

FREE WILL

**Under the Light of
THE QURAN**

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ISTANBUL/TURKEY

Free Will Under the Light of the QURAN¹ /by Dr. Ender TOSUN

ISBN: 978-605-63198-2-2

1.Introduction 2. General Framework of Islam Related to Free Will 3. Free Will 4. Implications of Free Will 5. Conclusion

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How to cite this book: Tosun, Ender. “Free Will Under the Light of the Quran.” İstanbul, 2020.

And whoever wills the reward of this world We will give
him thereof;

And whoever wills the reward of the Hereafter We will give
him thereof.

And we will recompense the thankful.

(Quran: 3/145)

He is Allah, other than whom there is no deity,

Knower of the unseen and the witnessed.

He is the Beneficent, the Merciful.

He is Allah, other than whom there is no deity,

The Sovereign, the Pure, the Peace, the Bestower of Faith,
the Overseer, the Exalted in Might, the Compeller, the
Superior.

Exalted is Allah above whatever they associate with Him.

He is Allah, the Creator, the Inventor, the Fashioner;

To Him belong the best names.

Whatever is in the heavens and earth is exalting Him.

And He is the Almighty, the Wise.

(Quran: 59/22-24)

WARNING-DISCLAIMER

And you (mankind)² have not been given of knowledge except a little.

(Quran: 17/85)

As human beings, we do not have and are not able to have all knowledge. But we can reach sufficient and relevant knowledge to be successful.

I have studied the Quran for many years. Yet, when I studied it focusing on free will, I have been corrected and intimidated many times by very interesting details in the Quran. I have witnessed once again the huge guiding power of the Quran, and I bow down humbly in front of its Author.

Can I say now that I have discovered all of the truth in the Quran related to the free will? Absolutely not. Having needed to change some of my earlier conclusions, by the guidance of the Quran, I will not be surprised if I will have to correct myself again upon the guidance of the Quran.

Yet, we are responsible for what we can do. And I feel quite comfortable that I should share what I have got, and I think that

² In our quotations from the Quran, square brackets - [] - are used to indicate details apparently included in the meanings of the original words of the Quran. Such details in square brackets are not reflected in additional words in the original text of Quran as the present words in the original text already give those meanings. These brackets are also used to give details that exist in the previous or following verses which are not quoted. The words in parenthesis - () - in the quotations are mostly explanatory for those who have little knowledge about the text of the Quran.

these will add important value in understanding free will. Hopefully, this added value will not be limited to Muslims.

Some explanations in this book relate to Allah, His relationship with space, time, and so on. Our understanding about Allah is very limited. So, the reader should keep in mind that the purpose of this work is not to give information about the person of Allah, but about free will.

And I supplicate to Allah so that He gives us a good understanding of His words.

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FOREWORD

In the name of Allah, the Beneficent, the Merciful.

(Quran: 1/1)

I thank Allah, the Lord of the worlds for all His favors.

I thank Him for especially for His guidance.

I thank Him for His Prophets, and especially for making me within the community of Prophet Muhammad (Peace be upon them).

I greet all of His servants who sincerely try to find out, follow, and spread the Truth.

I thank my grand mother Hatice Ince, and I ask Allah to increase her degrees in the paradise.

İstanbul, 19.06.2020

Free will³ is a very important concept, and it is directly related to many disciplines including science, philosophy, religion, law; and it is deeply related to our daily lives.

However, there are hugely different or opposing views about it, about whether it is a coherent concept, whether there is such a thing. So, for many people, it is an unsolved puzzle.

An immediate implication of this situation is that hundreds of millions of people who think differently than others are necessarily wrong in such an important matter.

Hence, a clarification of this issue is quite valuable.

The Quran, is a unique source which helped me understand the free will. Therefore, I thought sharing it will be very useful for all.

By carefully reading this book without any bias, you may expect to solve the puzzle of free will. But, in any case, if at the end it is not solved for you, you will have learnt what the holy book of one of the top religions in the world says about free will.

My target audience is not only muslims but also non-muslims.

Since non-muslims declare loudly troubles they have in understanding free will within their religions or world views, they may benefit from the teaching of Quran.

³ The literal concept “free will” is incoherent and the Quran does not use this wording. Yet today this wording has become very common so I will use it for the sake of a better communication.

1.1 Some of The Questions That Will Be Answered in This Book

There are interesting questions that we see in the discussions about free will. I will mention some of them to give you an idea about what I will talk about in this book:

How would not I have free will, seeing that I can step forward or backward if I will?

It seems that I will, but do I will freely or are the particles in my brain behave exactly as physical laws require? And when I say “I”, is this “I” an illusion, is it just a group of particles, or does it have a reality of its own? After all, if I let a rock consisting of particles, it always falls down in a certain way.

So, what if my will is just an illusion, and it is just the particles, fields or neurons that unconsciously move, act, or fire? Am I just feeling what is going on in the background and feeling as if I am the willer? What is this “I” other than these particles? Is there such an “I”? And would I make same choices had I been born in the jungle instead of a metropol, or vice versa, or if I was born 2000 years ago?

What is the meaning of applause upon a great performance, is the performance just an outcome of unconscious behavior of neurons and cells, or is it just particles moving randomly or deterministically⁴?

Should I feel hatred for a criminal, or not? Should we punish a criminal, or pay him for being the victim of unconscious particles whose behaviors are predetermined and absolutely unchangeable?

⁴ When we use terms related to “determinism” in this book, unless otherwise specified, we mean full determinism; not any local or partial determinism.

How can a criminal be responsible and punished if he does not have free will?

Should not I love my mother for all her kindness toward me? Are her behaviors that I perceive just illusions, are they just particles moving without any meaning?

On the other hand, if particles in my brain make me think, if particles obey physical laws where will I locate freedom of my will? Why do I think what I think?

If there is some uncertainty within physical events in my brain would this uncertainty make me free in willing? If so, why would uncertainty be sufficient for free will? If there are serious correlations between parents with certain attributes and their children's behaviors, how will I say that a person may be free in willing?

Can I make a contract while accepting that the parties do not have free will? Can I expect any applause for a great performance if I reject free will? If I reject free will and I applaud, would not I be a hypocrite?

But if the truth is ugly by requiring us to reject free will, yet is not it the truth?

However, can I believe in truth if I do not have the free will to believe in it, especially if my conclusion equals particles in my brain bumping one onto another? And can I believe in truth, if I believe that the truth is just an illusion?

And if I do not have the freedom to believe in it, what is the truth value of that belief? So, does not the denial of free will destroy almost everything upon which our daily lives are built?

Or should we accept the impossibility of a satisfactory conclusion about the existence of free will?

But yet, is not it possible that we have free will? So, should I behave as if we have free will?

So, are all successes and failures illusions?

On the other hand, if God knows all things in the past eternity, then how can we have free will, and how can we negate the knowledge of God?

So, questions keep going on. All of the above questions relate to the concept of free will.

These seem to be tough questions? Maybe they are, or maybe our dogmas without any basis produce confusions.

1.2 Importance of Free Will in Philosophy and Daily Life

Philosophers paid big attention to the “free will”. Its importance arises from its being very practical, theoretical, intellectual, comprehensive in that it is relevant for everybody, for almost all religions, sciences, jobs, immediate experiences. Its permanence as a problem also contributes to its importance.

There are many different approaches regarding the concept of free will. In the following I mention some of them to give you an idea about alternative approaches. This is not an exhaustive list:

One group of approaches is centered around the claims that events, entities, beings are reducible to physical things. Physical things behave only according to deterministic physical laws. Therefore, there is no room for free will, and free will is an illusion. This is generally called hard determinism.

Some group often adds that even if there is uncertainty in the physical realm, agents and their wills are determined by or supervenient upon the uncertain physical events and entities; in this case, the will would just be random. The related argument is generally called the argument from luck.

A second approach is that we obviously can raise our hands if we will, and nobody forces us to stop raising it. So, it is obvious that we are free in our wills. We are not entirely bound with physical laws, and things are not fully deterministic and reducible only to deterministic patterns. This generally has a dualist aspect maintaining that we have spirits which are independent from the physical. Libertarianism which says that we have free will but within limitations is sometimes called weak libertarianism. Within this group there are distinctions according to agent causation and event causation.

A third point of view says, even if everything is or would be deterministic, this does not/ would not require the non-existence of free will. For them, whatever is the definition of free will, in any case its elements would exist even in a fully deterministic universe. This is generally called compatibilism.

A fourth point of view is that nobody and nothing has free will, and nothing and nobody can have it. These are generally called impossibilists.

A fifth point of view is an agnostic approach which says that we do not know and/or cannot know whether we have free will. A version of this approach says that we must behave assuming that we have free will.

Some within all groups claim that because of practical reasons, we must behave as if we have free will.

Hard determinism, and libertarianism are also grouped together under the name of incompatibilism as they claim that determinism and free will are not compatible. According to incompatibilists, if determinism is true, then free will is false; and if free will is true then determinism is false.

The free will has direct implications regarding a key concept in this book: Responsibility. In our context, by responsibility I essentially mean retrospective responsibility that relates to praise and blame.

The first approach above, claims that as we cannot will anything except what we actually will, we are not responsible, yet we can take measures to prevent the harms of those who are harmful. The second and third approaches say that we are responsible.

There are different versions of the above points of view and also there are other points of view which may not be considered under the above. But for the purpose of this book the above outline will be sufficient though I will touch other approaches whenever it is necessary. Also note that the Quran does not endorse the above classifications and they do not conform well to the framework of the Quran, I will explain why in the following parts of this work.

You may have adopted one of the above approaches. You may have thought little, and one may be appealing and convincing to you in the first instance. Or you may have thought for years and came to a certain conclusion about one of the above views. Yet most probably, once you are presented with an opposing argument to yours', you may feel some dissatisfaction with your counter argument. Or consequently, you may be yet unconvinced for any of the above. If your situation is one of these, it shows to you that none of the above approaches is without at least one important deficiency. This is because without a sufficiently complete grasp of the existential

fundamentals, it is not possible to produce a complete and consistent system of free will.

The above are essentially considerations that do not take into account religion. When we take religion into account, one may come up with other important questions: If God is Knower, and knows things before they have happened, then how can we have free will? If God is the originator of all, how can we have free will? If there is destiny, how can there be free will?

Regarding these questions, there have been different approaches in different religions, including Islam. Some rejected freedom of will, some rejected some sunni⁵ claims and qualifications of God. In this book, I will address these points as well.

1.2.1 Philosophically Challenging Concept

For centuries, philosophers and others tried to tackle the free will-responsibility paradox. Up to now there has not been a progress toward a consensus about it.

1.2.2 An Extremely Practical Concept

The importance of free will does not arise only because it is a challenging philosophical question. It is also a very practical subject: It is directly related to the concept of responsibility which is of top importance to human beings in every aspect of our lives.

Saying there is no free will destroys almost everything upon which our daily lives are built. And also, free will is directly related to the

⁵ Sunni means in accordance with the two primary sources of the Quran, of Prophet Muhammad (PBUH) and in accordance with the application of the rational analysis and deduction in parallel with the two primary sources.

concept of responsibility which is of top importance to human beings.

In the following we briefly mention some areas where free will has key implications:

1.2.2.1 Commercial Legislation and Practices

Can you make a contract while accepting that the parties do not have free will? What can you say to a dog who prints its paw on the contract, and which does not have a relevant free will, when it does not abide by it?

1.2.2.2 Criminology

What would be the basis to punish agents if they are in fact no more than robots who cannot do other than what they do?

Of course, these ideas did not stay within the boundaries of philosophical discussions and people practically put them into practical use: For example, many criminals say in courts I did not have free will for that crime.

And naturally a lawmaker's conclusion about free will will directly influence him while he is shaping a related norm.

1.2.2.3 Religion

Many religious people advance that the evil wills are the wills of servants. Many atheists say we do not have free will so if God is, the evil is the product of God.

1.2.2.4 Behavior

Scientific studies show obviously that belief in the existence or non-existence of free will has considerable effect on one's wills and actions. For example, in some tests, persons who are required to read texts that maintain the non-existence of free will cheated more compared to the group who was not exposed to such texts.

On the other hand, can you expect any applause for a great performance if you reject free will? How can I talk of responsibility if you suffer for or enjoy the results of your actions, and yet your actions are just related to particles' actions and your wills and choices are just illusions?

1.3 Importance of Understanding the Quranic Framework About Free Will

And whoever wills the reward of this world We will give him thereof; and whoever wills the reward of the Hereafter We will give him thereof. And we will recompense the thankful.
(Quran: 3/145)

The Quran is the holy book of Islam, and it claims to be the final message of God to mankind. It was revealed approximately 14 centuries ago to Prophet Muhammad (PBUH⁶) within 23 years, a book with approximately 600 pages.

One of the most important concepts in the Quran is responsibility. Probably there is no other book on earth which emphasizes positive and negative responsibility as the Quran. And in this respect, there are also many verses that are relevant to free will, though there is no literal mention of "free will". The non-occurrence of literal "free will"

⁶ Peace be upon him

is quite wise as “free will” is not essentially a very coherent term, as explained in part 2.

Being a book from God, the Quran has a lot to say about foundations of existence, attributes of God, His knowledge, His relationship with His creation, His acts, past, present, future, time, space, good, evil, values, ethics, particles, life forms, consciousness, biological-physical-mental, material-spiritual, belief, disbelief, freedom, reward, punishment, blame, praise, regret, causality, parts, wholes, truth, error, knowledge, thought, observation, ignorance, known-unknown, local-transcendent, science-dogma, micro-macro, determinism, uncertainty, existence, non-existence, divine-worldly...

Free will-responsibility paradox relates to these fundamentals about which opinions differ widely and about which there is not even convergence.

There are very different conceptions and definitions of free will, and even as to these definitions there is great divergence. These show that there are some real problems about the understanding of its fundamentals. Thus, the Quranic framework which sheds light upon those fundamentals in a systematic way will be helpful in understanding free will.

I should note that the real reason for the power of this paradox is the separatist approach which keeps creating artificial and false distances.

For example, a physicalist reductionist approach reduces things to many things and considers those things as distances between things; so, for example, space is considered as a distance. Also, it rejects the wholes that unite things or gives them secondary position or even considers them as illusions. Because of those distances and related dogmas, reconciling our wills and their reality with what we observe becomes naturally impossible. Again, false distances between physical

and conscious, God and creation, discrete and concrete, patterns and uncertainty make the question more and more unsolvable.

Interestingly, we do not see much correlation between the approaches to free will and philosophical schools or religions/ideologies. There are different approaches within each major religion or world view.

So, the Quran as a foremost book that emphasizes the concept of “unity” will be helpful in easily solving the paradox of free will-responsibility by helping us eliminate such artificial barriers.

It sheds light upon fundamentals so that we can detect dogmas which disable us from reaching a good understanding about our environment, about ourselves, and of course about free will-responsibility. On the other hand, the Quran opens a path that we will not be blocked by dualism, determinism, or uncertainty.

Without a sufficient understanding of the foundations of existence, it will be difficult to understand free will. In physics, when we find out an equation which overlaps with a physical pattern we cheer up and consider that we learnt something considerable. However, in essence this is not superior to the understanding about electronics of a toddler who can play with a mobile. Free will does not give us the opportunity for a fake cheer-up. Any aspect of free will joins us with the fundamental and unsolved questions as consciousness, truth, space, time, past, future, causality...

So, I will explain the foundations of existence first under the light of the Quran. Of course, we do not have fully complete knowledge about existence as said in the Quran. But what we have been given is sufficient as relevant knowledge so that we can find our way.

Based on an insufficient understanding of the fundamentals, it is not possible to understand free will. For example, the starting point for

physicalism is the physical, yet, what the physical is, is not clear. Can physicalism explain the physical? As we will see later, it cannot, because it just has the contingent tools, hence, it does not have the necessary tools to explain what the physical is.

However, the Quran assumes the mission to explain all that is relevant for us: From the beginning to the end, from the micro to the macro, from the truth to the error... Therefore, the Quranic emphasis on human responsibility and knowledge about the great will power bestowed upon human beings with which he excels over many of the creation will be important items within the intellectual assets of any human being.

1.4 Can We Know That We Have Free Will?

He has not laid upon you in religion any hardship.
(Quran: 22/78)⁷

The message of the Quran is not a message just to philosophers, but it is a message to all human beings and more. And a sufficient understanding about will is necessary for a good understanding about responsibility. And since people other than philosophers are also responsible, the question must not be too difficult.

Indeed, there are many people who say, look I can see the alternatives that I can will, for example, I can will to raise my arms if I will, or I can will to let them as they are, and there is nothing that prevents me from raising it, or willing to raise it, or not. And nobody can say to me that it is impossible for me to will to raise them or let them where they are. So, I have free will. That is it. Quite easy.

And there are those who say, look, there are deterministic physical laws, and things behave according to them, and we can test those

⁷ (The-Holy-Quran .)

laws. These laws apply also to your will processes. You do not have a being separate than your parts. So, your feeling of freedom of will is just an illusion. And even if some events are uncertain, uncertain physical events would not give us free will. And therefore, we do not have free will. That is it. Quite easy.

There are also some who say that the question is not an easy one even though they reach a certain conclusion about the reality of free will.

And there are those who do not reach a conclusion about its reality and think that both sides have some truth in what they say; and they say that the question is not an easy one. This happens especially when one is presented the opposite arguments.

Yet, the obvious fact is that we either have free will or not. Whichever is the case, the following obvious fact is that the opposing argument is false, fallacious, and unsubstantiated. And since we are the immediate experiencer of the truth or illusion of free will, we may say that some make an unsubstantiated and avoidable error.

But it is obvious that there is also a task to show whether it is an easy challenge or not.

And easiness of things depends upon how we define and from where we look. If we look from an airplane, we can see the shape of the jungle more easily than looking from inside the jungle. If we try to comprehend a small part of the jungle, we may need to be inside it. So, what we mean by “free will” is important. And the difficulty seems to be in determining what we mean by “free will”.

Because of this, I organized this book as an explanation of free will.

And you (mankind) have not been given of knowledge except a little.

(Quran: 17/85)

Maybe we do not know everything about a thing, yet this does not mean that we necessarily do not have any knowledge about it. We have not been given all knowledge, but we have been given some knowledge. And if this knowledge is true, relevant, accessible, and sufficient, then it makes us responsible.

Islam does not claim to explain irrelevant things. As things and systems are contingent there are many ways universes may be constructed. So, science that deals with our universe is important in practical terms and in terms of showing the power and certain attributes of Allah. Yet among the kinds of universes that Allah can create, our universe is infinitesimally small. And however big is our knowledge about the contingent aspects of our universe, it will not be a considerable knowledge within the entire knowledge of God. So, lots of contingent knowledge cannot replace one fundamental knowledge. To get the correct conclusion about a matter, instead of lots of information, relevant information, balanced focus, and healthy judgment may be more useful. Hence, a person who lived hundreds of years ago may have the same opportunity to find the truth compared to someone in his future who has more information in quantity if the first considers more relevant info. So, we must not say that there must be necessarily new scientific findings so that we can find out about some truth.

Do we have to take what the Quran says and not to think about it? On the contrary, the Quran says that it is for being thought upon and understood.

1.5 The Method in This Work

1.5.1 General Method

In this book, I will explain free will in accordance with the Quranic framework. The emphasis in the question of free will is on the question of whether will can be free. To understand whether “will” can be free, we need to understand first what “will” is. Therefore, the book will be centered around the question of what will is, and the freedom of will will be dealt with in its relationship to what will is.

We will study in this book the will and its elements from the perspective of free will and justified responsibility. So, we will not get into aspects of will that are not related to the concept of free will.

As in our context, free will is closely related to its results, results’ ownership, results’ implications for the willer, and results’ fairness and justness, in other words the concept of responsibility, we will also consider responsibility. The elements of responsibility are closely related and the elements of will have implications for the concept and elements of responsibility. So, throughout our study of free will, we will also make a parallel study of responsibility as a secondary topic. But “will” will be prior in order since it is the main topic of this book and since responsibility is the result of will.

Regarding the will power, our explanations will relate to its agent, influencers, inputs, outputs, processes, scientific implications, neurological findings, daily life issues, and relationship to responsibility. And this way, we will analyze all elements so that we can understand how free will is built from scratch.

I will try to save space and be concise, and to this end I will abstain from mentioning or quoting tons of literature about the topic. But I will try to address all meaningful questions about it. Yet, I will try to

also offer the Quranic system in its relation to “will” which will be very functional in understanding the issue easily.

We will also enter into technical details whenever necessary⁸.

On the other hand, as the topic raises many questions and objections in many ways, I will address the possible questions and objections under related headings. Objections and questions covered in this book are not only actual objections; I will address potential objections as well. And we will see many issues in the form of questions and answers in order to facilitate the understanding. Some questions that can occur to the reader are explained under questions and answers under related sections. Questions are generally integral to the text. They are used to emphasize important points that may raise questions or objections. So, the reader normally should not skip them.

We will not only put forth what is according to the Quran, but also explain relevant implications according to current concepts and current science.

As this book is written from the perspective of Islam, there may be some psychological pressures as cognitive dissonance on the reader who adheres to another religion or view. Hence, it is obvious that to understand what is told here, the reader must put aside his/her beliefs or lack of belief that he has not substantiated strongly.

⁸ I give some brief explanations of technical terms to help the non-expert reader. These explanations may reflect one part of the term or one view of it because there is seldom only one understanding of such terms and generally there are variances. And we do not want to fill the book with more than necessary technical explanations which can be easily found on the internet. So, in occurrences where such variations are key for the reader, he is suggested to have sufficient further reading.

There are many who claim there is free will or there is no free will. We will try to make a difference in this respect with strong logic and by combining it with clear thought experiments.

Our empirical knowledge on some points is limited. We have and will have limited means to measure whether the smallest details of events are probabilistic or deterministic; whether there is an ultimate fundamental level; whether we influence the matter or the matter influences us, or both. In cases where we do not know which alternative is true, we will consider all relevant alternatives and their implications. We will analyze the possible results of many thought experiments.

According to the Quran, the truth is sufficiently accessible for us; and according to logic, it is sufficiently accessible since we are responsible only within the boundaries of our capacity.

1.5.2 The Method as Related to The Quranic Framework

Studying the freedom of the will, we will benefit from the tools that the Quranic teaching provides us with, and I will abide by the Quranic framework. Naturally, there may be some muslims who disagree with our conclusions. Therefore, I will give the related verses as much as possible.

And whenever I mention verses from the Quran, the non-muslim reader should not assume that we present them as proofs⁹. He should consider them as descriptions of the Quranic framework. Of course, empirical and logical arguments and proofs that I will present and

⁹ Though we do not present the Quran as a proof by itself, it should be noted that the only knowledge beyond our reach, that has the potential to be a true knowledge, would be a knowledge within a Holy Book confirmed by logic and observation.

which are in parallel with the verses may help the reader better understand the free will.

The free will framework of the Quran is mostly stand-alone model: It does not necessarily require one to be convinced about all the components of all Quranic belief essentials in order to understand it as a coherent model of free will.

Some elements of the Quranic framework may overlap with some theories in some respects. But in many respects, it has a different systematic. And as Islam is a whole system, then in any case, it will be fundamentally different from all other models.

We give the Quranic framework and its analysis in the context of recent considerations, and scientific findings. For example, I will explain related implications of the Quranic framework about free will as related to quantum physics.

1.5.3 Burden of Proof

Those who associated with Allah will say, "If Allah had willed, we would not have associated [anything] and neither would our fathers, nor would we have prohibited anything." Likewise, did those before deny until they tasted Our punishment. Say, "Do you have any knowledge that you can produce for us? You follow not except assumption, and you are not but falsifying."

Say: Then Allah's is the conclusive argument; so, if He had pleased, He would have guided you all.

(Quran: 6/148-149)

Is the proponent or the opponent of free will entitled to say, "my position is the default position, you are the one to prove your claim, you have the burden of proof, not me"?

The one who defends free will may say: “Look, I can will to eat the red candy or the white candy and eat it. You tell me I cannot eat one of them. Tell me which one I cannot eat! And prove it.” The other one may say: “Whatever happens has a cause, prove to me that your choice happens without a cause.”

Most empirical and immediate experience is for the existence of free will. However large is the information about the state of the universe prior to the will, nobody can say to the agent who is in a normal conscious state, “you will not will to eat the red candy”.

The opponent of free will has an implicit claim that things are reducible to the physical. One cannot say without substantiation ‘we do not experience free will’. There is the implicit claim that the act of the agent is either deterministic and/or random.

Furthermore, the opponent of free will wills certain wills, and he reacts strongly to some wills of some people in the daily life.

Therefore, we can say that the burden of proof is essentially on the opponent of free will.

However, the opponent of free will also brings an argument. And he will claim that his point is more fundamental. Hence, the discussion does not end on the side of the proponent of free will saying that he is not convinced by the argument of the opponent of free will. And the discussion did not actually end this way up to now.

If the opponent of free will extends it so as to say that God does not or cannot have free will either, then the burden of proof and null hypothesis become more meaningful: Why would the will of God be always with a coercive bias in a specific direction? For example, why would not God be able to create another kind of universe? God could have willed or done otherwise.

We can also easily imagine a conscious being who is not coerced by anything in a specific direction. He needs to will a or b. Can he will one of them? Of course. He can also define a and b. Claiming the opposite requires some proof. The default is the non-existence of a coercion in a certain direction.

The claim that there will always be a cause for willing each feasible alternative is unsubstantiated. In a case where there is no coercive cause for a certain will, the subject may will that will at least just to show the freedom of whis will.

The opponent of free will must show first that there cannot be such a power and secondly that the human being does not have such a power.

However, from another point of view, the burden of proof is on anyone who is influenced by the trueness or falsity of a claim. There may be people who deny the free will, and commit more crimes because they believe they are not responsible as they do not have free will. This will influence the proponents of free will as well. So, in any case the proponents of free will must bring their proofs for free will.

The explanations in this book will also show how the opponent of free will has the burden of proof, and that what he claims to be the default position is not the default position.

1.5.4 Reminders for Some Readers

The readers of this book may be muslims and non-muslims.

The non-muslim reader should keep in mind that I write this book as a believer. Yet I never expect that my statements to be accepted dogmatically. When a statement of the Quran is presented, the non-muslim should take it as a description rather than as a proof.

Sometimes you will see generalizations: For example, I may say that a certain world view postulates x. The reader should not take such statements literally. Especially on a subject like free will, there may be many sub-groups who differ in their opinion from the general world-view.

The muslim reader should know that if the verse of the Quran corresponds to the very truth in an event in the laboratory, our words correspond to our limited understanding.

Question 1.

How can the Quran as a book which came from the mouth of a person who did not know reading, who never went to any school, as a book which orders killing the apostates, or supports slavery and sex slaves guide us in these deep issues?

Answer 1.

The Quran does not order to kill the apostates, nor supports slavery and sex slaves. All those claims have their answers which are not the subject of this book. In order to benefit from this book, I recommend the readers to put aside such prejudices, emotions, and misinformation.

Along with misinformation, throughout ages, the arrogance and emotions have been important impediments against finding the truth. Many people even some who lived thousands of years ago had pride in having lived after those who lived in their past, and they have been arrogant for being more developed than their past generations.

And when Our verses are recited to them, they say, "We have heard. If we willed, we could say [something] like this. This is not but legends of the former peoples."

(Quran: 8/31)

But if they do not respond to you then know that they only follow their [own] low desires. And who is more astray than one who follows his low desires without guidance from Allah? Indeed, Allah does not guide the wrongdoing people.

(Quran: 28/50)

Surely, those who argue against GOD's revelations without proof are exposing the arrogance that is hidden inside their chests, and they are not even aware of it. Therefore, seek refuge in God; He is the Hearer, the Seer.

(Quran: 40/56)

1.6 Different Views Adopted by Muslims

Almost within each religion or world view, there are people adopting differing approaches. These may be due to different social environments, exposure to different educations, lack of knowledge, bad reasoning, political manipulation, and so on.

Muslim community is not different in this respect, so within the muslim community, there are or there have been different marginal approaches. What we present in this book is the sunni approach, yet there have been those who claimed non-existence of free will, and also those who claimed that a person is wholly free and that God does not know all things and does not have control over things.

As of now, we should note that there are two marginal groups in this respect:

1. The “jabriyyah” that is the “group advocating the coercion”, maintain that there is no free will because we have to will

what we will, hence they mostly maintain that there is no responsibility: They adopt a version of fatalism, they follow verses where Allah emphasizes His Power, and they omit verses where Allah shows the agent as the origin of his evil wills and deeds.

2. The “qadariyyah”, that is “the group who says that agents form their destiny”, maintain that we form our destiny, and essentially there is no involvement of God in what we will and produce.

I will not deal directly with their claims in this book; but the sources and explanations about the sunni view will refute their claims sufficiently.

So, if they deny you, [O Muhammad], say, "Your Lord is the possessor of vast mercy; but His punishment cannot be repelled from the people who are criminals."

Those who associated [partners] with Allah will say, "If Allah had willed, we would not have associated [anything] and neither would our fathers¹⁰, nor would we have prohibited anything." Likewise did those before deny until they tasted Our punishment¹¹. Say, "Do you have any knowledge that you can produce for us? You follow not except assumption, and you are not but falsifying."

Say, "With Allah is the far-reaching argument. If He¹² had willed, He would have guided you all."

Say, [O Muhammad], "Bring forward your witnesses who will testify that Allah has prohibited this." And if they testify, do not testify with them. And do not follow the low desires of

¹⁰ This is a common argument by atheists even today. Many atheists keep saying things as "If God wanted me to follow a religion, then He would know what would convince me, or He would rewire my brain". Somehow, they have difficulty in admitting the possibility that God may give free will, and the opportunity to display what a person chooses and make people bear relevant consequences.

¹¹ Do they will to get the punishment? No. Does Allah or determinism or uncertainty make them "not will it"? If yes, then their will is as if non-existent, and their will is an illusion. But they claim that they do not will it and they expect that their "will" is respected, and they also maintain that many things happen although they do not "will" them and that they do not approve many things, as if their will is existent. If no, then this means that their wills are true, and issue from their own selves.

¹² Allah does not have any gender. However, for Him we use the pronoun He, which is a special use for God with capital H so as to include the genderless. Likewise, the usage of "Him" or "His" as used for God, do not reflect any gender.

those who deny Our verses and those who do not believe in the Hereafter, while they equate [others] with their Lord.

Say, "Let me tell you about what your Lord has commanded: Do not consider anything equal to God; Be kind to your parents; Do not murder your children out of fear of poverty, for We give sustenance to you and to them. Do not even approach indecency either in public or in private. Take not a life which God has made sacred except by way of justice and law. Thus, does He command you that you may learn wisdom.

And do not approach the orphan's property except in a way that is best until he reaches maturity. And give full measure and weight in justice. We do not charge any soul except [with that within] its capacity. And when you testify, be just, even if [it concerns] a near relative. And the covenant of Allah fulfill. This has He instructed you that you may take heed.

And, [moreover], this is My path, which is straight, so follow it; and do not follow [other] ways, for you will be separated from His way. This has He instructed you that you may guard yourselves (against evil).

Then We gave Moses the Scripture, making complete [Our favor] upon the one who did good and as a detailed explanation of all things and as guidance and mercy that perhaps in [the matter of] the meeting with their Lord they would believe.

And this [Quran] is a Book We have revealed [which is] blessed, so follow it and fear Allah that you may receive mercy.

[We revealed it] lest you say, "The Scripture was only sent down to two groups before us, but we were of their study unaware,"

Or lest you say, "If only the Scripture had been revealed to us, we would have been better guided than they." So, there has [now] come to you a clear evidence from your Lord and a guidance and mercy. Then who is more unjust than one who denies the verses of Allah and turns away from them? We will recompense those who turn away from Our verses with the worst of punishment for their having turned away.

(Quran: 6/147 – 157)

Indeed, we offered the Trust to the heavens and the earth and the mountains, and they declined to bear it and feared it; but man [undertook to] bear it. Indeed, he was unjust and ignorant.

(Quran: 33/72)

As we noted earlier, "free will" is not literally mentioned in the Quran. But the "will" power is used as an effective power of the agent. In the Islamic context, the sovereignty of the agent and hence the sovereign free will is emphasized. In other words, instead of partial or whole non-existence of external influences¹³, freedom of will is based on the distinct power of the "agent" who is a "whole".

This whole, though containing its parts, has a distinct reality from them. This whole has been given some sovereignty by God. And the will of this whole has sovereignty in reference to this whole. Therefore, this agent firstly has a positive will power of his own, and secondly, this power may override some external influences, or may be influenced by the outside influences. In other words, it interacts

¹³ External influences include also the influences of the agent's parts or past.

with the other beings and entities. But under normal conditions, if not coerced or fully manipulated, it has a true potential range of freedom of will. In the next section I will explain what “will power” is.

Say, O Allah, Owner of Sovereignty, You give sovereignty to whom You will and You take sovereignty away from whom You will. You honor whom You will and You humble whom You will. In Your hand is [all] good. Indeed, You are over all things competent.

(Quran: 3/26)

O my people, sovereignty is yours today, [your being] dominant in the land. But who would protect us from the punishment of Allah if it came to us?" Pharaoh said, "I do not show you except what I see, and I do not guide you except to the way of right conduct."

(Quran: 40/29)

The word “sovereign” which is a key attribute as it relates to the sovereignty¹⁴ of agents, is used in this book according to the following explanations:

The origin of the word “sovereign” is as follows: “Middle English: from Old French *souverain*, based on Latin *super* ‘above’. The change in the ending was due to association with *reign*”¹⁵. Some of its definitions appropriate in our context are “Possessing supreme or

¹⁴ In the original text of the Quran, the word “mulk” is of the same origin as “malik” which means king.

¹⁵ (Oxford-Dictionaries 2020)

ultimate power”¹⁶, “efficacious; potent”¹⁷, “one that exercises supreme authority within a limited sphere”¹⁸.

The appropriate definitions of “sovereignty” in our context are as follows: “A self-governing state”¹⁹, “controlling influence”, “autonomy”²⁰.

The Quran teaches a positive, existent, and effective agent and will power. Note that this contrasts with approaches which try to define free will based on the non-existence of partial, or full influence, or control of the agent upon it. The agent is sovereign, real, and his will has sovereignty, which can suppress or cancel external influences to some extent. He can also interact with the influencers.

Based on this, scholars of Islam have used the following classification regarding will power: (1) Supreme, full will power “Kullee iradah” which is the will power of Allah. He is able to assign sovereignty to His creation. His will interacts with the wills of His creation. He determines the conditions of His creation. And, nothing can happen outside His permission. (2) Small, partial will “Juz’ee Iradah”: The will power of the creation. This power runs within the conditions and environment created by God. Though limited, it is real and effective. There is a sphere within which this will power can be exercised. And the agent has power to enlarge this sphere to some extent.

Though the Quran emphasizes the reality and effectiveness of will power, to facilitate understanding I will use also the “free will” wording. “Free will” will be used to represent the will power unless

¹⁶ (Oxford-Dictionaries 2020)

¹⁷ (Dictionary.com 2020)

¹⁸ (Merriam-Webster.com 2020)

¹⁹ (Oxford-Dictionaries 2020)

²⁰ (Merriam-Webster.com 2020)

stated or implied otherwise. The reader should keep in mind that when I use “free” in this context, this is closer to “sovereign”.

I also think that the Quranic presentation of the will power is more appropriate than “free will” wording. Because “free will” essentially as an act of the agent, is an incoherent expression. The will power itself, as an act or as a power of the agent, by definition cannot be free. But we see that “willing” is mentioned on many occasions in the Quran. And according to the definition of the will in accordance with the Quran, the will which is essentially an intrinsic power of the agent, contains freedom.

If there is no element of freedom intrinsic to the will power, then we can just talk of a process called will that either is a follow up of prior deterministic or indeterministic processes, or an illusion, or an epiphenomenon. In this case, the agent would be nothing but its parts, and could distinctly produce nothing new.

Before making a technical definition of will, we will consider the foundations of Islam that relate to will.

Free will is a small part of the whole system. So, foundations and the whole system are important. It is not possible to have a correct understanding of free will while the entire system of existence is conceived in a wrong way. In Islam everything constitutes a system as everything is logically and empirically linked. Hence nothing within our limited universe²¹ can be understood and can mean anything by itself as an isolated thing.

So, in this part I will try to explain the general teachings of the Quran that relate to free will, and then we will go into the details of will.

²¹ The “limited universe” is used in this book for the universe or multiverse other than God.

This part will constitute a roadmap as well so that the remainder is better understood.

2.1 The Position of The Quran Regarding Free Will: The Human Agent Has Free Will to A Certain Extent

And Allah created the heavens and earth in truth and so that every soul may be recompensed for what it has earned, and they will not be wronged.

(Quran: 45/22)

Allah does not charge a soul except [with that within] its capacity. It will have [the consequence of] what [good] it has gained, and it will bear [the consequence of] what [evil] it has earned.

(Quran: 2/286)

And leave what is apparent of sin and what is concealed thereof. Indeed, those who earn [blame for] sin will be recompensed for that which they used to commit.

(Quran: 6/120)

No event is necessary/ fully deterministic and no event is random. Every event is ultimately an outcome of free will. This free will may be the direct free will of Allah, or the free will of something which is created and sustained by Allah. A stone falls according to a certain pattern which is an element of design.

There are two main positions against free will. These positions are in parallel with certain world views.

The first world view in this respect is physicalism. Sub-categories under physicalism related to free will are reductionism, determinism,

and indeterminism. Reductive physicalists maintain that everything is reducible to the spatiotemporal. Here, though physics corresponds etymologically to “physica” which means natural science, today it is mostly understood as “a science that deals with matter and energy and their interactions”²². And specifically, physicalism means “a thesis that the descriptive terms of scientific language are reducible to terms which refer to spatiotemporal things or events or to their properties”²³. For physicalists then the “physical” is understood so as to have an even narrower meaning that is based on “spatiotemporal”, hence on “distance”. Therefore, for the physicalist, consciousness, qualia, and their effects go out of the window at the very beginning. Or if they stay, they stay as illusions. They are reducible to the spatiotemporal, and they are supervenient upon it. For the physicalist, the only effective causes are thus “narrowly physical”²⁴ causes, whether they are deterministic or indeterministic.

The second position against free will relates to religions and a specific understanding of God where God knows all in advance, and where there is unipotent²⁵ causal relationship from the knowledge of God to what happens. Accordingly, since God knows all in advance, nobody can behave against this knowledge. In this approach, time is also considered to be a barrier for God.

²² (Merriam-Webster.com 2020)

²³ (Merriam-Webster.com 2020)

²⁴ Because of the monist teaching of the Quran, an absolute division of the existence as physical and non-physical is not coherent. However, I need to use terms as the physical, or physicalist. When I use them, they are used as “narrowly physical” so as to represent the approaches of the physicalists who differentiate the physical as a distinct and prime thing as opposed to other things.

²⁵ See part 3.1.1.3.1.2 for the explanations about the unipotent and multipotent causes.

Some combine this approach with determinism: Here, God's perfect knowledge in the past about the future, entails all the future events being fixed before they have happened. In this approach time is a barrier for God, the only way for God to have control over His creation, is by setting initial states, and deterministic causal relationships. In another version of this approach, as laws are fixed and can only be deterministic, the only variable for God is the initial states. And God cannot interfere with the events.

In Islam, God can create originators of new events or wills. A creation may have an influence in a bottom-up, or top-down direction. The influence may be pattern-like, but it is not necessary that it is pattern-like and fixed.

Allah creates the requirements of the will such as the agent, the environment, the infrastructure of the will, and the agent; and the agent earns his wills and acts. And there is an interaction between any agent and God.

Allah creates us, gives us the powers to hear, to see, to think, to feel... And there is the human being who sees, hears, thinks, feels... By being created, we become new beings which are not reducible to those faculties.

For example, He shows us the fire, and teaches us that it burns, and that we are vulnerable. He teaches us the causal relationships. We see the alternative results within causality chains, and we choose. We are responsible for the results that we can foresee. We are responsible for the results of not trying to find out the possible results as well. Hence, if we foresee a result toward which we chose to proceed, or if we chose not to search the possible results, then we are responsible. If later we say we did not want that result, then we risk being dishonest.

On the other hand, willing things freely everyday, and then claiming that we do not have free will, either because of physicalism or because of God's knowledge or power may not be very consistent.

In this part I will describe some key points regarding what should one believe about free will according to the Quran. These I give here so that the reader may have an idea about the broad picture, so here I will not give arguments and details.

The answer to the question of free will is sought while assuming the truth of one or more of the following: Physicalism, determinism, indeterminism, reductionism. However, all of these are fallacious.

Question 2.

Why is the Quran taken as basis in this work?

Answer 2.

We took the Quran as a basis because firstly for the muslim reader, it is the message of God for muslims. Secondly, it is a book that received big acceptance as a book which claims to be built on logical and empirical evidence and not on mystery. Hence, its arguments are worth considering for both muslims and non-muslims.

2.1.1 The Quran Claims That There Is Free Will

And they said: "If it had been the Will of the Most Beneficent (Allah), we should not have worshipped them (false deities)." They have no knowledge whatsoever of that. They only lie.

(Quran: 43/20)

At this point it is important to clarify that the Quran claims that there is free will power. Though marginal, there are some muslims

who reject free will. And there are some muslims who are not clear about whether the Quran claims free will or not.

The non-muslim reader should note that the points in this part are not presented for them as proofs of free will. But for them it will be useful in learning the teaching of the Quran about whether free will power is true or not.

In the above verse, the disbelievers claim no responsibility based on freedom. There may be two assumptions behind this claim. (1) Had Allah willed them not to worship false deities, then He would prevent them from worshipping the false deities. (2) Allah causes them to worship the false deities. However, Allah says that their claim is false.

It is not possible for a soul to believe except by permission of Allah as mentioned in the following verse:

And it is not for a soul to believe except by permission of Allah, and He will place defilement upon those who do not use their reason.

(Quran: 10/100)

However, since their claim is said to be false, we understand that their worshipping false deities is not because of the will of Allah, or because of lack of God's permission for them to believe correctly. Otherwise, they would not be falsifying. Hence, both assumptions are false.

Allah does not force to believe:

And had your Lord willed, those on earth would have believed all of them entirely. Then, [O Muhammad] would you compel the people in order that they become believers?

(Quran: 10/99)

Also, if physicalist reductionism, determinism, or indeterminism were true, Allah would know that they could not will and they could not do otherwise.

And when they commit an immorality, they say, "We found our fathers doing it, and Allah has ordered us to do it." Say, "Indeed, Allah does not order immorality. Do you say about Allah that which you do not know?"

(Quran: 7/28)

Allah does not even order immorality; why would He force to it?

Allah has the power to guide or mislead by force as mentioned in the above verses. But He does not have the will to force them. If Allah would want to make people do something by coercion, either with direct forcing of God, or with deterministic or indeterministic processes, with no free will, then certainly, He could make them believe. But He does not have the will to force.

In the following sub-sections we will see the verses of the Quran that relate to the existence of free will.

2.1.1.1 What Is Free Will

I will give a technical detailed definition of free will later in part 3.1.2 as it requires some background information that I will give till that part. Below, I give a summary about what free will is so that you may follow the points until we come to the related technical definition.

The free will power is briefly the power of the irreducible and sovereign agent to determine equally a set of alternatives between multiple sets of alternatives.

Free will power may work when there are two sets of alternatives as long as they are distinguishable from each other, even though none of them has any superiority in any respect.

It can also navigate through alternatives, truth statements, and produce wills. It can will intellectual powers as knowledge power and reasoning power to process certain things, and it can will hence originate respective commands for them. If these powers are healthy and powerful enough, they may proceed toward a specific direction in harmony with the truth of the agent.

The free will power may override or overcome the influencers which exert influences to divert the essence of the agent from the OTBT toward other directions which are less than optimal for the agent.

It may give the agent the capacity to take the optimal route. Yet, an existent free will power may be exercised or not for the good of the agent. It can be exercised for evil as well. It can be governed by the wrong influencers which divert the essence of the agent from its pure trajectory. The agent may choose a wrong direction with his free will power, he may freely enter under the control of the wrong influencers. The agent who has free will power and other necessary powers is responsible, and if he does not exercise his free will power appropriately, this means that he is to be blamed or punished if applicable.

2.1.1.2 The Central Place of Free Will in Islam

Allah bears witness that there is no god but He, and (so do) the angels and those possessed of knowledge, maintaining justice. There is no god but He, the Mighty, the Wise.

(Quran: 3/18)

So, observe the effects of the mercy of Allah how He gives life to the earth after its lifelessness. Indeed, that [same one] will give life to the dead, and He is over all things competent.

(Quran: 30/50)

Free will is very central in Islam. It relates to the purpose of God in creating the human being and the universe.

Allah gives favors, and watches in His creation the traces of His mercy, His guidance and His truth. Allah loves His servant's acts and attributes that are based on his free will that He shares and loves, like His servant's kindness, justice, good deeds. And He loves the truth which is freely adopted and shared by His servant.

So, rely upon Allah; indeed, you are upon the clear truth.

(Quran: 27/79)

He loves His righteous servants, and they love Him:

He loves them and they love Him.

(Quran: 5/54)

Allah is satisfied with them, and they are satisfied with Him:

Allah is well-pleased with them and they are well-pleased Him. That is the great success.

(Quran: 5/119)

On the judgment day the servant is pleased with God not only because He saved him from fire, but also because He has been good, just, truthful, thankful...

And to David We gave Solomon. An excellent servant, indeed he was one repeatedly turning back [to Allah].

(Quran: 38/30)

[We said], "And take in your hand a bunch [of grass] and strike with it and do not break your oath." Indeed, We found him patient, an excellent servant. Indeed, he was one repeatedly turning back [to Allah].

(Quran: 38/44)

There are also His servants who have diverted from the truth and with whom Allah has not been pleased.

They swear to you so that you might be satisfied with them. But if you should be satisfied with them indeed, Allah is not satisfied with a defiantly disobedient people.

(Quran: 9/96)

If you are thankless, yet Allah is Independent of you, though He is not pleased with thanklessness for His bondmen; and if you are thankful, He is pleased therewith for you. No laden soul will bear another's load. Then unto your Lord is your return; and He will tell you what you used to do. Lo! He knows what is in the breasts (of men).

(Quran: 39/7)

And such servants will regret what they did, and they will bear witness that they were upon error, and that the truth is the truth even if they have negated.

Do they just wait for the final fulfilment of the event? On the day the event is finally fulfilled, those who disregarded it before will say: "The messengers of our Lord did indeed bring true (tidings). Have we no intercessors now to intercede on our behalf? Or could we be sent back? Then should we behave differently from our behaviour in the past." In fact, they will have lost their souls, and the things they invented will leave them in the lurch.

(Quran: 7/53)

Allah does not see the effects of His mercy and sharing of the truth only in human beings but also in all His creation in many ways.

God is pleased and satisfied with certain things and persons, and He is not pleased and satisfied with certain things and persons. But even if He is not satisfied with some part, the entirety of what happens and the balance within the total of what happens, is satisfactory and pleasing to God.

On the other hand, in a way, as a favor from God, the servant is given the opportunity to impress God within the potentials already known to God²⁶.

A disbeliever actualizes the potential evils that are already known by God; he may even insult God, though this will and act is among the potentials given to him and are sanctioned at least in the hereafter. These evil acts are also under the control of God, in that they are known and permitted by God though it is the servant who chooses to do them. He does a potential alternative that God dislikes and that has a bad consequence. A believer tries to do something again within potentials known to God but that may please God. These good wills and acts are also in any case under His permission.

And Allah is predominant over His affair, but most of the people do not know.

(Quran: 12/21)

Hence free will is key in reaching the ultimate goal and biggest success of life which is to satisfy God and be satisfied by Him, to love God and be loved by Him.

Divine love is an important benchmark in that it is not misled as our love may sometimes be. We can love something bad or evil. But Allah

²⁶ God also knows the potentials that will be actualized. But this knowledge depends on the will of the servant. This is explained in the relevant parts of this book.

loves only the good and He has full knowledge on what is really good and what is not.

2.1.1.3 The Agent and The Will Are Real

Whoever should will the immediate, We hasten for him from it what We will to whom We intend. Then We have made for him Hell, which he will enter, censured and banished.

But whoever wills the Hereafter and exerts the effort due to it while he is a believer it is those whose effort is ever appreciated [by Allah].

All do We aid -these as well as those- out of the bounty of your Lord, and the bounty of your Lord is not confined.

(Quran: 17/18-20)

We seized all of them for their sinfulness: against some We sent a violent tornado full of stones, some were seized by a mighty blast, some were swallowed up by the earth, and yet some We drowned. It was not Allah Who was unjust to them, but they were unjust to their own souls.

(Quran: 29/40)

And Satan will say when the matter has been concluded, "Indeed, Allah had promised you the promise of truth. And I promised you, but I betrayed you.

But I had no authority over you except that I invited you, and you responded to me.

So do not blame me; but blame yourselves. I cannot be called to your aid, nor can you be called to my aid. Indeed, I deny

your association of me [with Allah] before. Indeed, for the wrongdoers is a painful punishment."

(Quran: 14/22)

And leave those who have taken their religion for a play and an idle sport, and whom this world's life has deceived, and remind (them) thereby lest a soul should be given up to destruction for what it has earned; it shall not have besides Allah any guardian nor an intercessor, and if it should seek to give every compensation, it shall not be accepted from it; these are they who shall be given up to destruction for what they earned; they shall have a drink of boiling water and a painful chastisement because they disbelieved.

(Quran: 6/70)

The ones who prefer the worldly life over the Hereafter and avert [people] from the way of Allah, seeking to make it (seem) deviant. Those are in extreme error.

(Quran: 14/3)

In Islam the agent has a certain autonomy upon his future and his wills are real, and produce results.

Otherwise, Allah would be unjust, and the servant would not be unjust. But as seen in the verses, Allah does not accept to be unjust; and He says that the servants who have been subject to punishment are unjust.

Had Allah willed to force human beings, he could have made them just one community. But Allah did not will this. There are two alternatives:

- (1) Either Allah willed the disbelievers to go astray deterministically or probabilistically or by directly making them go astray with His powers,
- (2) Or, He left them free.

If He willed them go astray, then He would not have invited them to truth. Because in this case He would have invited them to something impossible, and He would have contradicted Himself. But as Allah is wise, and is not unjust, then (1) is impossible.

So, the only conclusion is that He set them free.

Hence, injustice and its source which is the will belongs to the servant.

Note that generally when we talk of free will, freedom essentially corresponds to the limited freedom of the agent, since the will necessarily depends on the agent.

Qualifying as unjust or evil requires ability to have power over one's wills.

2.1.1.4 There Is Responsibility

"If you do good, you do good for yourselves; and if you do evil, [you do it] to yourselves."

(Quran: 17/7)

Then, on that day, you will be questioned about the bounties (of God).

(Quran: 102/8)

He is not questioned about what He does, but they will be questioned.

(Quran: 21/23)

Follow, [O Muhammad], what has been revealed to you from your Lord - there is no deity except Him - and turn away from those who associate others with Allah.

But if Allah had willed, they would not have associated. And We have not appointed you over them as a guardian, nor are you a manager over them.

(Quran: 6/106-107)

Paradise is not [obtained] by your wishful thinking nor by that of the People of the Scripture²⁷. Whoever does a wrong will be recompensed for it, and he will not find besides Allah a protector or a helper.

And whoever does righteous deeds, whether male or female, while being a believer those will enter Paradise and will not be wronged, [even as much as] the speck on a date seed.

(Quran: 4/123-124)

And when you look there [in Paradise], you will see pleasure and great dominion.

Upon the inhabitants will be green garments of fine silk and brocade. And they will be adorned with bracelets of silver, and their Lord will give them a purifying drink.

[And it will be said], "Indeed, this is for you a reward, and your effort has been appreciated."

(Quran: 76/20-22)

²⁷ People of the scripture denotes mainly Jews and Christians.

Twisting his neck [in arrogance] to mislead [people] from the way of Allah. For him in the world is disgrace, and We will make him taste on the Day of Resurrection the punishment of the Burning Fire [while it is said],

That is for what your hands have put forth and because Allah is not ever unjust to [His] servants.

(Quran: 22/9-10)

And from [part of] the night, pray with it as additional [worship] for you; it is expected that your Lord will resurrect you to a praised station.

(Quran: 17/79)

But he (Pharaoh) turned away with his supporters and said," (Moses is) A magician or a madman."

So, We took him and his soldiers and cast them into the sea, and he was blameworthy.

(Quran: 51/39-40)

That is from what your Lord has revealed to you, [O Muhammad], of wisdom. And, [O mankind], do not make [as equal] with Allah another deity, lest you be thrown into Hell, blamed and banished.

(Quran: 17/39)

Responsibility and free will are closely related; and responsibility is a fundamental concept in Islam.

In the Quran, responsibility is real, and its results are ultimately empirically testable, since everybody will see the consequences of their good and evil deeds. And also, when someone does a good

performance, we applaud; and when someone robs, we say that he is responsible for what he willed and did.

So, when the Quran claims the existence of responsibility, and also recommends the ways that will help make good choices that will give the consequences of positive responsibility, one may conclude that the Quran claims the existence of freedom of will. Without freedom there can be no responsibility.

Allah does not charge a soul except [with that within] its capacity.

(Quran: 2/286)

Can someone who cannot will anything other than what he wills be held responsible? The above verse says he cannot.

The Quran emphasizes responsibility as we saw in many quotes from the Quran. So, when a determinist is questioned “why did you do this?”, he would reply “Because I was determined, so not because of me, as I am reducible to particles.” Hence nobody would be responsible under determinism except under compatibilism, however, compatibilism is not rational as I will explain in part 3.4.1.3.

The Quran starts with hinting to the vulnerability of the human being:

This Book, there is no doubt in it, is a guide to those who guard (against evil).

(Quran: 2/2)

Allah gives favors in degrees. One such degree, is giving the opportunity to own the available favors.

To each [category] We extend to these and to those from the gift of your Lord. And never has the gift of your Lord been restricted.

Look how We have favored [in provision] some of them over others. But the Hereafter is greater in degrees [of difference] and greater in distinction.

(Quran: 17/20-21)

As human beings, we are empowered and given freedom to do good things on our own and with the help of Allah. We are entrusted some duties. God does not create just puppets. A person or group can be empowered to have a nuclear weapon. Or a wealth to spend in the right way.

For this kind of responsibility, we have been given also other capacities such as knowledge, foreseeing the future, and so on. Hence, positive and negative responsibility is a key issue in respect to the origin of the favor of free will.

We will go into further details of responsibility in its relationship with the free will in part 3.7.6.

2.1.1.5 Necessity Cancels Responsibility

Whoever is guided is only guided for [the benefit of] his soul. And whoever errs only errs against it. And no bearer of burdens will bear the burden of another. And never would We punish until We sent a messenger.

(Quran: 17/15)

He who disbelieves in Allah after his having believed, not he who is compelled while his heart is at rest on account of faith,

but he who opens (his) breast to disbelief-- on these is the wrath of Allah, and they shall have a grievous chastisement.

(Quran: 16/106)

And let there be [arising] from you a nation inviting to [all that is] good, enjoining what is right and forbidding what is wrong, and those will be the successful.

(Quran: 3/104)

In many verses, we see that necessity or coercion at some levels cancel responsibility. Yet there is responsibility. Hence, the free will is valid outside necessity and coercion.

There are lots of orders in the Quran. These orders require muslims, human beings to behave a certain way. If there was no possibility of changing one's direction and will, then these orders would be irrational, redundant, and inconsistent with the systematic of the Quran. Hence these orders also show the freedom of will according to the Quran.

On the other hand, there are consequences of obeying and not obeying the orders. If there was no possibility to change one's will or act then the consequences would be unjust. But Allah says that He is not unjust.

2.1.1.6 Morals Are Real.

That is for what your hands have put forth [of evil] and because Allah is not ever unjust to His servants.

(Quran: 8/51)

Shall We treat those who believe and do good like the mischief-makers in the earth? Or shall We make those who guard (against evil) like the wicked?

(Quran: 38/28)

Indeed, We guided him to the way, be he grateful or be he ungrateful.

(Quran: 76/3)

Allah says that the wrongdoers are unjust toward themselves. So, they are at least a partial origin of their own end.

Quran emphasizes justice. Also, the use of attributes such as grateful, ungrateful, wicked, truthful, patient, humble, and so on for human beings assumes and claims that the agents act as persons, not as particles.

2.1.1.7 Allah Does Not Behave Unjustly to His Servants

They do not wait aught but that the angels should come to them or that the commandment of your Lord should come to pass. Thus did those before them; and Allah was not unjust to them, but they were unjust to themselves.

(Quran: 16/33)

Shall We treat those who believe and work deeds of righteousness, the same as those who do mischief on earth? Shall We treat those who guard against evil, the same as those who turn aside from the right?

(Quran: 38/28)

And it is clearly stated in the Quran that Allah is not unjust. Hence, freedom of the agent and will to a certain extent and will power is

recognized. Allah's word as that He does not behave unjustly to His creation, also shows that free will is recognized by the Quran. If there was no free will, then Allah would need to emphasize that He is just to His servants.

2.1.1.8 There Is Truth, And There Is Error

And say, "The truth is from your Lord, so whoever wills let him believe; and whoever wills let him disbelieve." Indeed, We have prepared for the wrongdoers a fire whose walls will surround them. And if they call for relief, they will be relieved with water like murky oil, which scalds [their] faces. Wretched is the drink, and evil is the resting place.

(Quran: 18/29)

And whoever obeys Allah and the Messenger, these are with those upon whom Allah has bestowed favors from among the prophets and the truthful and the martyrs and the good, and a goodly company are they!

(Quran: 4/69)

The agent and the will are not reducible to narrow physical entities and/or events. Truth and error are real. There are some who claim that they cannot have free will power because they are not but particles bumping one onto another. Such people cannot claim that their claims have any truth value, because after all they are just particles which cannot transcend concepts, relationships, the true, and the false.

2.1.1.9 There Are Invitations to Specific Alternatives and Opportunities

Surely this is a reminder, so whoever pleases takes to his Lord a way.

(Quran: 76/29)

(It is) for the poor who fled their homes and their possessions, seeking grace of Allah and (His) pleasure, and assisting Allah and His Messenger: these it is that are the truthful.

(Quran: 59/8)

Your Lord who causes the ships to sail on the sea so that you may seek His bounty is certainly All-merciful to you.

(Quran: 17/66)

And when the prayer has been concluded, disperse within the land and seek from the bounty of Allah, and remember Allah often that you may succeed.

(Quran: 62/10)

O you who have believed, fear Allah and seek the means [of nearness] to Him and strive in His cause that you may succeed.

(Quran: 5/35)

The essence of the Quran and Islam is an invitation to the right path. Hence, this is only possible with the truth of freedom to will. Also, there are many invitations in the Quran to numerous opportunities.

2.1.1.10 Tests and Wills Make Some Potentials Actual.

[He] who created death and life to test you [as to] which of you is best in deed and He is the Exalted in Might, the Forgiving

(Quran: 67/2)

And it is He who has made the night and the day in succession for whoever desires to remember or desires gratitude.

(Quran: 25/62)

An agent has the potentials of being good or being evil. And many circumstances constitute tests whereby the potentials actualize, and the agent determines whether he is good or not.

For each We have appointed a divine law and a traced-out way. Had Allah willed He could have made you one community. But that He may try you by that which He hath given you (He hath made you as ye are). So, vie one with another in good works. Unto Allah you will all return, and He will then inform you of that wherein you differ.

(Quran: 5/48)

And when it is said to them, "Spend from that which Allah has provided for you," those who disbelieve say to those who believe, "Should we feed one whom, if Allah had willed, He would have fed? You are not but in clear error."

(Quran: 36/47)

Allah can empower someone to feed a person with his own will. This empowerment may create and demonstrate a beauty which cannot happen without that empowerment. However, the disbelievers in the above verse do not see the fact that even if they had fed the poor, it would be again Allah who ultimately fed them. But they would also get high degrees in the sight of Allah.

So, is one who pursues the pleasure of Allah like one who brings upon himself the anger of Allah and whose refuge is Hell? And wretched is the destination.

They are [varying] degrees in the sight of Allah, and Allah is Seeing of whatever they do.

(Quran: 3/162-163)

And for all are degrees from what they have done. And your Lord is not unaware of what they do.

(Quran: 6/132)

Allah is not necessarily obliged to put everyone at the same degree, or not to give such opportunities to anyone. There are many degrees as opposed to the same degree (of zero) where everything is forced by God, or where nobody needs any help, and where there is no possibility and freedom to do a certain act or to will it.

If not measured or tested then the state is in suspension and not clear. If not tested then an agent is neither good nor evil. But Allah can create the good and the evil which have as an important ingredient the freedom of will.

2.1.1.11 A Human Being Can Influence Allah's Will by Calling Him to His Help.

Call unto your Sustainer humbly, and in the secrecy of your hearts. Verily, He loves not those who transgress the bounds of what is right.

(Quran: 7/55)

The most beautiful names belong to Allah: so, call on him by them; but shun such men as use profanity in his names: for what they do, they will soon be requited.

(Quran: 7/180)

And [there is a share for] those who came after them, saying, "Our Lord, forgive us and our brothers who preceded us in faith and put not in our hearts [any] resentment toward those who have believed. Our Lord, indeed You are Kind and Merciful."

(Quran: 59/10)

In many verses the believers are required or recommended to invoke Allah for help. Hence God's will and human beings' wills can interact up to a certain extent. And a human being can influence the will of Allah.

Especially in the last verse above, we see a supplication in order to have correct feelings.

2.1.1.12 Allah Does Not Force into One Way

Had Allah willed, He would have made you one nation [united in religion], but [He intended] to test you in what He has given you; so, race to [all that is] good.

(Quran: 5/48)

Had Allah willed, they had not been idolatrous. We have not set you as a keeper over them, nor are you responsible for them.

(Quran: 6/107)

And had your Lord willed, those on earth would have believed all of them entirely. Then, [O Muhammad], would you compel the people in order that they become believers?

(Quran: 10/99)

Had Allah chosen a way to force people in the best way, then He would make everybody on the right path. But regarding the human beings, this is not His method.

2.1.1.13 Even the Messengers Guided by Allah Had the Possibility to Will Wrong Things.

And [some] among their fathers and their descendants and their brothers - and We chose them and We guided them to a straight path.

That is the guidance of Allah by which He guides whomever He wills of His servants. But if they had associated others with Allah, then worthless for them would be whatever they were doing.

(Quran: 6/87-88)

So be patient, [O Muhammad]. Indeed, the promise of Allah is truth. And ask forgiveness for your sin and exalt [Allah] with praise of your Lord in the evening and the morning.

(Quran: 40/55)

And [mention] the man of the fish²⁸, when he went off in anger and thought that We would not decree [anything] upon him. And he called out within the darknesses, “there is no deity except You; exalted are You. Indeed, I have been of the wrongdoers”.

(Quran: 21/87)

And if We had not strengthened you, you would have almost inclined to them a little.

²⁸ Prophet Jonah (PBUH)

Then [if you had], We would have made you taste double [punishment in] life and double [after] death. Then you would not find for yourself against Us a helper.

(Quran: 17/74-75)

And if he (Muhammad) had made up about Us some [false] sayings,

We would have seized him by the right hand;

Then We would have cut from him the aorta.

And there is no one of you who could prevent [Us] from him.

(Quran: 69/44-47)

Allah has pardoned you (O Muhammad): why did you give them permission (to stay behind), before you could distinguish those who are truthful from the liars?

(Quran: 9/43)

And [mention, O Muhammad], when Abraham was tried by his Lord with commands and he fulfilled them. [Allah] said, "Indeed, I will make you a leader for the people." [Abraham] said, "And of my descendants?" [Allah] said, "My covenant does not include the wrongdoers."

(Quran: 2/124)

Allah rejects the supplication of Prophet Abraham (PBUH) regarding the unjust, when he asks that his offspring be made leaders to mankind. Things which are obvious such as being just or unjust are left to the servant to be followed or not. The will of Allah is not to

interfere with the fundamental will of the servant, as long as he does not ask for help.

In the following verse, we see an example where Allah orders His messenger to do some things. If there was no free will then He would not have ordered him. Because he would already be doing what Allah willed in any case. Especially if we consider that he is a prophet, this becomes more striking. For all orders of Allah to His servants, revelations are like this. They could disobey God, as we see in the example of Jonas (PBUH) who later repented.

And indeed, Jonah was among the messengers.

[Mention] when he ran away to the laden ship.

And he drew lots and was among the losers.

Then the fish swallowed him, while he was blameworthy.

(Quran: 37/139-142)

Question 3.

If prophets were chosen by God, how could they go astray? If a chosen person went astray, then would not this mean that God have chosen wrong person?

Answer 3.

The persons have been chosen for a certain duty. This choice does not mean that they had to be perfect or infallible. Choosing and assigning a person to a post, does not mean a guarantee of having chosen a necessarily successful person. If the chosen person fails, it is not necessarily a failure of the chooser, it may be the failure of the chosen person.

They were given a duty, and they could go astray, but Allah had guided them, helped them. They were exactly like other human beings. They had free will, yet they had a pure nature. But they were challenged with challenges as everybody. For example, Allah says in the Quran that he had chosen children of Israel, and Allah also says that most of them failed on many occasions.

If the prophets did not have free will, then their performances would not be praiseworthy. An important aspect of prophets is their being like anybody else in their human nature.

Some prophets sometimes disobeyed Allah. So, they are not like robots. They even in their relationships with Allah, are exercising their free will. An example of this is Prophet Yunus (Jonas) (PBUH).

Question 4.

Does a prophet have free will power while decreeing on a certain matter as a prophet?

Answer 4.

O Messenger, announce that which has been revealed to you from your Lord, and if you do not, then you have not conveyed His message. And Allah will protect you from the people. Indeed, Allah does not guide the disbelieving people.

(Quran: 5/67)

Or do they say, "He has invented about Allah a lie"? But if Allah willed, He could seal over your heart. And Allah eliminates falsehood and establishes the truth by His words. Indeed, He is Knowing of that within the breasts.

(Quran: 42/24)

Upon you is only the [duty of] notification, and upon Us is the account.

(Quran: 13/40)

Allah knows the heart of a prophet. So, He trusts in him and empowers him. He knows his alternatives and can guide or give necessary info. If he makes a mistake, He can correct him. He has chosen him. He is good but this does not mean that he cannot go astray.

Regarding the knowledge directly given by Allah, as a human being he can declare or not what Allah has taught; or he can alter it or not. But if he does this, or tries this, then Allah says how He will react and stop him.

Yet, knowing the prophet's good will and above average level of ethics and judgment capacity, Allah may empower him so that what the prophet chooses, or orders with pure heart is considered acceptable or even required; even though Allah did not directly decree a certain thing He may allow it to be the way the Prophet decreed. This would imply that what the Prophet has decreed on a specific matter must be that way, yet, there may be other acceptable alternatives regarding that matter. However, regarding the daily prayer for example, there are teachings of the Prophet which if not taken as basis, would make the daily prayers invalid. Because some of the teachings of a prophet may be direct teachings by Allah or His angels, even though they are not explained in detail in the Holy Book. But other than such things, there may be decrees or behaviors of the Prophet which are not the only truth. These are often understood through the clarification of a prophet about how strongly required is a specific issue.

2.1.1.14 There Are the Means to Find and To Be on The
Right Path, And There Is No General Coercive
Misleading Cause.

He [Iblees (Satan)] said, "My Lord, then reprieve me until
the Day they are resurrected."

[Allah] said, "So indeed, you are of those reprieved

Until the Day of the time well-known."

[Iblees] said, "My Lord, because You have put me in error, I
will surely make [disobedience] attractive to them on earth,
and I will mislead them all

Except, among them, Your sincere servants."

[Allah] said, "This is a path [of return] to Me [that is]
straight.

Indeed, My servants no authority will you have over them,
except those who follow you of the deviators.

(Quran: 15:36-42)

Or has he not been informed of what was in the scriptures of
Moses

And [of] Abraham, who fulfilled [his obligations]

That no bearer of burdens will bear the burden of another

And that there is not for man except that [good] for which
he strives

(Quran: 53/36-39)

And [by] the soul and He who proportioned it

And inspired it [with discernment of] its wickedness and its righteousness,

He has succeeded who purifies it,

And he has failed who buries it [in corruption].

(Quran: 91/7-10)

A person can change his state which is not pure, and can purify himself from the diseases, problems. If these problems are objectively incurable, then the person is not considered responsible. The person has powers which is bigger than the noise which causes him problems. For example, the biological balance of the body may be spoiled so that the person wills to smoke. But his reasoning power may show him the way to proceed. And the guidance of Allah is an important tool in this respect.

We will go into further details of this point in part 3.6.2 about OTBT.

2.1.2 The Human Will Is Surrounded by Allah

Unto Allah belongs whatsoever is in the heavens and whatsoever is in the earth. Allah ever surrounds all things.

(Quran: 4/126)

And he said, "O my sons, do not enter from one gate but enter from different gates; and I cannot avail you against [the decree of] Allah at all. The decision is only for Allah; upon Him I have relied, and upon Him let those who would rely [indeed] rely."

(Quran: 12/67)

Allah has full power over His affairs, though most people do not know.

(Quran: 12/21)

They have certainly disbelieved who say that Allah is Christ, the son of Mary. Say, "Then who could prevent Allah at all if He had intended to destroy Christ, the son of Mary, or his mother or everyone on the earth?" And to Allah belongs the dominion of the heavens and the earth and whatever is between them. He creates what He wills, and Allah is over all things competent.

(Quran: 5/17)

And there is no creature on earth but that upon Allah is its provision, and He knows its place of dwelling and place of storage. All is in a clear register.

(Quran: 11/6)

Full power belongs only to Allah. We know what we know, we do not know that which we do not know. But since Allah is the Originator and Creator of whatever is created, He knows all that is. For us the future is unknowable.

We are many and we limit each other.

There can be no will that limits the will of Allah.

2.1.2.1 No Will Can Happen Outside the Permission of Allah.

It is not for any soul to believe save by the leave of Allah; and He lays abomination upon those who do not use their reason.
(Quran: 10/100)

Around us there are lots of factors which influence our wills: There are barriers between us and the good deeds, such as worldly pleasures, health problems, monetary problems...

And there are factors which help us will or do good deeds such as guidance of God, His messengers, knowledge, education, signs of God in the universe...

We are influenced by these things and they are all created by God. The ultimate source of all is Allah. However, the human being and his will are also real. So, the direct origin of the wills and results of the human being from his perspective is mostly himself.

In this respect, there are sufficient conditions for responsibility. One of them is mentioned in the above verse: Understanding or reasoning capacity which must be used appropriately. Some other important conditions mentioned in the Quran are the knowledge given by God, and the power and freedom of the agent to follow the way which is in accordance with a good reasoning. These are real and subject to the permission of Allah as mentioned in the above verse.

A human being may say: "I will believe and enter the paradise whether God wills my entrance therein or not. As Allah promised the paradise for the believers, He cannot prevent me from entering there. Otherwise, He will have broken His promise or He will be unjust." Such a person if he has sufficient reasoning power to continue his daily life, has clearly put aside his reasoning power. Since, it does not require huge reasoning capacity to find out that a creation cannot challenge God like this and force Allah to do a certain thing.

Such a person will not have believed with a true submission to Allah and his belief would not be a real belief. As he has understanding

capacity but has put aside this capacity and moves with his emotions, his belief may be made impossible and prevented by Allah.

Wherever you may be, death will overtake you, even if you should be within towers of lofty construction. But if good comes to them, they say: This is from Allah; and if evil befalls them, they say: This is from you. Say: All is from Allah, but what is [the matter] with those people that they can hardly understand any statement?

What comes to you of good is from Allah, but what comes to you of evil, [O man], is from yourself. And We have sent you, [O Muhammad], to the people as a messenger, and sufficient is Allah as Witness.

(Quran: 4/78-79)

The wills of people exist; yet everything is as approved by God's will.

The agent may will the good or may will the evil. Yet, the will power is given by Allah. The knowledge that the agent can use, the guidance, and the truth are from Allah, therefore the goods are from Allah. Misleading things are also ultimately from Allah, but if an evil comes, this means that the agent did not exercise the free will power and other powers that Allah gave him.

And among them are those who listen to you, but We have placed over their hearts coverings, lest they understand it, and in their ears deafness. And if they should see every sign, they will not believe in it. Even when they come to you arguing with you, those who disbelieve say, "This is not but legends of the former peoples."

(Quran: 6/25)

There are mechanisms and conditions by which the permission of Allah and the lack thereof is executed. We will see them in the following parts.

2.1.2.2 Necessary Elements of Guidance and Going Astray Originate from Allah.

And We have not made the wardens of the fire others than angels, and We have not made their number but as a trial for those who disbelieve, that those who have been given the book may be certain and those who believe may increase in faith, and those who have been given the book and the believers may not doubt, and that those in whose hearts is a disease and the unbelievers may say: What does Allah mean by this parable?

Thus, does Allah make err whom He pleases, and He guides whom He pleases, and none knows the hosts of your Lord but He Himself; and this is naught but a reminder to humanity.

(Quran: 74/31)

Is not Allah sufficient for His Servant [Prophet Muhammad]? And [yet], they threaten you with those [they worship] other than Him.

And whoever Allah leaves astray for him there is no guide.

And whoever Allah guides for him there is no misleader. Is not Allah Exalted in Might and Owner of Retribution?

(Quran: 39/36-37)

And We will have removed whatever is within their breasts of resentment, [while] flowing beneath them are rivers. And they will say, "Praise to Allah, who has guided us to this; and we would never have been guided if Allah had not guided us. Certainly, the messengers of our Lord had come with the truth." And they will be called, "This is Paradise, which you have been made to inherit for what you used to do."

(Quran: 7/143)

Since there is no god other than Allah, everything necessary for guidance or going astray originate from Allah. This does not mean that these requirements are always coercive causes.

2.1.2.3 The Guidance or Misguidance of Allah Is Generally Based Upon the Will and Attitude of The Human Being.

And those who strive for Us We will surely guide them to Our ways. And indeed, Allah is with the doers of good.

(Quran: 29/69)

Surely Allah does not change the condition of a people until they change their own condition; and when Allah intends evil to a people, there is no averting it, and besides Him they have no protector.

(Quran: 13/11)

And [mention, O Muhammad], when Moses said to his people, "O my people, why do you harm me while you certainly know that I am the messenger of Allah to you?"

And when they deviated, Allah caused their hearts to deviate.

And Allah does not guide the defiantly disobedient people.

(Quran: 61/5)

And Allah sends astray the wrongdoers. And Allah does what He wills.

(Quran: 14/27)

I will turn away from My signs those who are unjustly arrogant in the land, (so that) even if they see each and every sign, they will not believe in it.

If they see the Right Way before them, they will not follow it; but if they see a crooked way, they will follow it; this is because they denied Our revelations and were heedless of them.

(Quran: 7/146)

Only they believe in Our communications who, when they are reminded of them, fall down in prostration and celebrate the praise of their Lord, and they are not proud.

(Quran: 32/15)

And certainly, Joseph came to you before with clear arguments, but you ever remained in doubt as to what he brought; until when he died, you said: Allah will never raise a messenger after him. Thus, does Allah cause him to err who is extravagant, a doubter.

(Quran: 40/34)

And when a sign comes to them, they say, "Never will we believe until we are given like that which was given to the

messengers of Allah." Allah is most knowing of where He places His message. There will afflict those who committed crimes debasement before Allah and severe punishment for what they used to conspire.

So, whoever Allah wants to guide - He expands his breast to [contain] Islam; and whoever He wants to misguide - He makes his breast tight and constricted as though he were climbing into the sky. Thus, does Allah place defilement upon those who do not believe.

And this is the path of your Lord, (a) right (path); indeed, We have made the communications clear for a people who mind.

For them will be the Home of Peace with their Lord. And He will be their protecting friend because of what they used to do.

(Quran: 6/124-127)

If the agent purifies himself, then, he can be open and eligible to receive the guidance of Allah. Otherwise, he becomes a mixture of good and evil or full of evil. Beyond a certain degree of evilness, he becomes ineligible to the guidance of Allah.

A person who is unjust, arrogant, and defiantly disobedient is ineligible for the Divine guidance. To be guided, an agent must open himself to the guidance.

Each person has his ability to protect himself. If objectively he does not have this ability, he is not responsible.

So, in cases where he is responsible and he chooses the path of evil, God may directly or indirectly through mechanisms created by Him cause him to go further astray:

Allah does not permit a truly evil person believe. This is not injustice from the side of Allah. As that person has been arrogant and unjust, he has been unjust toward himself. And ultimately his disbelief originates from himself.

As we see in the above verse, the will of God is real, and the will of the human being is also real. They interact.

In the following verse, we see that the example causes them to go astray, yet it is said that Allah is the one who misleads:

Indeed, Allah is not timid to present an example that of a mosquito or what is smaller than it. And those who have believed know that it is the truth from their Lord. But as for those who disbelieve, they say, "What did Allah intend by this as an example?" He misleads many thereby and guides many thereby.

And He misleads not except the defiantly disobedient.

(Quran: 2/26)

Likewise, any factor around us which misleads us may actually be a tool through which Allah misleads. This shows that the things mislead, but their misleading is in the same time, actually a function of our evilness. Hence, there is the interaction between these tools, us, and God. If we are evil, then our evilness is reflected upon us by God through those tools.

There are those who reject God though they do not have any argument or evidence against God. They do not have any evidence about the non-existence of evidence for God. Yet they easily challenge or may even insult God. These attitudes are emotional, and such deny God according to their arrogance. And as such, warnings have no effect on them as noted in the following verse:

Indeed, those who reject faith it is all the same for them whether you warn them or do not warn them they do not believe.

Allah has set a seal upon their hearts and upon their hearing, and over their vision is a veil. And for them is a great punishment.

(Quran: 2/6-7)

The thieves know well that being robbed is not a good thing, yet they see robbing fine as long as they are not the robbed ones. When they rob, they take the risk, and if their robbery is successful, they will enjoy what they have robbed. This is the real cause. If it is OK for them to hurt someone, then if they say it is not OK that they are hurt themselves, then of course they are lying, and they are inconsistent. They knowingly choose their evil path. Allah does not need to force them to another path.

A person like this, who does not care for consistency and understanding will probably behave in a similar manner toward God. And in this state, not recognizing the God who created him, not giving due credit to God in this respect originates from their putting aside their reasoning power. Hence while they reject God and while they are within this state, the rejectors' hearts are sealed and they cannot believe.

But if they get rid of their arrogance, defiantly disobedience, ungratefulness, and inconsistency then they can be open to belief and guidance. With openness to truth, justice, humility, thankfulness, they can open the channels through which they can receive the Divine guidance.

On the other hand, if there was no free will what would Allah seal and why would He not permit them to believe? Since the beginning,

all would be as He wished and if there was no will He would be sealing His own decision and will.

Leave alone those who take their religion to be mere play and amusement, and are deceived by the life of this world. But proclaim (to them) this (truth): that every soul delivers itself to ruin by its own acts: it will find for itself no protector or intercessor except Allah: if it offered every ransom, (or reparation), none will be accepted: such is (the end of) those who deliver themselves to ruin by their own acts: they will have for drink (only) boiling water, and for punishment, one most grievous: for they persisted in rejecting Allah.

(Quran: 6/70)

To be willfully evil is a matter of choice, not a matter of being constrained or forced.

In their (hypocrites') hearts is disease, so Allah has increased their disease; and for them is a painful punishment because they [habitually] used to lie.

(Quran: 2/10)

This disease is like the health problem of an addict. If he admits this problem, then he can take the necessary steps. But if he does not admit, then he cannot proceed in the correct way. He just rejects the correct path, maybe knowingly. Such reject the good at the very bottom of their souls, unless they themselves want to be upon the truth.

And if they had intended to go forth, they would have prepared for it [some] preparation. But Allah disliked their being sent, so He kept them back, and they were told, "Remain [behind] with those who remain."

Had they gone forth with you, they would not have added to you aught save corruption, and they would certainly have hurried about among you seeking (to sow) dissension among you, and among you there are those who hearken for their sake; and Allah knows the unjust.

(Quran: 9/46-47)

The misleading or guidance of Allah are for reasons. Had Allah guided or allowed those who are unjust to acceptable belief or to certain actions, or into certain groups, or into paradise, then they would cause disorder in a way that is unacceptable for God.

Allah might cause them to be good by removing their free will to a great extent, but then this would not be their goodness. Allah fully by Himself, might also cause them to be good by not removing their free will power, but then they would not have contributed again to their own goodness.

If an extremely bad person who killed millions of people and did not sincerely regret what he did, entered paradise, then he would cause problem in paradise or he would be forced to behave a certain way in the paradise.

And indeed, there is among them a party who alter the Scripture with their tongues so you may think it is from the Scripture, but it is not from the Scripture. And they say, "This is from Allah," but it is not from Allah. And they speak untruth about Allah while they know.

(Quran: 3/78)

Indeed, this is a reminder, so he who wills may take to his Lord a way.

But you will not unless God wills; surely Allah is ever All-knowing, All-wise.

He admits whom He wills into His mercy; but the wrongdoers He has prepared for them a painful punishment.

(Quran: 76/29-31)

Certainly We sent Our messengers with clear arguments, and sent down with them the Book and the balance that men may conduct themselves with equity; and We have made the iron, wherein is great violence and advantages to men, and that Allah may know who helps Him and His messengers in the secret; surely Allah is Strong, Mighty.

(Quran: 57/25)

O you who believe! save yourselves and your families from a fire whose fuel is men and stones; over it are angels stern and strong, they do not disobey Allah in what He commands them, and do as they are commanded.

(Quran: 66/6)

He created world of angels who do not disobey God. And world of human beings who may choose to disobey and see consequences. At the end in any case the good rules.

And so those who were given knowledge may know that it is the truth from your Lord and [therefore] believe in it, and their hearts humbly submit to it. And indeed, is Allah the Guide of those who have believed to a straight path.

(Quran: 22/54)

Allah guides the believers by His words and by other means to the right path. Due to the interaction of belief of the believer and the

guidance of Allah, those who have not been guided are not probably believers.

There are common points for everyone, such as vulnerability of each human being, obvious ends, causal links, and some obvious truths perceived and comprehended by everyone. These are taught by God to responsible human beings. Those who are not able to comprehend them objectively are not responsible. These are the foundations of responsibility: A person may not say I was disadvantaged in this respect, because I did not know that fire would burn or harm me. Any person who knows this, can not say if he jumps into the fire, I am not responsible for jumping in the fire, so why I got burnt. This is the seed of responsibility, and nobody can claim lack of freedom in this respect, since nobody is forced to jump into the fire, if not openly coerced. If someone manipulated his brain, so that he jumped without having any freedom, then he is not responsible. And this reality surpasses the neuron. For the neuron, it does not make any difference to fire or not so as to make the subject enter the fire. The influence is top-down oriented. If the top chooses to jump into the fire, therefore, the top cannot blame the down.

Question 5.

In the verse of the Quran 2/6, it is said that it is equal whether the Prophet (PBUH) warns or does not warn, they will not believe. And in the following verse, it is said that Allah has sealed their hearts. So, how can Allah take them as responsible, since they cannot will to believe?

Answer 5.

And Moses said, "Our Lord, indeed You have given Pharaoh and his establishment splendor and wealth in the worldly life, our Lord, that they may lead [men] astray from Your way.

Our Lord, obliterate their wealth and harden their hearts so that they will not believe until they see the painful punishment."

[Allah] said, "Your supplication has been answered. So, remain on a right course and follow not the way of those who do not know."

(Quran: 10/88-89)

A person has the freedom to be good or not with the freedom given by Allah. Allah provides us with signs that show us the truth, and the superiority of divine values, and of being good. He says that He misleads only those with certain bad attributes, and He does not permit them to believe.

Belief is also a favor of God. In this sense, disbelief is a punishment, a curse. For example, in the above quoted two verses, Moses (PBUH) asks Allah to increase the wealth of Pharaoh and his companions, and make them disbelieve until they see the punishment of Allah. The reason for this was that Pharaoh was evil, unjust, arrogant, he was torturing people, he was being unjust against them. Torturing people, being arrogant upon the earth is not a good attitude compliant with the truth. This is clear to everybody since whoever is the victim of such an attitude knows that this is not good; and a person with a mental capacity to continue his daily life can perceive this fact. Pharaoh also can perceive this. Yet, he committed his acts knowing that what he did was not good; he would not want that what he did to others was done to him. He behaved like that while he knew the evilness of his acts thanks to the faculties Allah gave him. He chose to be evil. He chose to be arrogant. Therefore, he did not deserve to be a believer, and enter paradise. Hence, Allah did not guide him, maybe He prevented his belief. But the origin of his disbelief was his choice of being evil.

Question 6.

If Allah hardens the heart of Pharaoh, then why would he be responsible?

Answer 6.

Note that in the verse, Allah hardens the heart of Pharaoh because he was very evil prior to the hardening. Certain acts demonstrate that the essence of the actor has become totally evil, and buried under bad qualifications. Pharaoh has proven that whatever potential of evil he had, he would use it to the full extent for his arrogance and oppression. He did not sincerely ask for the help of Allah. Whenever he asked and was helped, he turned away.

Allah's rule is that He misleads and does not guide the arrogant. Pharaoh with his evil whole, which he chose to be has been subject to that rule. Pharaoh destroyed and suppressed his pure essence to satisfy his low desires. He did not care for his OTBT. He did not exercise his free will power and related powers appropriately.

Therefore, though Allah hardened his heart, the cause of this hardening was his own wills and acts.

We should note that all evidence was in fact encouraging him to follow Moses and Allah's guidance. So, if he had headed for the right way, this would be essentially because of Allah. However, despite evidence, he let his low desires govern him. Hence, his error originated from himself. So, he is responsible.

The guidance of Allah has been encouraging him toward the truth. This was in compliance with the norm in the following verse:

What comes to you of good is from Allah, but what comes to you of evil, [O man], is from yourself.

(Quran: 4/79)

2.1.2.4 In Terms of Action, What Allah Wills Will Happen.

Then after distress, He sent down upon you security [in the form of] drowsiness, overcoming a faction of you, while another faction worried about themselves, thinking of Allah other than the truth, the thought of ignorance, saying, "Is there anything for us [to have done] in this matter?" Say, "Indeed, the matter belongs completely to Allah." They conceal within themselves what they will not reveal to you. They say, "If there was anything we could have done in the matter, some of us would not have been killed right here."

Say, even if you had been inside your houses, those decreed to be killed would have come out to their death beds." [It was] so that Allah might test what is in your breasts and purify what is in your hearts. And Allah is Knowing of that within the breasts.

(Quran: 3/154)

Indeed, the time [set by] Allah, when it comes, will not be delayed; if you only knew.

(Quran: 71/4)

Allah is the designer of physical laws, structures, constants, initial positions and so on. On the other hand, even though these are set, there is also unpredictability for us and buffer wherein Allah may change everything whichever way He wants: A photon may be used to trigger a nuclear bomb, or to stop it. As made clear in the chaos theory, a slightest change in any initial position may produce huge outcomes.

In this respect, Allah may also change the setting in which a person exercises his free will, even though He may let that person free in exercising his free will within a range.

2.2 Attributes of Allah

He is Allah besides Whom there is no god; the Knower of the unseen and the seen; He is the Beneficent, the Merciful

He is Allah, besides Whom there is no god; the King, the Holy, the Giver of peace, the Granter of security, Guardian over all, the Mighty, the Supreme, the Possessor of every greatness; Glory be to Allah from what they set up (with Him).

He is Allah the Creator, the Maker, the Fashioner; His are the most excellent names; whatever is in the heavens and the earth declares His glory; and He is the Mighty, the Wise.

(Quran: 59/22-24)

In Islam, the origin of all things ultimately is Allah.

That is Allah, your Lord; there is no deity except Him, the Creator of all things, so worship Him. And He is Disposer of all things.

(Quran: 6/102)

In Islam, everything relates to Allah. Allah is the name of the one God. God is the ultimate cause of any creation. The attributes of Allah have key implications not only regarding the creation, but also regarding the acts and wills of the creation. Therefore, I will explain in this section the attributes of Allah and how they relate to “will power” and “the freedom of the will power”. A good understanding about the attributes of Allah is necessary for understanding the Quranic framework of free will.

Firstly, we have to understand what a free will power without any limitations (as opposed to the limited will power of human beings) essentially is. This will help us understand what free will in our context is. It would be impossible to understand whether we have free will if we do not know what freedom of will is in its simplest form. So here, to have some idea about the free will of God is crucial in this respect. Because it gives us a true and basic understanding of free will. It will also give us a good understanding about how a power of freedom is different in kind from other powers.

Also, to exercise the will power, we have to have certain other powers. These other powers and the will power cannot be explained by and cannot originate from the spatiotemporal relationships. Hence, they need an Originator, a Creator who may give them to us. If all things including free will are reducible ultimately to point-like interactions of point-like things, then free will will go out of the window just from the beginning. Therefore, in order to understand free will and whether it exists or not, it is very important to understand Allah, the Originator of all things, His transcendence and His unity.

As God is One, He has the absolute knowledge of being God and all truths relating to that, as there is no other place where that knowledge can reside. And as God is related to all things in a huge extent, we will never have satisfactory knowledge about anything without having some knowledge about God. Knowledge about God constitutes a large part of knowledge of the reality other than God. So, having sufficient knowledge about some attributes of Allah other than His free will is also necessary to comprehend free will.

According to the Quran, it is not possible to sufficiently explain anything without God. The Self-Sufficient Allah is the Sustainer of all and nothing can exist without God. Everything has the attribute of being sustained by the unity, power and knowledge of God. Therefore, free will power and things related to it cannot be

understood without God. So, in the following parts I will explain the attributes of Allah.

Question 7.

We are limited and relative, and whatever we can conceive of, is of our nature, relative, limited, and can be reduced or increased. So how can we make conclusions about the unlimited God?

Answer 7.

Can we know all about God? No. Can we make no conclusion about Him? Certainly, we can make some conclusions about God, since things are related to God and they are created and sustained by God as explained in relevant parts of this book, and in the related resources. We need to reach only conclusions about Him which are relevant for us.

2.2.1 Allah Is

Indeed, I am Allah. There is no deity except Me.

(Quran: 20/14)

Allah is the Eternal, Transcendent, Aware, Self-Sufficient, One, Multipotential²⁹ Cause, Originator, Designer, Sustainer, Guide of all creation.

Without having an understanding about the One God, it is unlikely to be able to have a sufficient understanding about free will in Islam.

And without believing in One God as in the first paragraph above, it is difficult to fully believe in the existence of a true free will power.

²⁹ The multipotentiality is explained in part 3.1.1.3.1.2.

Because belief in free will power requires the belief in the unitary and transcendent essence of the agent, and unitary and transcendent free will power. Unlike alleged point-like instantiations within the brain of the agent, the alternatives must be transcendently united within the unitary essence of the agent. Furthermore, this essence must have an effect on the elements of the brain so that they behave in a holistic way, and differently than what the wholes of the parts entail.

The acceptance of such an essence and such a power requires a unitary locality³⁰ within them and outside them. Because, on one hand, such a power will dominate the parts of the agent and of the agent's brain, and on the other, such unitary essences must be distinguished from other such essences and also related with other such essences. Also, these essences must be combined with the elements that are allegedly spatiotemporal. In Islam all these distinctions and combinations are done and sustained by the Fundamental Unitary Power through creating and sustaining activity.

Without the One God, we will have to explain the agent, his will power, and "everything" of the agent and of his will power with things which are not transcendent, which do not have knowledge, which do not originate the truth, which are not sovereign, which are not one. These things which lack these properties, cannot give such properties to other things. Hence, the agent will be just an

³⁰ Especially based on some quantum phenomena, non-locality is accepted by many. Here, the denial of locality is because of the observed facts that there are no distances as absolute barriers. However, as explained in the related parts, alleged distances are not and cannot be absolute distances in the first place. They are elements of design, transcendence, and of unity. So, locality does not necessarily entail absolute distance. Hence, according to Islam, instead of an expression as "non-locality" which embodies the two errors of recognizing distances as absolute and then denying them entirely, the expression of "unitary-locality" which recognizes both locality and its distances' unitary-binding function is more plausible. For this reason I prefer using the expression "unitary-locality" instead of "non-locality".

epiphenomenal event, without any distinct effective causal power and therefore without any distinct will power.

In Islam, belief in Allah is mainly through evidence and reasoning. Attributes of Allah relevant for us are sufficiently accessible. Blind faith or mysteries have no key place in Islam. Since we are responsible as human beings, Allah enabled us to distinguish the truth with our own capacities and with the present evidence.

Allah is not a specific person within the history, Allah is not a god of a specific nation, Allah is not a limited object, Allah is not an animal. Hence, many counter arguments brought against god concepts which contain subjective human elements, around the question "how do you know that your god is true as opposed to another god" are not applicable against Allah.

Proofs for Allah according to the Quran follow the following elements: Everything in the universe is evidence for Allah. An electron, an atom, a cell, an animal, a stone, a human being, an eye, a star, a moon, the space, numbers, ...

Say, "This is my path: I invite to Allah, on the basis of clear proof, and so do those who follow me. Allah be glorified. I am not an idol worshiper."

(Quran: 12/108)

Among His proofs is that you see the land still, then, as soon as we shower it with water, it vibrates with life. Surely, the One who revived it can revive the dead. He is Omnipotent.

(Quran: 41/39)

Those who disbelieve in the signs of Allah and kill the prophets without right and kill those who order justice from among the people, give them tidings of a painful punishment.

(Quran: 3/21)

Hence, the denial of the evidence/ signs/ proofs³¹ of Allah is not separable from the denial of Allah.

When we observe the universe, we see many events and entities. But we also see that none of them has the power of its own to behave the way they do. A rock falls down, but it does not have the power to notice what is down and what is up. The same applies for its molecules, atoms, electrons, and so on. Or if we explain its fall with spacetime curvature, the same applies to the parts of the spacetime. The rock or its components do not have the power on their own to coordinate with the planets and stars. But it cannot reach the ground while falling *ceteris paribus* unless the earth rotates a certain angle.

These show us that what we see through our eyeballs is a limited part of the existence. We have to use our eyes of intelligence in order to see more completely.

Upon such reasoning, human beings conclude that either God or god-like things exist. Some of us believe in God. Some say that there are equations which kind of make the rock fall. Some say it is a spacetime curvature which makes it.

The Quran says that all things other than the true God, needs God. No multiple thing can be the true cause of the universe.

³¹ The word corresponding to sign/ proof/ evidence used in the Quran is generally “ayah” in Arabic.

The fall of the rock needs a Being who is transcendent and aware of the entire universe. The movements of things need a Powerful who will give them energy.

In this respect, each attribute of Allah is effective. And each of them is an evidence for God.

So, as part of the argument for free will, I need to give briefly some arguments for God. This way, we will also have seen some information about who or what Allah is. The following arguments for God are very relevant to free will power. Because, the system in this book which entails the existence of the free will power is partially built on the rejection of determinism, indeterminism, physicalist reductionism for a more satisfactory, consistent, and complete alternative. This alternative is a system which is sustained by Allah. Therefore, I will give some proofs about Allah. Yet, as a detailed presentation of these proofs here would necessitate too big a size for this book, I will limit the space allocated to these proofs.

The attributes of Allah that are not specifically explained in the following as arguments for the existence of Allah can also be bases for arguments for the existence of Allah similarly to the following. The attributes of Allah relate to the empirical world. Hence, they are not only logical arguments, but also empirical ones.

Note that these arguments are given because they are closely related to the existence of the free will power. These arguments are also very important because their details are essential in understanding how free will power works.

I will not go through each attribute of Allah as evidence for the existence of Allah, this is beyond the scope of this work, but you can easily try to develop the arguments according to the following.³²

2.2.1.1 Argument from Contingency, Dependence, and Necessity

Allah is the Self-Sufficient.

(Quran: 112/2)

If everything depended on other things, then there would be no existence. Because, in this case, there would be either infinite regress, or circularity.

If a woman W1 depended on her mother M1, if M1 depended on her mother M2, if M2 depended on her mother M3 so on and so on in an infinite regress, then this chain of mothers would not exist since none in the chain has any self-sufficient power to exist in the first place.

This problem does not only exist sequentially; it can exist in many other directions: For example, if a stone depends on its molecules, if the molecules depend on the atoms, if the atoms depend on the protons and so on in order to exist, then none of them would exist either. I explain the problems and contradictions with bottom self-sufficient particles/ fields in the part 3.5.6.4.2.8.

Again, if in order to move under gravity, a stone needed some guiding particles to detect its direction, speed and acceleration, or if for such it needed spacetime curvature, and if spacetime curvature needed its components to be curved, and its components needed to

³² For the complete book of the author about the proof of Allah see:
<http://islamicinformationcenter.info/poa.pdf>

be curved correctly because of other components, so on and so on, there would be infinite regress as well.

Hence, everything cannot be dependent on other things, there needs to be one self-sufficient and necessary cause.

How can we know that the necessary being is sentient and has free will power? As will be explained in this book, truth, transcendence, consciousness, and some other attributes of human beings are not reducible to spatiotemporal events or entities. Hence, for the above reasons, they also need to be caused by the necessary being. For example, my awareness of my beautiful flower depends on the existence of that flower. But the flower needs my care. Hence, if my awareness is an effective element in this entire existence, and if it is contingent, and irreducible to the spatiotemporal, then it cannot be caused by a necessary cause which causes only spatiotemporal events and entities. The necessity for unity applies in this case as well. Therefore, the necessary cause must be sentient as well.

Hence, it is obvious that if “everything” depended on other things, there would be no existence and no basis for existence. Therefore, we can safely conclude that there is one self-sufficient thing/being.

Furthermore, if the null hypothesis requires that there is no necessity for the universe to be the way it is, then we can conclude that the necessary being has the free will power. Because although He could design it otherwise, He designed it the way we observe.

Moreover, I will demonstrate our free will power in the coming parts. In line with the above points, this will show that the necessary being must also be the origin of our free will power.

How do we know that there is only one necessary cause?

We can understand this when we examine the circularity aspect of the contingency/ dependency argument. Regarding circularity, if the point P1 in space is defined based on point P2, and if P2 is defined based on point P3, and so on and in total if P2 is defined based on P1, then no point would have a real basis. Likewise, if the speed of the object O1 is in its relation to object O2, and if the speed of O2 is in its relation to O1, then none of the two speeds is self-sufficient. This shows us that the necessary Being is one. Otherwise, allegedly multiple necessary beings would be dependent upon other necessary beings and they would also be limited.

Ibn-I Sina (Avicenna) argued for the unity of God in the following way: If there is more than one self-sufficient being, then there would be a contradiction. Because then there would be at least one element that distinguishes one from the other and that factor would be needed for both of the allegedly self-sufficient beings. Hence, these allegedly self-sufficient beings would not be self-sufficient. Therefore, there can be only one self-sufficient being.

Question 8.

Is God a requirement for free will? Can we have a complete and consistent model for free will without God?

Answer 8.

No, in Islam, God is necessary for understanding sufficiently all things. However, for example a physicalist who believes that spatiotemporal things are self-sufficient may also improve his understanding about free will by learning the Islamic framework, even if he does not believe in it.

2.2.1.2 Argument from The Non-Existence of Nothingness

He is the First and the Last, the Ascendant and the Intimate,
and He is, of all things, Knowing.

(Quran: 57/3)

I will explain this based on a question: If there can be no infinite regress, and if God created things, then who or what created God?

This question is extremely important. Because it is built on the most important false belief that nothingness is the all-encompassing, simplest, and default reality.

This question assumes that the default or the rule is nothingness. It assumes that there was nothing, then God appeared, so who or what made God appear.

Actually, nothingness is not the default or the rule.

When we look at the sky in the night, we see that it is mostly black, and here and there are stars and/or galaxies... This is just a wrong impression. The black that we see is not nothingness.

By definition nothingness does not and cannot exist. If we can show nothingness, then it is not nothingness since we can show it and give it certain attributes. If it has an extension, it is not nothingness. If it has any effect, it is not nothingness.

So, nothingness cannot exist as a general nothing. But also, it cannot exist as a partial nothing³³. Hence, something cannot be surrounded by partial nothingness either.

The default, the rule is full power.

³³ (Tosun 2012)

One may ask: Well, maybe this nothingness does not exist, but this does not mean that full power exists. Is not it possible that “something” exists instead of full power and nothingness?

Something would be “something which is surrounded by partial nothingness”. But partial nothingness cannot exist exactly for the same reason for the impossibility of general nothingness.

“Something” in the latter question assumes the existence of partial nothingness: There is a thing, but that thing is not full power, like we see in the specific amount of energy within the present universe or within a certain volume of space. What is beyond that energy level? Beyond a speed? Beyond an acceleration? Beyond a size? Beyond a consciousness level? Is there a partial nothing beyond them? Is it that which holds them at what they are? Does it constitute their boundaries? Partial nothingness does not exist and cannot exist for many reasons. Hence, a logical necessity for the existence of “something” is not possible. So, as neither general nothingness nor partial nothingness are possible, the rule is full power and full knowledge. In Islam the Eternal and All-Encompassing Being is called Allah.

The existent cannot be surrounded by nothingness. Relatively to us and from our perspective we can say that the rule is non-existence of nothingness and existence of full power.

If there is one ultimate power as we observe empirically and if a partial nothingness around it which would constitute limits around it is impossible, then that power is a full power.

There is no nothingness either which would divide this full power into parts. We say that the handle of the door is a part of the door, because we can separate the handle from the door and then there can be a distance between the handle and the other part of the door. But

the distance is not nothingness; nothingness cannot separate any two things. Distance is also an implication of the full power. A point of space is not separated from the adjacent point by nothingness.

If the existence of something is claimed as opposed to the existence of full power, parts of this something are again within a unity and connected by a power.

If considered applicable, the null hypothesis also requires the non-existence of a coercive bias.

Non-existence of general and partial nothingness is very important in that it is an answer to why there is full power rather than nothingness. It also answers why there is something. But furthermore, together with the other two arguments in this part, it also gives an idea about the basis of creation.

As there is no distance because of non-existence of nothingness, there is a fully homogeneous full power. And this full power in his creating power, has the potentials of all things. These potentials are not creatable out of nothingness. They exist under the Creative Power of this full power. This power actualizes whatever He want to create.

The following verse alludes to this:

His command is only when He intends a thing, that He says to it, "Be," and it is.

(Quran: 36/82)

He it is who gives life and causes death; and when He decrees a matter, He but says to it, "Be," and it is.

(Quran: 40/68)

Originator of the heavens and the earth. When He decrees a matter, He only says to it, "Be," and it is.

(Quran: 2/117)

Some examples which may show us that this would not be impossible would be some of our abilities given and sustained by God, such as our consciousness and free will power: When we will a certain thing, we connect it into the flow of certain chains so as it is executed. Our essence connects things transcendently, and we have new conceptions in our consciousness. Also, our essence can reorganize some spatiotemporal structures.

In part 3.6.1 and other related parts, I will go into further details about this point.

2.2.1.3 Argument from Unity

And your god is one God. There is no deity [worthy of worship] except Him, the Beneficent, the Merciful.

(Quran: 2/163)

If there had been in them[, heavens and the earth,] any gods except Allah, they would both have certainly been in a state of disorder; therefore, glory be to Allah, the Lord of the dominion, above what they attribute (to Him).

(Quran: 21/22)

Argument from necessity relates to the impossibility of infinite regress and circularity within all that actually exist.

Argument from unity focuses on the unity observed within the multiple things. For example, remember our falling rock example above. It cannot reach the ground unless the earth rotates a specific angle. If the rock reaches the ground very slowly *ceteris paribus*, what

would be the basis to say that there is something wrong in its fall in terms of time?

And each time we make a similar experiment, *ceteris paribus*, we observe similar relationships. Similar relationship is also true between the rock and the movement of the sun. The rock, and the earth do not design that relationship, and do not know the entire universe, and do not have any control about other things. Yet what we observe is true. This shows that there is one power above all things. Such things are impossible unless there is One Power over all things.

Many who reject God, see the matter as that which is sufficient without God. The reason for this is that the matter is not questioned, it is generally conceived by senses. But thinking about it will lead us to different conclusions. In the explanations about physicalism, determinism, space, time, it will be made clear that matter is not a self-sufficient thing. And it needs to be questioned. It has multiplicity and it does not have features for being a basis for the existence. Above, it is explained why the matter has circularity, does not have the transcendence necessary for the unities we observe.

The matter is claimed to be observed generally as waves and particles. What is a wave? Wave propagates in a medium, as a sound or the waves of a sea. So, it is consecutive shapes of the medium. Yet there are also things like photons which are waves, but which also are quanta. There are different theories about these. But essentially, waves are specific changes in a medium. If a wave is the movement within a medium, this means that the medium itself has differentiations within it. So, while a wave is defined as a change within a medium, the medium also is defined by change.

A particle is also defined by change: For example, it has boundaries. So, the matter which in any case is defined by change is not by itself

and by its intrinsic properties a final explanation for the existence, whatever is its shape.

The elements of change are defined by each other; therefore, the basis cannot be the change itself. The basis must be a power with a unity unlike that which we imagine.

Question 9.

How can God know that He is the only God?

Answer 9.

If an alleged self-sufficient cause (SSC)³⁴ has multiplicity within His essence, this would mean that it is not SSC: Because it would need a cause which is One as explained in the following syllogism³⁵:

FROM AXIOM-CONCLUSION

³⁴ Self-sufficient cause or more specifically Allah. For further details see (Tosun 2012).

³⁵ This syllogism applies for SSC in that it shows that SSC does not have parts or divisions; this applies to effect causes (EC) and its parts. An effect cause, is an effect of something else and as such it also causes effects; in essence, it is an effect, not an absolute cause. But as EC does not have a permanent and self-sufficient essence, in terms of EC its value is in its demonstration of the sustaining unity of the SSC regarding EC.

- 1 OBSERVATION Point³⁶ a defines point b, and point b defines point a³⁷.
- 2 OBSERVATION Point a and point b are limited³⁸.
- 3 OBSERVATION 1 and 2 apply to the constituents of dimensions as well.
- 4 OBSERVATION The dimension of the object can be related to what extends beyond that object in that dimension.
- 5 LOGIC 1 is circular and impossible, when considered within only the testable universe.
- 6 1 This circularity applies to the parts of a and to the parts of b.
- 7 5 and 6 Point a and point b are not defined each within itself³⁹.
- 8 2 One of them (a and b) cannot contain any information (/initial

³⁶ We use the word “point” to make the syllogism general, which may be replaced part, object, and element etc. according to the context.

³⁷ Point b can be defined by point a, point be can be defined by point a.

For example, the size of a tree is defined by meter, and the meter is defined by the distance taken by light in a certain time. There is no reason for the speed of an entity to be relatable/ comparable to the speed in another location or in another time.

³⁸ For example, a four-meter-long tree does not extend 100 meters.

³⁹ Otherwise nothing would be relatable to something else.

- and absolute defining capacity)
about the other.
- 9 7 and 8 They are defined from/within
outside of them⁴⁰
- 10 1 They are unified
- 11 2 and 9 They cannot unify themselves
- 12 4 There is a higher level in which
they can be related and which will
unify them.
- 13 10, 11 and 12 They need ONE power to unify
them

Let us give a simple example of a universe that consists of stone S1, the smaller one, and stone S2, the bigger one. If we say S2 is bigger than S1, the bigness of S2 depends upon the smallness of S1, and vice versa. The size of a stone does not mean anything except if it is linked to the size of another stone, or to a unit within another object externally. Internally, the size of any stone relates to the structure and behavior of its sub-parts which behave according to a certain unit. These units cannot be inherent to any object, because any unit relating to ONLY any object is not a unit, is not meaningful, and cannot produce any consequences. And therefore, S1 does not define itself, and it cannot define S2; since S2 would be defined by S1, and vice versa. So, they need one cause, which has unity and which has power on all that exists so that each stone may have any value.

⁴⁰ This applies for the amounts of extension (What is within it, such as the amount of extension in units) as well (as the limitations). (From 3 and 9)

The variation of the units according to certain systems requires other kinds of units according to which the previous units change. Thus, relativity theory or physical transformations according to different geometries do not affect the above analysis in a negative way.

Thus, SSC can only be one⁴¹.

We do not need to assume that God is of the same nature as the creation. God's unity and being is unique and different than what we observe in the limited world. In this world we see things that seem to be separate; there is generally systematic discontinuity, in other words we do not see the same structures/relationships at all levels. Everything that exists is not of the same nature. Even in this universe as well things are not reducible to other things in a homogeneous way. For example, Newton's relationships do not apply at the quantum level.

Based on the three arguments above we can conclude that the fundamental unitary power exists.

Question 10.

Is not the idea of God of gaps fading away with the development of science, and since things are explained more and more and without any reference to God, how much is it reasonable to explain free will in its relationship to God?

Answer 10.

This argument against the idea of God called god of gaps is not defensible against Islam, since in Islam nothing other than God is self-sufficient and everything other than Him needs Him. From this

⁴¹ The answer to this question until this point is taken essentially from (Tosun 2012).

perspective, according to Islam, there is no self-sufficient part of the “wall” in the first place, therefore we cannot speak of a “gap” filled by God. Nothing is fully explained, and no thing other than Allah has any attribute relevant and meaningful so as to make that thing candidate as a fundamental cause of what we observe, even partially.

For example, if gravity might be explained fully so as it is self-sufficient, then one might say god of gaps argument against God is valid. But as things depend on each other, there is circularity in the limited world since things are explained by things that they cause or by things that need causes or in other circular ways. There is no possibility to explain the limited universe or its parts by their own selves or by their components. So, there is no possibility to say that “this thing is explained fully, so it narrowed down the need for God, let us fill the next gap”.

2.2.1.4 Argument from Fine-Tuning

Almost everybody including many atheists agree that there are very precise relationships in our observable universe which make it exist as it is. For example, if the cosmological constant was different than its actual value by even $\pm 10^{-115}$ percent, then neither the stars, nor the atoms would exist. Furthermore, we do not have any argument to say that it cannot be different than its actual value by 10^{+100} percent or infinitely more. This is just one of the numerous examples. Hence, the theist says that the components of the universe are related in a specific way by a Designer.

The atheists argue against this line of thought as follows: (1) If a Designer designed this, who or what designed the Designer? Hence, the Designer explanation leads to an infinite regress and special pleading. (2) If the universe is just one of the many universes, then the seemingly small likelihood of the occurrence of these relationships will not be so small. According to the anthropic

principle, human beings would naturally be in a successful universe. (3) If the Designer is all-Powerful, then He would not need to obtain these precise relationships in order to create human beings or any other creation. (4) Most of the universe is not hospitable to life.

According to Islam we can address these points very strongly, because, Islam does not have some artificial limitations of some other religions:

Regarding (1), (2), Allah is not in the image of the human beings. He is the default full power. Allah is a logical necessity because of the argument from non-existence of nothingness and because of the other arguments above. Also, He is an empirical necessity because of the first and second arguments above.

This full power and His attributes are logical necessities without any restrictive time component. This power intrinsically has all powers. Anything necessary for the being of this power necessarily exists by default within His unity.

If the atheists would claim that this Designer should have components that are connected in specific ways so that He can be a designer, then these components would also be existing and connected by default and by necessity, since there is no nothingness to limit any attribute, or prevent any connection. The existence of just one component and non-existence of other components would not be possible since the existent component cannot be surrounded by nothingness. However, note that God does not have parts according to Islam and logic, because then the parts would be interdependent and not necessary.

This full power contains the potentials of the components of all things in His creative power. His creative activity may be understood in a similitude of connecting the dots with a qualified unity. This unity may be related to the actuals and to the potentials. Our free

will also has some similarities to this: When we will an alternative, we connect it to the actual data, and to the modules of our brain which produce the future states.

In fact, the multiverse which is the only presentable argument of atheists resembles God in that the atheists see it as eternal. However, it cannot address many points that God addresses:

For example, the multiverse would have a shape in any case, and why it is the way it is is not answered, since the atheists would not recognize a willing power for the multiverse. The multiverse would not address the consciousness and transcendence we experience and the unity which underlies them. It does not address the sovereign wholes⁴² that we explain in part 3.5.3. It does not address the points in the necessity argument, non-existence of partial nothingness argument, it does not address the unity argument.

One may ask, how a unitary power operates over things. As explained regarding unity, and change, above and in other parts, even change and differentiation needs unity. This unitary and unlimited power is very different than what we are used to. Our consciousness and our free will give us an idea and constitute a small example about how such a unity may be operational.

We must not be so arrogant as to expect that everything would be fully knowable, understandable, and conceivable by our limited minds, even though we can understand things that are relevant and necessary for us. In this respect, the regions beyond our capacity are irrelevant for us. The Quran confirms these points. Someone who

⁴² A sovereign whole is broadly a whole whose distinct behavior cannot be predicted even if we have full knowledge about the wholes which are its parts and about the wholes which contain that sovereign whole. Unless otherwise noted or understood from the context, the word “whole” alone also should be understood as “sovereign whole”. We will have a section about the sovereign wholes when we explain the agent.

thinks without evidence that everything would be fully knowable to him, would be confirming his ignorance, arrogance, irrationality, and emotionality. Yet, as ordered by the Quran, we must always be looking for useful knowledge and wisdom as much as possible.

For further details about multiverse see part 3.4.1.2.2.1.2.13.

(3) The third point of the skeptics is quite arbitrary and is not based on any compelling logical or empirical grounds. Unity and transcendence underlie creation. Also, we understand that parsimony is important for God. We also learn from the Quran that Allah works mostly through His commands; commands require definitions of objects and relationships, procedures. Additionally, beauty, symmetry are important elements. There may be many other things related to the patterns and balance that we observe in the universe. In any case, we cannot say that God had not to create these relationships. Each element of design is an additional unity, an additional beauty, an additional art, and an additional evidence for us. Their creation is no limitation for Allah.

(4) The human being is not extremely special in Islam as in some other religions.

The creation of the heavens and earth is greater than the creation of mankind, but most of the people do not know.

(Quran: 40/57)

A galaxy, a star, a black hole are also the servants of Allah. Hence, the 4th counter-argument against fine-tuning is not applicable to Islam. Because, Allah does not have any shape of any human being or of any other worldly life form. Every place of the universe does not need to be hospitable for human life. Other things are also valuable and have their missions.

2.2.2 Allah Is One

Therefore, know that there is no god but Allah.

(Quran: 47/19)

Allah has testified to the fact that there is no god but Him and so do the angels and those who are well grounded in knowledge standing firm on justice; there is no god but He, the Mighty, the Wise.

(Quran: 3/18)

The unity of Allah is important for free will power (FWP). Because, if there is no source of consistency in the universe, then the requirements for free will power cannot be obtained: For example, we cannot have a strong basis to say that two alternatives are different though this difference is a requirement for free will power.

In Islam God is absolutely one. Allah does not have any father, son, partner, part... which can negate His unity. There are no internal divisions, internal different divinities, persons within God; and there are no external divinities. There are no divinities before Him, and there are no divinities after Him. There is no before Him, there is no after Him. He is the First and He is the Last. Allah is not born; He does not reproduce. His divinity is not divided or shared by anyone. This unity is a logical necessity. There is only one ultimate source of power. This source of power is not bound or limited by any compulsory restrictions and boundaries. Therefore, the default situation is freedom of will at the level of God. Also, the null hypothesis is non-existence of any coercive bias that influences in a compulsory way this divine will power.

Everything that exists needs Allah in order to exist, in order to influence anything. Other things do not have self-sufficient existence. Beings other than Himself cannot be caused ultimately by anything

other than Allah. In this sense, there is no absolute determinism. Things can be determined as long as designed by Allah, within the limitations of Allah's choice. Yet, beings created and sustained by Allah are able to act under the control and power of Allah.

In respect to the above, there may be overlapping points between Islam and other religions. There are some other religions which say that God is one. However, many religions which say that God is one, will claim that God has internal differentiations as seen in trinity of contemporary mainstream christianity. Or God has children, or behaves like a human being with human limitations as having face, shape, spatiotemporal limitations, having some rest in some periods, and things going on while He rests, and so on. Hence mainstream judeo-christian religions' perceptions of God that differ from Islam's teachings will not allow a good understanding of free will. But of course, in their original forms they are essentially Islam.

Religions which conceive God as limited in time cannot have an understanding as described in this book.

Religions other than Islam, Judaism and Christianity have mostly polytheistic teachings where god(s) are internally or externally differentiated and limited. Hence according to their frameworks, it is hard to conceive one power which is not limited, forced and which is ascertained to be the sole absolute originator of its/ his/ her wills. Once the possibility of more than one God or more than one part of God is admitted, then there is no reason to put an upper boundary to the number of gods. And hence these gods will lose their status of divinity as their multiplicity conflicts with an unlimited real God. Hence for these religions it is not possible to conceive of an absolute free will. Without reaching a positive conclusion about the unity of God, it is not possible to reach a positive and solid conclusion about the existence of free will.

The same is applicable for some approaches which are not considered by some as “religion”, such as physicalism, pantheism, atheism. These generally reduce the agent and free will power to many unconnected, and randomly or deterministically behaving things. Hence, it is not possible to obtain any real free will power that may comply with these world views.

2.2.2.1 Unity Is Basic

Say, "Is it other than Allah I should take as a protector,
Creator of the heavens and the earth, while it is He who feeds
and is not fed?"
(Quran: 6/14)

When we observe the universe, we see unity and multiplicity together: I have arms, eyes, cells..., and yet I say “I” and recognize myself as one being. I as one agent, conceive many things.

Is unity prior to multiplicity, or is the reverse true? Is unity source of multiplicity, or is multiplicity the source of unity? Or, is it wrong to classify the “one” and the “many” separately? Or are these many things encompassed and sustained by the “One”? If we do not classify as such, then should we see things as one or as many?

For multiplicity, the multiple things must be defined first, and for this there needs to be the relationships which can only be based on unity. Unity can be without multiplicity, but multiplicity cannot be without unity.

As Allah is one in the entire existence and nobody like Him has power in His domain, an agent’s consciousness and will power are in His domain and nothing else like God has full power over them.

Things build up in unities and not separations. A unity seems like difference but in whole it is another layer of unity.

2.2.2.2 How Can God Be Undifferentiated, While He Exists, And Creates and Sustains Many Different Things?

The difficulty in conceiving such a unity with no separation or differentiation arises because of the limitations in our perceptions. Because we have limitations, we can encompass only a limited range. So, when we conceive of what “is”, we cannot conceive of what “is not” to be the aspects of the same thing. So, we conceive change in terms of that which is and that which is not. However, “that which is not” is not existent ontologically and epistemologically. Yet, we give a big place to nothingness in the background of our minds and in between things. If something dies, we think that nothingness replaced it; if something is born, we think that it replaced nothingness. If something moves, we think that nothingness replaced its previous position, and its newer position replaced nothingness.

Attributes that relate to distance between parts, or to differences are not absolute. They are relative and they can be defined only based on the fundamental unity power. For example, there is no absolute reference frame related to space or time or spacetime. Hence, the latter do not constitute any absolute distance or differentiation. They are just aspects of the design of Allah, related also to the design of the means of our perception. For example, when I see a cat, by seeing it, I do not perceive its entire reality. Its entire reality has some connection with God. But what I perceive is related to the design of God in terms of its relation to me with the limitations and design of a human being.

Hence, we should not try to confine God within our limited perception. Any differentiation we observe within the creation does not have a corresponding differentiation within God, on the contrary, no differentiation can be without the unity that sustains it.

What we conceive consists of unities, not separation. Separation, or distance does not exist other than as links, connections, unities. Separation or distance does not exist as nothingness, since, as explained in part 2.2.1.2 nothingness does not and cannot exist. We perceive unity x, unity y, unity z; and they are united in unity k. For example, we perceive spatial distance between the cat and her kittens. But the distance is a part of the cat and part of the kittens. And it is a common element of all of them. If we say unity x is separate than unity y, that separation is not in fact a separation, it is also another unity. Furthermore, there is also a relationship between the cat and its Creator and Sustainer. This is also another kind of unity. The distances we see when we look in a limited way are just distances on the skins of things, observed through our eyeballs. If we look using also our reasoning power, we will notice that there is not and there cannot be absolute divisions.

Question 11.

If God is One and undifferentiated wholly, and if He is the origin of things, then how things can be differentiated?

Answer 11.

Differentiating does not mean making distances. Differentiation rather means creating unities in the first place. Different unities are also united. When we say “different”, this word also means essentially united, because different requires beforehand relationships, which are built on unity.

We as human beings see differences as distances because of our limitations. We are not able to reach an object 10 meters away without certain activities and without spending some energy; we need those activities, hence we are prone to consider distances prior to

unity aspect of things.. We have to see things from another perspective.

Our laws of thought also sometimes mislead us, and maybe we need new laws of thought: For example, based on law of non-contradiction, we say “if it is true that x is y, it is not true that x is not y”. However, though these are true, prior to these, there is another truth which is that x and y are built on a unity which defines them.

Therefore, to create differentiated things, God does not need to be differentiated or complex. Likewise, when we talk of a whole as a human being, prior to differentiated parts, we need to see the whole and the very being of it as one. The unity that underlies the particles of the human being, underlies also the spacetime that underlies the particles and the related physical laws. Hence the very living being of the agent is an additional layer of unity that constitutes an element of the parts of the agent under certain conditions while he is alive. Same applies for the agent’s will power. Ability to see, to hear, to understand, and so on are also similar layers of unity.

The agent may choose anything. To make something exist, is very similar to make that thing instantiated within a unity. This way, that thing is limited: If we create a word, its letters are limited into a certain sequence. Yet, this limitation does not mean that that word ends in nothingness; rather, what seems like the start of nothingness is in fact what makes that word exist, be defined, and have a value. If Allah creates a spacetime, then its points are not absolutely separate elements of another spacetime or of another coordinate system. God may choose anything and limit it so that to make it exist.

The agent also was given such a power, so if he had power over a homogeneous thing, he could make it differentiated by uniting the relevant elements. So, the will power of the agent is an example of

undifferentiated power or agent. Such unifications look like limitations to us, because the outside of us seems inaccessible to us and separate since we are limited in terms of spatiotemporal; and we apply and extend our limitations to all that is beyond us, and finally we have difficulty in accessing the unity that surrounds all.

However, the reality of things cannot be contained within our limited encompassing power, but it can be encompassed within the God's complete encompassing power. I can say that I was born at time t_1 , before t_1 I was not, hence, my ontological existence was not connected to what was before t_1 . Within my abilities, I cannot define myself in my relationship to what is before t_1 , since, within my limitations, before t_1 , I was not. Yet, within the knowledge of God and His effective power, t_1 is my birth time hence my reality has a unity with what is before t_1 . And through the all-encompassing unity and power of God, I can connect myself with what is before t_1 and have some reality that extends before t_1 in the knowledge of God.

A meaningful example about this may be the information: The same information can be written by mountains or by atoms. The information is same. The apparent distances between the mountains or atoms do not constitute any distances regarding the unitary meaning of the information.

2.2.3 Allah Is Creator

Allah creates what He wills. Indeed, Allah is over all things competent.

(Quran: 24/45)

And Allah created you from dust, then from a sperm-drop; then He made you mates. And no female conceives nor does she give birth except with His knowledge. And no aged

person is granted [additional] life nor is his lifespan lessened but that it is in a register. Indeed, that for Allah is easy.

(Quran: 35/11)

The creation and resurrection of all of you is the same as that of one person. Allah is Hearer, Seer.

(Quran: 31/28)

He replied: 'It shall be so; your Lord says: "It is easy for Me, indeed, I created you before when you were not a thing."

(Quran: 19/9)

And He it is Who made for you the ears and the eyes and the hearts. Little it is that you give thanks!

(Quran: 23/78)

"While Allah has created you and what you make!"

(Quran: 37/96)

Creating power of Allah is important in our context. As I will explain in the following parts, an important error related to free will is material reductionism. Many people knowingly or unknowingly may assume material reductionism. They think that things are reducible to fundamental particles or fields or laws and therefore the will power or the agent is just illusory or epiphenomenal.

Once we recognize Allah as a Creator, then we can have a basis for the distinct reality of the agent and his powers.

According to the Quran, no layer within the limited world has creating power of its own, no layer in it is self-sufficient. All is sustained by Allah. Things can only exist thanks to the creating

power of Allah. As explained in the previous parts, unity of Allah relates to His creating power in that nothing can have any value or meaning without being encompassed by the unity of Allah.

Different layers of creation or things within different stages of creation are also real: When Allah creates, the dust becomes real, the sperm becomes real, and the human being becomes real. Our ears are real, our eyes are real, and we are real. We are as real as our eyes, cells, particles or fields contained in our bodies. All of them need the creating power of Allah, and none of them is self-sufficient. None of them is equal to Allah.

If God created a triangle then is the triangle reducible to God and is it illusory and epiphenomenal? Is it supervenient upon Allah? No. The triangle is real, though it is sustained by Allah. It is not Allah; it is not part of Allah. And, if it was not real, then God would be creating nothing. But Allah creates things. His Being, and His Powers are not equal to what He creates and what He sustains. What He creates are not illusions.

On the other hand, the triangle has its existence and if its structure is or can be related to consciousness, then it can also be conscious.

So, the Quranic teaching entails not only the denial of physical reductionism but also the rejection of general reductionism. That is why it is said in the Quran “there is no god but Allah” and not “there is nothing but Allah”. In part 3.5.6.1 I will further discuss physicalist reductionism in detail.

He can create beings who have awareness, knowledge, power. Yet beings who have these attributes and their abilities are sustained by God.

When we observe the universe, we see that knowledge, awareness, powers are facts. However, we also see that they are not self-

sufficient. So, from an empirical point of view, these are surrounded and sustained by a Self-Sufficient Creator and Sustainer.

Question 12.

If things are sustained by God, how can they have their own powers?

Answer 12.

If I have an energy, I can transfer that energy to another thing. If I raise a ball, I give it some potential energy. This is a similitude.

As explained in the argument for God from non-existence of nothingness, the default is the full power of Allah. This power also contains the potential to create beings, spaces, structures. And Allah may give some powers to such beings. Nevertheless, His act here is not like us, because when we give energy, our energy goes down as it is transferred. But God's power does not go down since the structure is surrounded by Allah in any case.

We empirically observe that there is the power, knowledge, and awareness; we witness their reality. And due to irreducibility, we can see that these and their owners are real. So even if conceiving exactly how God assigns this power to other beings, this power is a fact that we witness. Things change relatively to other things. But if they change relatively to other things, then this means that there is one power in a layer of unity which is above all relative things. Otherwise we could not relate and measure that which changes and the changes since there would be neither common point nor any unit to define or measure any change.

The Creator and the creation are different, but they have also some common points.

Question 13.

You generally present physicalist reductionism as the main view which opposes free will. But there are non-reductive physicalism and other views as well which oppose free will. Why do not you give them equal weight?

Answer 13.

I consider other main views as well in this book. However, I argue that the views which are not built on the absolute unity of the Creator will be understood somehow, that they are equal to physicalist reductionism in the final analysis. They will also have many common points with it.

The remaining alternative after reductionism and Islam, is the claim that the irreducible acts of the agents and particles coincide by chance. However, this is not very convincing.

2.2.4 Allah Has Full Power

Blessed is He in Whose hand is the kingdom, and He has power over all things.

(Quran: 67/1)

There is none to be a guardian for them besides Him, and He does not make any one His associate in His Judgment.

(Quran: 18/26)

And never say of anything, "Indeed, I will do that tomorrow," Except [when adding], "If Allah wills." And remember your Lord when you forget [it] and say, "Perhaps my Lord will guide me to what is nearer than this to right conduct."

(Quran: 18/23-24)

The power of Allah has implications regarding our will power. There is an interaction between our wills and Allah's wills and actions. Therefore, our will power is not unlimited. On the other hand, there is a range in which we have freedom through the permission of Allah.

Allah is powerful, and He does what He wills. He can authorize beings to do or will things under His control. He also knows the possibilities when He decrees a thing.

A contingent thing is sustained and surrounded by that which is absolutely and ultimately active. Its unity is contained within the absolutely active's unity. It has unity but its unity is sustained by the absolutely One's unity.

Some angels are given the duty to implement some of God's wills in the limited world. This may be related to what we call laws of nature.

2.2.5 Allah Is First and Last

He is the First and the Last, the Ascendant and the Intimate, and He is, of all things, Knowing.

(Quran: 57/3)

And there is not a thing but with Us are the treasures of it, and We do not send it down but in a known measure.

(Quran: 15/21)

The relationship of Allah to time and the nature of time are important regarding the free will. He is not confined within time brackets, and time does not restrict Allah. We cannot say "Allah is on the earth or inside this spatial region" either.

Allah's being the First and the Last, the Ascendant and the Imminent is important regarding all of His attributes. There are sequential or

structural relationships between things. Yet the basis of all these relationships and definitions is the unity and being of Allah, the One God.

As we will see later, this point is especially important about the relationship between the free will and omniscience of Allah.

2.2.6 Allah Wills and He Is Free

Honorable Owner of the Throne,

Doer of what He wills.

(Quran: 85/15-16)

Never say of anything "I will certainly do it tomorrow" without adding: "If Allah wills!"

And if you forget to say this, then call your Lord to mind and say: "I hope that my Lord shall guide me and bring me ever closer than this to the Right Way."

(Quran: 18/23-24)

But you will not unless God wills; surely God is ever All-knowing, All-wise.

(Quran: 76/30)

All that is in the heavens and the earth glorifies Allah; and He is the Mighty, the Wise.

His is the dominion of the heavens and earth. He gives life and causes death, and He is over all things competent.

He is the First and the Last, the Ascendant and the Intimate,
and He is, of all things, Knowing.

(Quran: 57/1-3)

Verily, Allah does what He wills.

(Quran: 22/14)

There is not any deity except Allah, the One, the Prevailing.

(Quran: 38/65)

Surely, He has power over all things

(Quran: 41/39)

Your Lord is most knowing of you. If He wills, He will have
mercy upon you; or if He wills, He will punish you. And We
have not sent you, [O Muhammad], over them as a manager.

(Quran: 17/54)

Then, do they not look at what is before them and what is
behind them of the heaven and earth? If We should will, We
could cause the earth to swallow them

Or

[could] let fall upon them fragments from the sky. Indeed, in
that is a sign for every servant turning back [to Allah].

(Quran: 34/9)

Allah is over all things competent, so nothing forces Allah to
anything.

There is no before Him and there is no after Him. So, nothing can compel him sequentially.

Allah's will is real, and everything is surrounded by the will of Allah. Allah and Allah's will are not reducible to other things.

Hence, no pattern is necessary except for His values and ways. So, whatever happens is the result of will. Allah is willer. Things originate either from the will of Allah or from willers that Allah created and permitted or both.

Freedom is at the bottom of everything, since there is no absolute direction unless Allah gives a direction to anything.

As we see in the following verse, in terms of will, things were free by default even to disobey Him. But this does not prevent Him from determining partial or all-encompassing patterns:

Moreover, He comprehended in His design the sky, and it had been (as) smoke: He said to it and to the earth: "Come ye together, willingly or unwillingly." They said: "We do come (together), in willing obedience."
(Quran: 41/11)

Allah is the Default Power, other than whom there is no power, creator or initiator. Therefore, the default in terms of will, is free will. In other words, the null hypothesis in terms of will, is the freedom of will and non-existence of any coercive bias. And of course, Allah has free will, since there is nothing other than Him who can affect or constrain His willing power or who can cause any coercive bias within, against or before His will. Secondly, any creation with "will power" that He creates, by default, does not have any coercive bias for any will, until or unless Allah designs or wills a certain pattern or structure for that creation. His attributes are the origin of morals, yet

these are not personal since there is nothing above Him and there is nothing more general which would render His attributes limited.

Say to those who remained behind of the bedouins, "You will be called to [face] a people of great military might; you will either have to fight them, or they will submit. So, if you obey, Allah will give you a good reward; but if you turn away as you turned away before, He will punish you with a painful punishment."

(Quran: 48/16)

But He can be influenced, though this influence originates from Him, is predictable for Him, subject to His plan, values, and is based on His permission and is not coercive for Him.

Anything other than Allah is free as long as Allah does not force one to will a certain thing. Because there is no other fundamental power center/source.

Due to the unity of God, He is not questioned about anything.

He is not questioned about what He does, but they will be questioned.

(Quran: 21/23)

This is the default state for Him. Hence, the default state is the freedom of will. This is an important point regarding those who claim that free will is impossible.

And yet though He is not questioned and though He is free, He decreed upon Himself mercy.

Say, "To whom belongs whatever is in the heavens and earth?" Say, "To Allah." He has decreed upon Himself mercy.

(Quran: 6/12)

This is a true indicator of His goodness. Hence, He is the source of ethics by His will and choice.

Question 14.

Cannot we say that God will not will to heal a specific amputee in a certain time?

Answer 14.

God might have created a world where an amputated human being would be healable by himself. But He designed a universe or part of a universe in whose systems human amputees cannot be healed by themselves. God also willed to make the universe predictable in this respect. Therefore, as of now, what we can predict is that God does not heal amputees in accordance with the actual patterns He designed, at least up to a certain time.

Question 15.

If God has no bias, then how can we say that He is good instead of evil, and that He prefers goodness instead of evil?

Answer 15.

And the heaven He raised and imposed the balance
That you not transgress within the balance.
(Quran: 55/7-8)

If a person helps poor people often, this does not mean that he is forced to help the poor. Had he been forced to do it, then we would not consider him as a good person for that behavior. So, by bias I mean a coercive bias.

Furthermore, the no-bias regarding God relates to the concept of balance as well. And the concept of balance relates to goodness. So,

for example justice, truthfulness, thankfulness, and other values that God loves relate to this balance. Our injustice, arrogance, jealousy, oppression arise because of our fears and our weaknesses. Hence, His Power, Knowledge and that there is nothing that He fears, may give Him certain preferences in the direction of those values.

The following verse relates to such a preference and decree:

And when those come to you who believe in Our verses, say, "Peace be upon you. Your Lord has decreed upon Himself mercy: that any of you who does wrong out of ignorance and then repents after that and corrects himself - indeed, He is Forgiving and Merciful."

(Quran: 6/54)

By contrast, God does not love injustice, oppression, wasting... These relate to lack of balance. Of course, we are not in a place to declare things regarding the person of God. However, we can conclude these based on some teachings in the Quran. Allah knows the best.

2.2.7 Allah Is Beneficent, Merciful

He has decreed that mercy is His attribute. (Quran: 6/12)

Surely, He is the Benign, the Merciful.

(Quran: 52/28)

Shall We treat those who believe and do good like the mischief-makers in the earth? Or shall We make those who guard (against evil) like the wicked?

(Quran: 38/28)

Is the reward of goodness aught but goodness?

(Quran: 55/60)

If there is no good or evil, then talking about freedom of will would be redundant: What difference would make to have free will or not if there is no good or better? The results of our acts would have same value, or no value at all. Suppose that one killed an innocent person, or that he saved him. Independently of his freedom of will, the will would be neither blameworthy, nor praiseworthy. No alternative would have a different value in terms of goodness and preference in any case. All alternatives would have same value, in other words, according to the criteria of goodness all alternatives would be same.

Some opponents of free will claim the following: Pity, thankfulness, honesty have no intrinsic value and intrinsic influence on the world. They are secondary and just illusory. It is only the particles that rule. The spatio-temporal is fundamental. Higher level organizations are only derivatives and passive. They supervene on low level supervenience bases. Lower level organizations do not depend on higher level organizations. One who does something for justice is illusioned. We can fully define the above values with reference to physical events or entities – like atoms, hormones, electrons... -. We would be just deceiving ourselves if we say that good or evil are effective; it would be like saying that the fall of the rock in this location is just, its fall in that location is unjust. There is no effective law of justice preference which has influence on low level things. If there is such law it could not change low level physical relationships. Probabilistic relationships are not influenced either by laws as in legal systems or values as justice.

For some other opponents of free will, higher level relationships exist but are not subject to the agent. The agent does not exist as an influencer. It does not have any reality except for the reality of its fundamental elements which are totally of different nature.

On the other hand, some compatibilists also think like the above opponents of free will regarding the non-existence of the above

values. For them also goodness, evilness, pity, arrogance are just illusions. Everything is reducible to spatiotemporal relationships.

In Islam good, evil, and consciousness are existent. The above points of opponents of free will and compatibilists are not acceptable. Values are not inferior to spatiotemporal relationships. And God makes a choice in this respect, and He has ordered good deeds, values, and being good. He might have chosen the evil. But He did not. Hence at the very fundamental level, good and evil are existent as real and effective concepts and qualifications. That Allah has chosen with His free will the good shows that in the essence of God goodness is real.

In parallel with these, love, justice, patience, humility, and so on are also real as values.

Question 16.

If we consider the incompleteness of our knowledge, how can we know reliably goodness, evilness, and that they are true?

Answer 16.

This relates fundamentally to unity. We see that things converge into facts. In any setup, there will be such truths: For example, $2+2=4$. We know how statements like $2+2=5$ will be rejected and things will boil down to $2+2=4$. In our daily lives as well, there are things that everybody would prefer, and things that people would not prefer.

Saying no knowledge is true is a claim and it is either true or false. And based on the arguments for the One God, we can know that there is a power who knows whether that claim is true or false.

2.2.8 Allah Is the Evident Truth and There Is the Truth.

On that day Allah will pay back to them in full their just due, and they shall know that Allah is the evident Truth.

(Quran: 24/25)

Truth is very important regarding the exercise of free will power. I will go in the details of truth in part 3.6.2.2.6. Briefly, a doubt about the truth, would undermine the reality of the agent, and the reality of the alternatives.

Here lets just see some aspects of truth in regards to Allah.

If I say “there is a normal elephant on my desk”, is this statement true or false? It is false, because based on the unity of the Creator and Sustainer of all, there are and there must be many coherent implications of an elephant being on my desk, with the rest of the existence. Also, there are connections of each word in that statement with the rest of the existence as well.

Because of the necessary and default unity of Allah and the relationship of this unity to whatever we observe, we can talk of a transcendent truth.

If I imagine a triangle, it has its own reality. It is not fully reducible to the cells in my brain⁴³. It may be needing them and my consciousness in order to be that triangle. However, it has a reality of its own. Within the cells there may be no corresponding and clear triangle shape.

Likewise, when Allah creates a thing it has its own reality. It has its own effects. Though it needs God in order to be, it is real. It has its

⁴³ Cells of my brain are not different from that triangle in regards to their very being. Nothing is separable in this context.

own attributes as not being self-sufficient, or in its being limited. Its reality is closely related to the unity of Allah who surrounds all because this causes all to be united and not fundamentally separated and this way for example a triangle formed by three balls is real because though the balls seem to be separated in space, in fact space is a structure created by the Creator, and hence, they are one in being surrounded and comprised by Allah due to His attribute of unity.

If things that depend on other things were not real then nothing would be real. If I was not real as a human being, then my cells or particles in my body would not be real either.

Hence, though we depend on Allah in order to be, we are true. And we are true because Allah in His unity sustains us.

In this respect, the most obvious truth is Allah and His unity; and these are the basis of all truth.

On the other hand, our free will power is an evidence of our distinct and effective truth. Our free will power demonstrates that we are not merely reducible to our parts. This will be demonstrated clearly in the relevant sections of this book.

2.2.9 Allah Knows All Things

He is Allah, other than whom there is no deity, Knower of the unseen and the witnessed. He is the Beneficent, the Merciful.

(Quran: 59/22)

The unlimited knowledge of Allah is closely related to the discussions about free will. Especially it is asked: If Allah knows all since past eternal, how can we will something different than what Allah knows? I will explain this in part 3.8.1.4.3.

I will just note here that the infinity that escapes us whenever we try to grasp, does not escape Allah.

2.2.10 Allah Is Aware

No vision can grasp Him while He grasps all visions. He is the Subtle, the Aware.

(Quran: 6/103)

But those who disbelieved their deeds are like a mirage in a lowland which a thirsty one thinks is water until, when he comes to it, he finds it is not aught but finds Allah before Him, and He will pay him in full his due; and Allah is swift in account.

(Quran: 24/39)

"This is the Fire which you used to deny.

Then is this magic, or do you not see?

(Quran: 52/14-15)

Allah is Aware. He sees, He hears, He knows, He loves, He dislikes, He is Thankful, He is Merciful. Hence, in Islam, at the level of the Originator of the universe, there is the consciousness and related truth.

As we will see later, consciousness is important in regards to the concept of free will. And there are some who reject the reality and effectiveness of consciousness and maintain that consciousness is epiphenomenal, illusory, and unreal.

Consciousness is real according to the Quran. It is our first and most fundamental experience, and empirical fact we witness. I will give further details about consciousness in the context of free will in the relevant parts.

Things cannot be surrounded by nothingness in regards to their power of consciousness since such a partial nothingness does not and cannot exist as explained earlier. In terms of the argument from unity, differences in qualia require a power of unity in terms of consciousness that will make them comparable, real, and meaningful.

Hence, our empirical observations about consciousness shows us the existence of One Power who is Conscious.

“The specific way the universe is” also reflects a choice within the unity of the Creator.

Hence based on our consciousness, we conclude that the one absolute power is conscious and is the source of consciousness. Therefore, at the origin of all, there is the unitary power with consciousness, who can originate consciousness for what He wills.

2.2.11 Implications of Creation

2.2.11.1 Allah Executes and Establishes the Truth⁴⁴ and Its Consequences.

And Allah created the heavens and earth in truth and so that every soul may be recompensed for what it has earned, and they will not be wronged.

(Quran: 45/22)

And Allah will establish the truth by His words, even if the criminals dislike it.

(Quran: 10/82)

⁴⁴ Allah is the Obvious Truth. Based on His creating power, things also have the general attribute of being true and truth.

And Allah eliminates falsehood and establishes the truth by His words.

(Quran: 42/24)

And say, "The truth is from your Lord, so whoever wills let him believe; and whoever wills let him disbelieve." Indeed, We have prepared for the wrongdoers a fire whose walls will surround them. And if they call for relief, they will be relieved with water like murky oil, which scalds [their] faces. Wretched is the drink, and evil is the resting place.

(Quran: 18/29)

That will be the Day of the Truth. Therefore, whoso will, let him take a (straight) return to his Lord.

(Quran: 78/39)

Indeed, this is a reminder, so whoever wills may take to his Lord a way.

(Quran: 73/19)

Indeed, the Fire is of the greatest [afflictions]

As a warning to humanity

To whoever wills among you to proceed or stay behind.

(Quran: 74/35-37)

In accordance with the previous explanations about the unity and coherence underlying the existence, all that exists will be harmonious and balanced at the end. Allah has the power to create the truly good who chooses the good way on his own; and He has the power to create the evil who chooses the evil way on his own. He has the

power to show each the paths and let them go through the way they will.

Allah can create an environment where His creation may have free will and own their deeds to some extent. In this free environment, there may naturally be evil agents. These evil agents may choose to let themselves be just the outcome of statistical distributions, may choose the short-term joys instead of permanent joys, may choose to be evil instead of being good. Essentially all agents may be good. Or all may be evil. Or an agent may be good or evil.

For this reason, he gives freedom to choose so that every body is recompensed by what he/she did.

This way, the evil potentials may be actualized, and the good may be actualized in accordance with the will of Allah. And no evil will go unpunished, no good will be unrewarded. Hence, the truth of all things and potentials will produce coherent implications in accordance with their truth and the unity that surrounds all.

Allah is not a God who just has powers, knowledge, values and does not put these into effect. He is not unable to give will power, He is not unable to punish or reward.

The implication of free will power in religion is not only punishment and establishing the truth, but also that the agent may reach high degrees in the sight of Allah. This is true not only regarding the affairs that relate to hereafter, but also in worldly affairs to some extent.

Also, this way God cooperates with His servants, though He does not need their help. He gives them this opportunity. We understand that God enjoys this cooperation:

O you who have believed, if you support Allah, He will support you and plant firmly your feet.
(Quran: 47/7)

Question 17.

Is not it a hypocrisy that a servant knowing that Allah just could do anything He wants, tries to help Him?

Answer 17.

Help is not given only in situations where the person who is helped is not able to do something. In some cases, the person who asks for help asks it although he is also able to do it by himself. For example, a father may ask for the help of his child though he can do it; and this way he also sees how helpful his child is and improves his child.

This way Allah performs some of His goals through cooperation, and gives His servants the opportunity to cooperate with Him and to improve themselves:

And We will remove whatever of ill-feeling is in their breasts; the rivers shall flow beneath them and they shall say: All praise is due to Allah Who guided us to this, and we would not have found the way had it not been that Allah had guided us; certainly the messengers of our Lord brought the truth; and it shall be cried out to them that this is the garden of which you are made heirs for what you did.

(Quran: 7/43)

And thus, we have made you a just community that you will be witnesses over the people and the Messenger will be a witness over you.

(Quran: 2/143)

Allah may cause certain events as the results of responsibility of His servants:

And who does greater evil than he who forges against God a lie? Those shall be presented before their Lord, and the witnesses will say, 'Those are they who lied against their Lord.' Surely the curse of God shall rest upon the evildoers.

(Quran: 11/18)

And they have made the angels, who are servants of the Most Merciful, females. Did they witness their creation? Their testimony will be recorded, and they will be questioned.

(Quran: 43/19)

And those who are guided He increases them in guidance and gives them their righteousness.

(Quran: 47/17)

On the other hand, Allah improves the servants with their involvement, and makes them intellectually competent:

We sent those Messengers with clear signs and scriptures; and now We have sent down the reminder to you (O Muhammad), so that you may explain clearly to mankind as to what was sent to them so that they may think about it.

(Quran: 16/44)

Thus, does Allah make clear to you the communications that you may understand.

(Quran: 24/61)

Also, Allah created an environment where the good and evil are differentiated, and made obvious.

But they differed, and some of them believed and some of them disbelieved.

(Quran: 2/253)

And to Allah belongs whatever is in the heavens and whatever is in the earth that He may recompense those who do evil with [the penalty of] what they have done and recompense those who do good with the best [reward]

(Quran: 53/31)

[Allah] said, "Get out of Paradise, reproached and expelled. Whoever follows you among them I will surely fill Hell with you, all together."

(Quran: 7/18)

All might be good. However, Allah knows the future and He knew that there will be so many people as to be sufficient to fill the hell. Evil is a reality, and there will be evil people who will choose it.

And the good people will try to benefit from opportunities presented to them for improving themselves with the help and guidance of Allah, like great students who are trained by a great trainer.

Question 18.

Why would God care for the wills of human beings, since we are like a point within this big universe?

Answer 18.

Because of our limited capacity, when we conceive a bigger whole, we have less knowledge and encompassing and conception power about the parts. So, for example when we see only our solar system, we can conceive better details about it compared to the situation when we see it in a photo of our galaxy. And when we conceive the entire universe, even our earth seems small, like a point.

This is just the result of our limited capacity to conceive and to evaluate. But to say that this limitation applies also to God would be a faulty generalization.

For God, knowing more does not cause him to give up any details and lose focus. He knows each of us fully whether He knows in the same time our universe or numerous universes.

And not absent from your Lord is any [part] of an atom's weight within the earth or within the heaven or [anything] smaller than that or greater but that it is in a clear register.

(Quran: 10/61)

2.2.11.2 Allah's Personal Relationships with Individuals.

He loves them and they love Him.

Quran: 5/54

Say, I do not ask of you for it any payment only that whoever wills might take to his Lord a way.

(Quran: 25/57)

But they denied him and hamstrung her. So, their Lord brought down upon them destruction for their sin and made it equal [upon all of them].

And He does not fear the consequence thereof.

(Quran: 91/14-15)

God can interact with His servants. Allah loves, and enjoys His servants who choose the good, though His such attributes are not exactly like ours.

2.3 Existence and Physical Reality in Islam

In islam everything is related and displays unity. Therefore, to understand free will it is important to understand correctly the physical world.

In Islam, everything is created and sustained by the One God. Essentially and at the ontological level, physical and non-physical are not separable, they constitute a whole. We cannot say this is physical, this is not physical.

Rather, we can distinguish between that which relates to the limited world, and that which relates to God.

Hence, in Islam, we can talk of unlimited monism.

Physical effects do not just spread through points but have implications in a transcendental way and unity. And they are related to truth.

In the relevant parts, I will explain physicalism, reductionism, determinism, indeterminism, space, and time as they relate to free will.

2.4 Islamic Holism

Is it then other than Allah's religion that they seek (to follow), and to Him submits whoever is in the heavens and the earth, willingly or unwillingly, and to Him shall they be returned.

(Quran: 3/83)

Do you not see that to Allah prostrates whoever is in the heavens and whoever is on the earth and the sun, the moon, the stars, the mountains, the trees, the moving creatures and many of the people? But upon many the punishment has been justified. And he whom Allah humiliates for him there is no bestower of honor. Indeed, Allah does what He wills.

(Quran: 22/18)

An objection against free will is the claim that things are essentially physical, and any effects of the agents, are just supervenient upon the physical entities and physical relationships. However, in Islam, there is not just bottom-up causation, and there is holism. This means that there are also some sovereign wholes which are real and distinct, and they have effects upon their parts. On the other hand, things in Islam are fundamentally non-separable. All is sustained by God. And spatio-temporal distances are also elements of the wholes.

Those who reject free will, generally deny the wholeness and reality of the agent, and see the agent as reducible to particles. However, in Islam in the hierarchy of existence there are wholes at different layers which have their distinct realities and wholenesses.

Islam does not consider things as having only bottom-up oriented causality. Things are holistic and any sovereign whole at any level has its reality. Each part of space for example is related to other parts and needs a unitary power for this relation.

According to physicalism, space or spacetime is compartmentalized. So, each region of spacetime is seen as final, in other words, they do not need a unifying power above them. However, if each region of spacetime has implications regarding another region, then each spacetime region is not final, because there needs to be a further layer for the definition of these regions. We cannot get rid of infinite regress if we see the nature of spacetime as fundamental or if we see the ultimate basis spacetime-like. Relationships between these regions cannot be explained by space or spacetime-like explanations, since each region will require an explainer in turn.

So, the basic truth or explainer cannot be compartmentalized. A unitary and transcendent truth is necessary. So, though there is difference between created things, this difference is encompassed by the unity of God.

We will go into the specifics of holism regarding free will in part 3.5.6.4.3.

In the previous two sections, we made an introduction and we saw the general framework of Islam related to free will.

In this section, we will examine the definition, essence, levels, attributes, producer, inputs, outputs, and influencers of free will.

3.1 Definition of Free Will

3.1.1 General Considerations on The Definition of Free Will

Indeed, We created man from a sperm-drop mixture that We may try him; and We made him hearing and seeing.

Indeed, We guided him to the way, be he grateful or be he ungrateful.

(Quran: 76/2-3)

Human being is created from entities, cells, organs which are at a lower level than human beings. And there are consequences that are good or not for the very agent in accordance with its nature and truth.

The main question in our context is not whether determinism, or indeterminism is true or not. But rather whether there is any distinct power called “will power” which may cause change in the world.

There are lots of discussions about “free will” yet there is no clear or agreed upon definition or description of it. There are also very different conceptions and definitions of free will, and even as to the definitions there is great divergence. Therefore, firstly I will define and describe what free will is.

In order to do that, we will first consider what “will” is, and then what “free” means in the context of will. This is because when we

say free will, the prime essence that we try to understand is the “will” and secondly its freedom which is its attribute. Freedom of the will depends upon the essence related to will and its constituents/ influencers. We cannot have a good understanding about the freedom of will if we do not have a good understanding of will.

3.1.1.1 Will from Different Perspectives

In our context, there are three main dictionary definitions of will. They are all related. Before the technical definition, let us go through these definitions:

3.1.1.1.1 Will as An Act/ Process

Will can be defined as “the act, process, or experience of willing; volition”⁴⁵. As this refers to an act, in normal usage it is often related to the verb “to will”. For example, if I say “he willed to eat the chocolate”, I mean that he went through a process of willing.

3.1.1.1.2 Will as A Result

Those who believe and do not dress their belief with wrongdoing; they will have security, and they are rightly guided.

(Quran: 6/82)

The will as a result, can also be defined as “something desired”⁴⁶. In the above example, the chocolate has been the will of the agent.

⁴⁵ (Merriam-Webster.com 2020)

⁴⁶ (Merriam-Webster.com 2020)

3.1.1.1.3 Will as A Power

It is also defined as “mental powers manifested as wishing, choosing, desiring, or intending”⁴⁷. In the above example, the agent exercised his “will power” when he willed.

There are overlapping aspects among the above definitions.

All of these three definitions relate to the same thing in terms of the power, or act of the power, or the result produced by that power. When we ask “Do I have free will”, obviously, this relates to the third definition.

Hence, in our context, we focus on the definition of the will as a power to will. In the following parts, whenever I use the word “will”, it will be used with the meaning “will power” unless otherwise noted or clearly implied by the context.

3.1.1.2 Free Will = Will

As will be explained in the following sections, will is a distinct and irreducible power. Hence, it interacts with the universe, and it makes a difference in the universe. According to these features, the reality of the will power contains freedom. Therefore, free is redundant in the concept of “free will”.

Also, as the will is exercised by the whole and essence⁴⁸ of the agent, will depends on the agent, hence, the wording “free will” contains a contradiction. The same applies if the will is taken as a process exercised by and dependent upon the will power, and the whole of the agent. Again, the same contradiction happens if the will is

⁴⁷ (Merriam-Webster.com 2020)

⁴⁸ The essence of the agent is like the leader/ manager/ center/ representative of the whole of the agent. The details will be given in the following parts about the sovereign wholes.

considered as a result which depends upon the will power, will process, and the whole of the agent. This may be a reason for the absence of the wording “free will” in the Quran for the will. But the will is often used as a concept containing freedom in the Quran. However, I will use the wording “free will” to facilitate the communication.

3.1.1.3 Causal Relationships and The Definition of Free Will

A definition of free will inconsistent with any alleged framework of causality will not be understandable. Therefore, here I will present a framework of causality which is in harmony with the definition that will be presented.

Here I will not present any evidences for this causality framework. But the evidences and arguments that will be presented for free will and against determinism, indeterminism, physicalism, and reductionism, will be clarifying also this causality framework.

3.1.1.3.1 Causes and Causal Relationships

In this part we will examine some types of causes that are relevant to free will and responsibility.

3.1.1.3.1.1 Coercive Causes and Non-Coercive Causes

Some causes are coercive, and some are non-coercive.

If a beggar begs a person, and he gives him money, then normally, the beggar is not a coercive cause for the act of the person who gave him money.

If an earthquake makes a building collapse upon a person who is not able to escape, the earthquake is normally a coercive cause of the

death of that person. The agent does not have the ability to not die when the building collapses upon him.

But in the previous example, the agent has the power to resist the beggar.

He also can will not to give that money. One may argue against this claim saying that if he gave him the money, then he could not have willed and done otherwise. The explanations about free will will prove this claim. Now it is sufficient to give this classification so that the reader may understand what we mean when I use the term “coercive cause”.

There are also conditions that are relevant in this context:

In order to be able to will or to do the good deeds, we have to try to satisfy the necessary conditions as much as possible. In order to prevent ourselves from willing or doing the bad deeds, we have to remove their conditions as much as possible.

The absence of a condition may disable an agent from willing a will; but the existence of a condition may not necessarily force the agent to will a specific will. So, the states about conditions may be coercive or non-coercive about wills.

Let us suppose that it is week-end, and a father asks his son where to go. The son says after a little thinking “let us go to the Kilyos beach”, how did this occur to the son? Maybe he heard the day before from his friend that he went there. But if he wanted to cite the alternatives, he could mention many more places to go in Istanbul.

In this example, having heard of that location is a condition for saying that place. Having heard of that place is necessary for the son to recommend that place, but having heard of it does not necessitate that he recommends that place. Hence, that he heard his friend talk

about it, does not limit the freedom of will of that agent. But if the son had not heard of any place, then he could not recommend a place. But if he heard of a place, this does not require that he recommends that place.

A person may have heard of 10 different places the day before he is asked by his father for a recommendation. This does not require that he is obliged to recommend all of those places. It is not even necessary that the agent recommends a place even if he knows only one place to go. Imagine a child who knows the animals, but refuses to pick the name of any animal. Claiming that he had to pick that animal's name when he actually chose it, is unjustified presupposition and wishful thinking.

Food is a condition for living. But does not necessitate living. Sighting the new moon necessitates fasting, it is a cause which necessarily produces some implications. But ablution does not necessitate prayer, it is a condition for the validity of the prayer. Offer and acceptance cause hence necessitate transfer of ownership. But maturity or sanity do not; they are only conditions.

3.1.1.3.1.2 Multipotential Causes and Unipotential Causes

Some causes may produce only a specific and precise set of effects S1. These causes, all else being same, do not have any equal power to cause either set of effects S1 “or” set of effects S2. They can cause only one set of effects altogether. I call such a cause a “unipotential cause”. I call the related effects the “unipotential effects”.

Some causes, all else being same, have the power to produce a set of effects S1 or a set of effects S2. These I call “multipotential causes”. The related effects are called “multipotential effects”.

Let us see each one of these types in further detail:

3.1.1.3.1.2.1 Multipotential Causes

O you who wraps himself [in clothing],

Arise [to pray in] the night, except for a little,

Half of it or subtract from it a little,

Or a little more; and recite the Quran (aloud) in a slow,
(pleasant tone and) style.

(Quran: 73/1-4)

In the above verses, the Prophet Muhammad (PBUH) is considered by God as a multipotential causal agent. Allah orders the Prophet (PBUH) to do a certain act, or another act, or another act. He gives him options. In this context, Allah is also a multipotential cause; even though he has full control of permission over all potential choices of the Prophet (PBUH) and how these would unfold.

If there was just one possible course of action, and the other courses were not possible, Allah would not mention the other courses as if the other courses were also possible.

However, note that the multipotentiality here is relatively to each one of the alternatives. There may be situations where one of the 3 alternatives will be caused by the cause in any case, even though which one of the three will be caused depends on the cause which may cause equally any one of the three. In this situation, relatively to the whole set, the agent is a unipotential cause since he has to will in any case one of the three alternatives. However, relatively to each one of the three alternatives, he is a multipotential cause, because he can choose any one of the alternatives equally.

Leucippus says that nothing happens “in vain” but everything from logos and by “necessity”⁴⁹. “In vain” is also translated as “at random”. This sentence is important in that it displays the reasoning which underlies determinism. And it denies any room for sovereignty and freedom. Necessity as used by Leucippus, is not acceptable for the reasons I give in part 3.4.1.2.2 about determinism. Regarding the randomness, I agree with Leucippus; I give the reasons against indeterminism in part 3.4.2.

We have to make a distinction between (1) “Everything must be caused” and (2) “Everything must be caused to be a certain way.” And there is no reason to claim the second statement.

Multipotential cause does not mean merely that this can cause more than one event. It means that under same circumstances, it has the potential to cause equally a set of effects S1, or a set of effects S2, or one of other sets of events.

Unipotential cause does not mean that it causes just one event in a certain instance. If a cause has the potential to cause only one set of events under same circumstances, then it is a unipotential cause.

Whether a cause is multipotential depends also on the context: For example, a human being which is a multipotential cause, in the case of a fire may run out through the only available door. This context does not change the multipotential causal nature of the agent.

In actuality, a multipotential cause will produce only one set of events or wills, even though it has potential for many sets of events.

⁴⁹ (Berryman 2016)

Laws⁵⁰ of nature do not necessitate that the multipotential causality would be a breach of conservation of energy. If we consider laws as ways that things follow being fueled by energy, there may be many ways that can be selected. Yet, in principle there is no ultimate conclusion about the conservation of energy. Also, because of the findings about uncertainty, a claim for such a breach can never be substantiated. On the other hand, quantum phenomena show that laws are probabilistic.

Multipotential cause also chooses one path. But the important distinction is that its not choosing another path is not because of disability, but because of preference. This preference may be related to OTBT or just an exercise of sovereignty. In part 3.5.3 further details about the sovereignty will be given.

But those who [willingly] open their breasts to disbelief, upon them is wrath from Allah, and for them is a great punishment;

That is because they preferred the worldly life over the Hereafter and that Allah does not guide the disbelieving people.

(Quran: 16/106-107)

And as for Thamud, We guided them, but they preferred blindness over guidance, so the thunderbolt of humiliating punishment seized them for what they used to earn.

(Quran: 41/17)

Generally, and by default, many directions are possible in causality, since Allah is able to do all things. On the other hand, the null-

⁵⁰ In the part about determinism, we will see the limited aspects of laws of nature according to the Islamic framework.

hypothesis requires non necessity of any specific direction as a basic assumption unless otherwise proven.

Regarding our multipotential causal power, there are many courses of action equally possible according to the physical and we cause one of them happen. Before actualization, there was already within us equal representations of the alternatives that we transcended. After actualization, we can also transcend what we transcended as possible alternatives.

Within our conceiving power, the actualized and the potential are and have been equally present. If there was a corresponding coercive differentiation within us then we would not be causing it, it would be caused automatically and reducibly by that differentiation. Hence there would be infinite regress and other problems explained in part 3.4.1.2.2.

Multipotential causes cause things in a transcendent, and sovereign way.

Question 19.

If we trace back a will backwards, we will see that there is a cause. If a person wills to have ice cream instead of chocolate, is not it likely that he has been subject to hot weather for example?

Answer 19.

If we trace it back, we will see the agent, and if we go further back, we can see some inputs that influence the will of the agent. However, when we trace back, we cannot pass through the agent as if he is ineffective; this would be assuming the consequent. The agent is real. The agent is a multipotential cause. That the agent willed a specific will does not mean that he could not will another will. That his brain was in a specific state, does not mean that necessarily it could not be

in another state. In the following parts I will give many reasons for these.

3.1.1.3.1.2.2 Unipotential Causes

Unipotential cause is a cause which is bound by a coercive cause, or reason that will produce a predictable single set of alternatives. The reason may be the effect of other cause(s) which already produced its effect in a certain direction.

For example, a human being may be eating as a unipotential cause since he will necessarily eat something.

There is no logical or empirical necessity to consider every cause as unipotential.

Question 20.

There are situations where tumors are discovered to be the cause of some criminal activity. When these tumors were removed from the brain, the persons would behave normally, when these tumors grew again, they returned to criminal behavior. One of such cases is known as the Whitman case. So, do not these cases show that there is a deterministic relationship between the wills and the physical conditions? Do not these cases show that there are only unipotential causes related to the will power?

Answer 20.

There are situations where there are such strong causal relationships; but this does not mean that all wills are like this. There may be physical states which prevent certain wills or cause certain wills, and there are physical states which do not. Rejecting these latter situations based on some cases or types of events is a fallacy and a

faulty generalization. It is like saying “Cats have four feet. Cats are animals. Therefore, animals have four feet.”

There may be cases where there is no return, due to physical or non-physical causes. This is recognized in the Quran: Firstly, if there is no possibility to prevent the cause and the result then there is no free will power and there is no responsibility; for example, if there is a health issue that causes big problems if someone fasts, then, that person is not required to fast as long as this health issue continues. Secondly, such a case may be caused by the agent, as in the sealing of hearts by God. In such situation the servant is responsible for what caused the sealing. And there is the possibility of repentance and forgiveness, since there can be situations where it is not possible to change the past.

But also, there are situations where there is cure. For example, if Charles Whitman went to a doctor and he learnt what was in his brain then he could undergo a surgery and get rid of the tumor and the wills caused by it.

Certainly, he had sanity and knew that there was a “problem” with him, since he wanted his brain to be searched. He was aware of the normal, and of the abnormal. Yet he did not stick to his reasoning power and OTBT; he followed his low desires. That even he was aware of the normal and of the abnormal demonstrates that the normal processing of a brain is different than its abnormal processing. And there are many checks and controls that can serve the will process.

The existence of the normal relationships, gives us the opportunity to find out physical causes/ means that need to be removed in order to produce a correct set of wills or will structure. This gives us also the opportunity to find out other physical states that will produce any desirable kind of will and prevent any undesirable kind of will.

Hence, the agent has normally the capacity to transcend a bad process and a good process, and the capacity to suppress a bad process or a good process. Therefore, the agent is normally a multipotential cause.

3.1.1.3.2 “What One Wills”, “Must Will”, And “Is Able to Will” Are Not Necessarily Equal

And whoever desires the reward of this world We will give him thereof; and whoever desires the reward of the Hereafter We will give him thereof. And we will reward the grateful.

(Quran: 3/145)

And man supplicates for evil as he supplicates for good, and man is ever hasty.

(Quran: 17/11)

In the above verses, we see the contrast between willing the permanent life, which is what the agent needs, and willing the reward of this temporary world. Indeed, a person does not always will the good as also we see in the examples of smokers. Hence the agent is not coerced fully with the optimal good that his nature requires. This is an evidence for the sovereignty of the agent against the OTBT, within a certain range.

According to determinism or indeterminism, what the agent “must will”, what he “does will”, and what he is “able to will” are equal in every specific situation: Because if he did something, then according to the past state of the universe, or according to the random behavior of fields or particles, he had to do it. For the same reason, if he willed something, then he could not have willed something else.

To be compelled or to have to do some thing and to be able to do that thing are totally different. The agent’s ability to do it may be

possible, but the agent's intention to do it may be a totally different issue. The agent may be able to do something, but may choose not to do it. The agent does not do all things that he is able to do.

The opponents of free will power say that all that the agent does are all that he must do, and all that the agent does are all that he is able to do. Likewise, they claim that what the agent wills, must will, and is able to will are necessarily equal in every specific situation.

These are unsubstantiated and irrational claims.

What the agent does, must do, and is able to do are not necessarily equal in every specific situation.

Let us give an example with two hypothetical situations: (1) If a person is offered 100USD for a specific work, he may choose to do it, and if he is offered 10USD for the same specific work, he may choose not to do it. Assuming that his cost is trivial in both cases, he is able to do it, if in any one of them he is able do it. (2) Similarly, one may do the same thing if he is required to do it, and not to do the same thing if he is not required to do it.

In the situation (1), if he does not do the work for 10USD, then we cannot say that he could not do the work. He could, since we accept that he would do it for 100USD.

Can we say that he could not do a healthy evaluation for 10USD, and that he was not able to do a good evaluation about it? No, the freedom applies here as well. He might be offered 1000USD to do a good evaluation about it.

However, cost/ benefit analysis is not applicable here because, our question is very fundamental, and if it works in a specific case, then it proves that free will power is true. For example, in case of belief in God, and paradise, and the claims about the origin of the universe, the stake is much bigger than 1000USD.

In the above example, as giving 100USD does not add to the free will power of the agent, not giving 100USD would not diminish anything from the free will power of the agent⁵¹.

On the other hand, it should be noted that “must will”, “able to will”, “actual will” are not fully exclusive. They are like different dimensions of will: For example, the child may be forced to study. But on the one hand, he is willing to study, and he is actually studying and in the same time, he may be willing to watch soccer.

Furthermore, above I mentioned “must will” situations instead of should be or ought to be situations. This is to show that even in more restraining “must will” situations, ability to will and actual will do not overlap fully or that they are not exclusive. For “should be” or “ought to be” situations, the non-exclusivity is more obvious.

3.1.1.4 A Criticism of The Compatibilist Definition

The compatibilists that one has free will if he can do what he wills. It does not deal much with the ability to will. If there is no impediment to do what one wills, then the person is considered to have the ability

⁵¹ Deniers of free will power sometimes give examples as follows: Pick a name. Why did you pick that name? Because either you met someone with that name recently, or ...

These are examples that relate to influence, not sovereignty of will power. It is important to make a distinction between an influence and a coercive causal effect. Not all influences are coercive. If an agent picks the name “Mike” from among 10 possible names, this does not require the agent to have a certain will regarding Mike. For example, if someone tells the agent that he has to will to pick Mike, or he has to will to marry him, or he has to will to give him a ride, the agent may will a different will, or someone else. This ability demonstrates that the agent has the power to pick any other name even though he has chosen Mike and though he has chosen a certain decision method from among many methods that he could choose.

of free will. But note that this is not in fact an ability to will, this is an ability to do.

The compatibilists say that even if full determinism is true, the agent may have free will. The compatibilists consider that the free will is or may be supervenient or epiphenomenal, yet even if it is so, they see this no problem against freedom of will or responsibility. In other words, even if the agent's will power is reducible to spatiotemporal events, it is considered free. For example, if an agent is not tightly chained and there are no such coercive impediments, he is considered free in willing to walk. The agent is considered to have free will even if the agent cannot will anything other than what the deterministic movements of atoms and other particles and laws of nature require.

According to the Quran, a condition which disables the agent from willing something other than the actual will destroys the freedom of will.

So, in compatibilism, even if there is no will power, free will may exist. Because compatibilists argue that the whole of the agent does not have any distinct power of its own to change the flow of deterministic events⁵². Therefore, we can say that compatibilists adopt a definition of free will as an act or result of an act, but not as a power.

Compatibilists often say one is free when there is no physical constraint. This is irrelevant. If there is physical constraint one may keep willing against that physical constraint. And if the agent's will is reducible to his particles, then we cannot say that his will is free from physical constraints. Further details about compatibilism are given in part 3.4.1.3.

⁵² Some compatibilists are agnostic about this. But all compatibilists say that even if there is full determinism, the free will would exist.

3.1.2 Definition of Free Will Power

They will⁵³ to extinguish the light of Allah with their mouths, but Allah refuses except to perfect His light, although the disbelievers dislike it.

(Quran: 9/32)

In the Quran, the “will” is recognized as a real, irreducible, standalone, and interactive power within a certain range. In this respect, semantically “will” equals “free will” as I will explain in the following sections. Hence, the definition of will or free will in accordance with the Quran will be as follows.

The definition of free will power: The irreducible, non-deterministic, non-random, sovereign, distinct power of the whole of the agent to determine equally and without being coerced within a certain range, any one of the sets of alternatives as the one to be actualized.

To clarify the definition, let me give a brief explanation on some expressions within the definition of free will power – further details are given in the related parts –:

Power: Free will power is a power rather than an act or a result or a chosen alternative. It is a power that is usable. If it is not exercised, it does not mean that the agent does not have this power. Here the word power means a capacity, an ability to make a change in the universe⁵⁴. This power belongs to and may or may not be exercised by the distinct essence of the agent which has a close relationship with the whole of the agent. This power is also interactive in that it interacts with other wholes, entities, and their acts. The “essence”

⁵³ The word literally corresponds to the word “will”.

⁵⁴Note that this power in a human being is not essentially much different in kind than the will power of another sovereign whole. Another sovereign whole may even be an atom, an electron, ...

and how it uses this free will power will be explained in detail in part 3.2. This power belongs also to the whole of the agent who is irreducible, transcendent, and real.

To determine: This means to arrange the related modules so that the alternative which is subject to this act of determination is taken into the agenda of things to be actualized and the other alternatives be removed from consideration. The act of determination entails also directing and influencing the environment toward that set of states if possible, in accordance with the willed alternative. This “determining” does not include necessarily the comparison according to preferences. The awareness that one alternative is different from the other is sufficient. The consciousness, transcendence, and reasoning may be minimally accessed and used just to make this distinction.

Equally: This means that the will power is exercised as a multipotential cause. In other words, this power could choose just another alternative instead of the determined alternative. Note that here the issue is not an issue of indifference regarding the alternatives. Rather, in free will power the preferences are not necessarily taken into consideration. It may also be a mere power to select based on any difference between the alternatives. Any difference between the alternatives which indicates the difference of the alternatives is sufficient.

Without being coerced within a certain range: This clarifies that the power is not an unlimited power. That it is or that it may be obtained within a limited range is sufficient for its existence.

Irreducible: This clarifies that the power is irreducible to the neurons’, or atoms’, or electrons’ acts... This and other attributes of the power mentioned in the definition of free will power will be explained in detail in the following parts.

Sovereign: Sovereignty is explained in part 3.5.3.

Distinct: This power is structurally, organizationally, potentially distinct. In other words, though it can use other components of the agent or essence of the agent, it has some effects which cannot be explained based on the effects of the parts of the agent. These effects cannot be explained either by reactions of the parts of the agent to the conditions that may be obtained by coming together of the parts of the agent within the whole of the agent.

The sets of alternatives: Note that the sets of alternatives are transcended by the agent. Alternatives may also be developed by free will power through cooperation with other powers of the whole of the agent. Alternatives include the intellectual, external, and other resources that may be accessed by free will power in order to produce a will.

The whole of the agent: The agent as a distinct whole is an important element of the definition of free will power. As explained in the relevant parts, the agent is a sovereign whole. However, the agent has sub-modules which may have their own free will powers which present to the agent different kinds of alternatives, including the low desires. So, when I mention the free will power, this is the free will power at the top layer of the agent related to his whole and his essence. Nevertheless, it is also possible that if an agent does not control these sub-free will powers, his essential free will power may be under the control of or equal to his sub-free will powers in different contexts.

Actualized: This means “to be made in a specific state” as opposed to other states. Here, the word “state” is used as a broad term. For example, to be chosen, to be determined, to be indicated, to be had in mind for anything may also be considered within the word “state”.

Question 21.

If free will power means an ability to will any of two alternatives equally, then how does it relate to reason?

Answer 21.

Prior to navigating through alternatives while assigning them values of ought to be truth (OTBT)⁵⁵, what is necessary for free will power is the ability to navigate through the alternatives and to be finally exercisable on one of the alternatives, no matter what their implication for the OTBT of the agent is. This ability is the essence of free will. Once the agent has this power, the assessment of alternatives in respect to OTBT will be meaningful. Free will power can also be run upon the preferences of the agent. However, in any case, the agent has and has to have the power to override at least some of the implications of some OTBTs.

Note that OTBT is not without cost:

Whoever desires to meet his Lord should strive righteously and should worship no one besides Him.

(Quran: 18/110)

Hence, following OTBT requires something like a trade. The agent is not forced to buy OTBT against the price. He can buy it, or he can choose not to buy it:

⁵⁵ This is the objective and optimal ought to be truth of the agent, like “being healthy”. Furthermore, OTBT of the agent does not mean only the ought to be truth that is directly related to the agent. For example, let us suppose that the agent sent some money to the needy people in another continent, whom he never met. If it is ultimately known to be good by Allah, then, he will have done something which is in accordance with his OTBT. Further details are explained in part 3.6.2.

Indeed, Allah has purchased from the believers their lives and their properties [in exchange] for that they will have Paradise. They fight in the cause of Allah, so they kill and are killed. [It is] a true promise [binding] upon Him in the Torah and the Gospel and the Quran. And who is truer to his covenant than Allah? So, rejoice in your trade which you have contracted. And it is that which is the great success.

(Quran: 9/111)

Reason relates to the correctness of the course of action. So, it is important in terms of taking the right course of action. However, if the agent cannot shift his direction from one way to another, then the rightness or wrongness of the course of action becomes meaningless. Hence, without having this freedom to shift or determine direction, we can talk neither of a real freedom, nor of responsibility.

For example, the ability to merely turn the steering wheel is different and immiscible from the ability to turn it to the right or to the left according to the consequences of turning to the right or to the left. The latter depends also on the consciousness, structure, reasoning power of the agent, and external structure/conditions. If there is a cliff to the left, the agent may be unwilling to turn the steering wheel to left but this is not a disability to turn it to the left. For instance, if the cliff was to the right the same agent would not -not would not be able to- turn it to the right. Our freedom of will is like this, it is independent of conditions except if there is something directly canceling the will power.

The ability to merely turn the steering wheel does not require responsibility by itself, because by this, the will is not necessarily accompanied with powers that relate to the OTBT. So, if the agent turns it to the right, he has not willed a specific result. So, the responsibility conditions have not been formed without the presence

of the reasoning, knowledge, and some other intellectual powers besides some other conditions.

As the free will power is able to choose among alternatives equally, the essence of the agent that exercises this power also has the capacity to navigate through mental and other resources, determine what resources to access and get relevant feedback. If someone is about to buy a car, his free will power navigates⁵⁶ through his memory about his budget, look at the relevant points of the car, ask an expert about it, and so on. Yet, whatever is the feedback, free will power can will to evaluate the situation further, or will what the reasoning module proposes, or will to overlook whatever is necessitated by any expert's recommendations. A person may be under tight budget but his free will power may will to borrow money, and buy an expensive car knowing the problems this will bring.

So, this power rules over the implications of reason. However, free will power is tightly connected to the consciousness. Hence, the essence of the agent which is the owner of these powers, will bear the consequences of a good outcome or bad outcome of the exercise of his free will power and other intellectual powers. Consequently, although the control of free will power is independent of the directions evoked by these powers, the essence which runs them may suffer indirectly if the wills entail bad situations. As there is time difference between the exercise of the free will power and their implications upon the essence, free will power has larger freedom. At the time of the exercise of the free will power, the implications of the specific will may not be present. So, free will power may tend to produce a will W_1 in the absence of its implication I_1 in the near future; and it may tend not to produce W_1 in the near presence of its implication I_1 . In this setup, the essence of the agent will be able

⁵⁶ The statements like "free will power navigates", must be understood as "the essence of the whole of the agent that exercises the free will power navigates".

to expose how good or evil he actually is, since, his acts are not eclipsed by the presence of the implications of his wills against himself. Likewise, the small likelihood of some results may also facilitate the exposure of how the agent really is: For example, a criminal may give little likelihood to his being caught upon committing a crime, and expose how he is by committing that crime; however, if the likelihood of being caught was high, he might choose not to expose how he really is.

Therefore, fundamentally free will power is independent from reasoning power and other mental powers. It has a big sovereignty over them. An important control over it is upon the essence which exercises free will power who will sooner or later bear the consequences of how it exercises free will power. For those who believe in the truth and divine values, being among the good and among the evil are included in those consequences.

Question 22.

Is Islamic free will libertarian free will?

Answer 22.

As explained in this book, Islamic free will is distinct from other conceptions of free will in certain respects. When all of its attributes are considered, we cannot say that it is a libertarian free will though it has some aspects that comply with it. Islamic free will is quite sophisticated when compared to other types of free will.

Question 23.

Could not we define freedom of will saying “A will is free to the extent that it makes the related agent responsible”?

Answer 23.

Sometimes it is said: “If there is no free will, then if someone kills your mother, you cannot blame him. But obviously he is responsible. Therefore, there must be free will.” This approach is not acceptable. If the killer does not have freedom of will he will not be responsible. Responsibility depends on freedom of will, but freedom does not depend on responsibility. A person may be free on a certain occasion, but not responsible.

Freedom of will is a condition of responsibility. So, it is true that if we somehow find out ultimately whether a person is responsible, he must have been free to commit that act. But, in order to find out whether the person is responsible, we have to find out whether the person was free.

If we say responsibility depends on the freedom of will, and freedom of will depends on responsibility, then there will be circular reasoning. This will lead us nowhere. The freedom of will must be determined prior to the determination of responsibility.

Question 24.

Robert O. Doyle and William James propose two stage free will models, and there are also models based on two orders of desires. Are not these models useful to explain the relationship between the free will power and reason?

Answer 24.

The two-stage model presented by Robert O. Doyle is based on both indeterminism in the sense of randomness, and determinism. He says: “Random noise in neurobiology of animals allows for the generation of alternative possibilities for action” and “But event acausality somewhere is a prerequisite for any kind of agent causality

that is not predetermined”. And crediting William James, Doyle says: “In the second stage, the agent evaluates the options in a determined way, but not one that was predetermined from the time before the new possibilities were generated.” And one of these possibilities is “chosen for adequately determined reasons, motives, or desires”. There are also such models which combine the same things in order to obtain the free will power. The models like this contain the problems of both determinism and indeterminism. The reasons and so on are considered as the deterministic causes of the will, and obviously, if deterministic, they remove the freedom of will; and the prior allegedly indeterministic processes cannot provide us with any explanation for free will.

Quranic teaching is totally different than the above approaches. According to Quranic teaching, neither determinism nor randomness is true. In the Islamic teaching there are no two stages. There is sovereignty of the agent. Unpredictability is only an outcome of sovereignty and multipotential causes. Indeterminacy as randomness does not exist.

The model based on the second order desires presented by Harry Frankfurt does not contribute to solve the issue of freedom. It says: If a person wills to not smoke, this relates to the second order desire of being healthy; so, not to smoke is not an outcome of determinism or randomness. It relocates the cause of wills to the agent’s second order desires saying that these second order desires are inherent to the agent. But it does not go deep enough so as to bring a solution outside determinism or randomness as to the origin of these second order desires. Even though the source desires are of second or higher order, yet they are desires; hence, essentially, they are wills which require an explanation that is not given in that model.

Any model which proposes a true free will and does not recognize the transcendent, multipotential, unitary causal power of the sovereign wholes will fail.

3.2 The Essence of The Will Power

And the heaven He raised and imposed the balance.

(Quran: 55/7)

And within the land are neighboring plots and gardens of grapevines and crops and palm trees, [growing] several from a root or otherwise, watered with one water; but We make some of them exceed others in [quality of] fruit. Indeed, in that are signs for a people who reason.

(Quran: 13/4)

And not alike are the two bodies of water. One is fresh and sweet, palatable for drinking, and one is salty and bitter. And from each you eat tender meat and extract ornaments which you wear, and you see the ships plowing through [them] that you might seek of His bounty; and perhaps you will be grateful.

(Quran: 35/12)

As the will power makes a change in the universe, what is it?

The will power is like a power that makes the wave function of a particle in a superposition, collapse in a certain direction: There may be no need in fact for any or considerable additional energy for the direction, and there is no need to breach the laws of thermodynamics. The energy to collapse is already in the particle. Also, since the energy is a scalar, not a vector, it does not contain the coercive influence for a specific direction by default.

In this similitude⁵⁷, the free will power may determine in which state it will collapse. This is like a command. Hence, the interaction between the whole of the agent and between the particle/ wave is between the transcendent component of the agent and the transcendent component of the particle in the superposition.

Within any sovereign whole, it is likely that there are some parts, regions and related mechanisms which are as in the above similitude. These regions would give the sovereign whole the power to steer the parts in accordance with the free will power.

In the following, I will try to explain the system of the free will power:

The A and B in the following setup represent the ends of two electrical circuits. The copper bar in the middle may rotate clockwise or counter-clockwise and close one the circuits and cause a specific kind of light.

⁵⁷ Note that I present a specific interpretation of the wave function collapse as a similitude. Not as a model for free will power. However, it is very likely that free will power is directly related to such aspects of the quantum physics, though there should be very complex quantum structures.

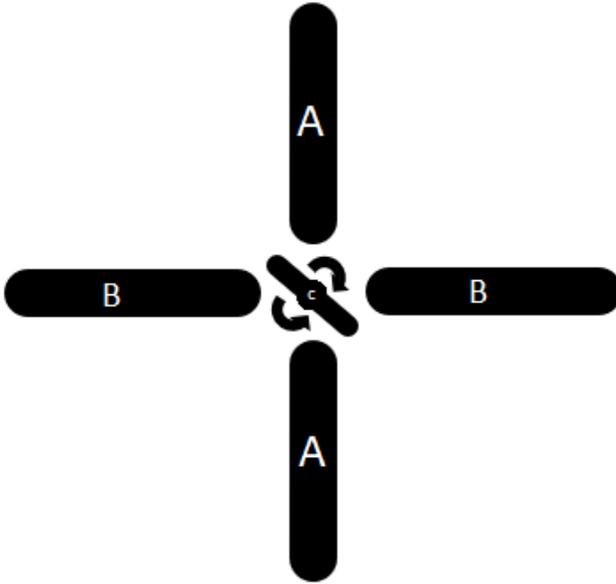


FIGURE-1: MECHANISM OF THE WILL POWER

The multipotential application of the will power is like some phenomena in quantum physics: The bar in the center in the above illustration, is as if it is in superposed states to close any of the circuits, but it will not be effective until it collapses. The multipotential causal power of the free will power can make it collapse in one of the specific states, either to close the circuit A or the circuit B.

The behavior of the copper bar is not a follow-up state in a chain of unipotential events. It is not a supervenience basis of the behavior of the agent. The distinct whole of the agent is real, can collect data through his sensory organs, through his memory, and it can make the bar collapse in a state that it wills, hence making the will be finalized.

Electrons in a rock move according electromagnetic relationships yet the rock falls with its electrons according to gravity. We see that more than one relationship or power may run simultaneously. We are not entitled to claim that there are no buffer-like dimensions which may create slacks for the operation of multiple free will-like powers.

When the essence gives a direction to the superposed thing, it does not transfer energy through transfer by contact. It is a transcendent transfer of command, in accordance with unitary locality.

The sovereign wholes may interact within different layers in a hierarchical way: If a whole is active in a universe with N dimensions, and it has a $N+1^{\text{th}}$ dimension extension, then it can be directed in its $N+1^{\text{th}}$ dimension aspect by another whole and its essence which is in the $N+1^{\text{th}}$ dimension.

So, for example, the parts move in many ways relatively to many wholes: The same part may move up as part of a whole, may move down as part of another whole, and left as part of another whole, and in the same time. An electron may move in a direction $D1$ as part of a bird which goes up, and in direction $D2$ as part of the rotating earth. Likewise, different parts of different nature may act in harmony for the same whole.

However, if the essence encompassing the $N+1$ dimensions disappears or becomes inactive in a certain range, then some of its parts in that range may be free again. The essence active in the N dimension may be aware or not of that $N+1^{\text{th}}$ dimension capabilities of these parts. The essences may appear or disappear. They give like info and command⁵⁸ to the others; these commands may also be like the laws of nature. And they may be connected.

⁵⁸These commands and commanded things may take different forms like laws, forces, and so on. For example, a form of energy related to the wave-function

On the other hand, certain events have different implications for different wholes. For example, from our perspective, burning does not have any positive or negative implication for a carbon atom. But it has such an implication for a man.

Essences of sovereign wholes establish connections with their parts. The connections may be between layers and/or between times. So, a new creature or molecule may be created. Essences may be connected with the relevant parts if the necessary conditions are obtained. Since the creation of things is based on commands, it is likely that these connections are like communication connections.

Essences govern a certain energy which is the total available energy of its parts. But the essence's connection with the parts is not permanent. This connection is like a line of communication and command. The parts with their steering ranges⁵⁹ may continue their existence and may get under the command of other essences. The steering range⁶⁰ within a whole which is usable by a higher or lower

of a superposed particle may be defined in a command-obeying way. Like "if ... then...". "if a command x comes from whole W1 of configuration T1 collapse in the form F."

⁵⁹ The steering range means the aspects, the components, slacks in the pattern-like behaviors of a whole which is usable by higher level wholes and their essences. For example, our brains act in accordance with gravity. But also they have some aspects and components maybe like the quantum superposition components' aspects explained above. These aspects and components will serve the essence and whole of the agent to use the brain which is a lower level whole in order to produce will power consistently.

⁶⁰ Steering ranges remind the collapse caused by the conscious observer in quantum physics. Mechanisms related to such collapses may be a general mechanism used by sovereign wholes. There may be such ranges within every or some kind of particles, and sovereign wholes that are allocated to the use of sovereign wholes as their connection/ communication/ formation centers/ points. Sovereign wholes may be making them collapse like we may be making

level wholes and their essences may constitute different percentages of the whole.

These steering ranges in accordance with the features of the related wholes, open room for the different systems at different layers. These ranges which may also be considered as slacks and buffers for those systems, make those systems real and distinct like the other systems. Hence, systems which are not epiphenomenal can realize: For example, this way, there is a system of economics and its rules are able to work while the patterns of physics, and patterns of brains also able to work without any clash.

Question 25.

While exercising the will power, is a unipotential energy transformed into multipotential energy?

Answer 25.

Not necessarily, since energy is a scalar.

Question 26.

Is the multipotential cause here getting its influencing power from a unipotential energy?

Answer 26.

It is not correct to consider the energy as unipotential in itself. Because, it depends on the related sovereign wholes. The related

collapse systematically the steering ranges within our wholes through a mechanism that we do not know, as an animals does not know which muscles to activate when it runs. On the other hand, human beings or animals are not the only sovereign wholes. See part 3.5.3 about sovereign wholes.

multipotential sovereign wholes regarding a specific energy package may be many.

Question 27.

Does the change related to the free will power happen at a point in time?

Answer 27.

A moment with zero extension in time does not define anything. So, the change related to the production and effect of the will of the agent or its initiation happens in a bracket in time not a moment. But note that time brackets are not isolated. The same is true structurally as well: change cannot happen only at the level of protons, neutrons, electrons... So, the change in this respect relates to many design elements of related sovereign wholes and other related things.

Question 28.

Is will power a form of energy?

Answer 28.

If my brain has sufficient or more than sufficient energy, but if I am dead and missing the necessary features, then any energy within the body will be useless. We will discuss this in the next part.

Question 29.

According to the above, should we say that every sovereign whole has a kind of will power?

Answer 29.

And He completed them as seven heavens within two days and inspired in each heaven its command.

(Quran: 41/12)

When we consider that Allah gives commands to beings other than the human beings, this means that things other than human beings may have will power.

The will power may be of many different kinds. For example, a living organism like paramecium which has no brain, may have a will power. Or a chicken may have a will module. Likewise, a galaxy may have a will module.

Question 30.

How meaningful to the free will power are “could have willed otherwise” and “could have done otherwise”?

Answer 30.

It is important to clarify the question:

If “could have willed otherwise”⁶¹ corresponds to “equally” in the definition of free will power presented in this book, then there is no tension between this statement and this definition. Because, then it means “I had the sovereign free will power to will the other alternative.”

⁶¹ I consider the act done in “could have done otherwise” to be the “act of willing”, and I will not go into the implications of being able to perform the will which is not directly related to the question.

The following verses are related to “could have done” or “could have willed” otherwise:

And if they had said [instead], "We hear and obey" and "Wait for us [to understand], "it would have been better for them and more suitable. But Allah has cursed them for their disbelief, so they believe not, except for a few.

(Quran: 4/46)

And if only they upheld [the law of] the Torah, the Gospel, and what has been revealed to them from their Lord, they would have consumed [provision] from above them and from beneath their feet. Among them are a moderate community, but many of them evil is that which they do.

(Quran: 5/66)

And if only the people of the cities had believed and feared Allah, We would have opened upon them blessings from the heaven and the earth; but they denied [the messengers], so We seized them for what they were earning."

(Quran: 7/96)

And they will confide regret when they see the punishment; and they will be judged in justice, and they will not be wronged.

(Quran: 10/54)

However, sometimes the statement “could have willed otherwise” is considered as “I could have willed otherwise if we rewinded the time to when I willed.” If it is presented like this, then it becomes irrelevant to the free will power: If we rewinded the time everything would be the same.

Then if determinism is true, “I could not have willed otherwise”.

If indeterminism is true as in the Copenhagen interpretation of some quantum phenomena, then in appearance, “I could have willed otherwise”. Because some things in the quantum realm might turn out to be different, though everything else was same. But then again, we had to discuss whether this “I” exists as a distinct or epiphenomenal being. So, even if we rewinded the time back and willed otherwise, this would not demonstrate the free will power.

It is also important to note that saying that someone “could have willed otherwise” does not necessarily mean that he “would” have willed otherwise. According to the following verses, some people would choose to do the same even if they could have done or willed otherwise:

If you could but see when they are made to stand before the Fire and will say, "Oh, would that we could be returned [to life on earth] and not deny the signs of our Lord and be among the believers."

But what they concealed before has [now] appeared to them.

And even if they were returned, they would return to that which they were forbidden; and indeed, they are liars.

(Quran: 6/27-28)

This is related to the unity and transcendence of the agent. Some attributes of people depend on how they behave while they have free will power.

Question 31.

As in John Locke and Harry Frankfurt’s examples, someone may have no ability to do otherwise, but he may be unaware of this fact.

So, would he be considered to have free will power in such a situation?

Answer 31.

That something prevents the execution of free will, does not entail the absence of free will.

3.3 Levels of Free Will Power

Let assume that there are just two exactly symmetrical points in a fully homogeneous space with exactly same implications. The structure of the agent is also exactly symmetrical in respect to the two points and all other things. The free will power of the agent exercised for one of the points as opposed to the other corresponds to fundamental level of free will power. The ability to distinguish one point from the other is necessary for this level.

If these points have different implications for the agent, then the exercise of free will power may be at a practical level. The ability to distinguish the points in terms of their implications for the success of the agent is necessary for this level.

Let us see some further details about these:

3.3.1 Fundamental Level

A driver has the power and freedom to turn the steering wheel to the right or to the left when the car is not moving. This power corresponds to the fundamental level of free will power.

But if there is a cliff to the left and if the car is moving, it is likely that he will not exercise his power to turn it to the left.

So, while moving while the cliff is on the left, does not he have the free will power to turn the steering wheel to the left? He has. But in

that situation, “he does not turn it to the left”. We do not say here “his power to turn the steering wheel to the left has vanished”.

In the exercise of free will power, at its simplest level, it is sufficient for the agent to know that alternative A1 is different than alternative A2. For example, that the white candy is different than the red candy is sufficient to exercise free will power in terms of input. Free will power does not even require a consideration that the agent is indifferent to the values of each candy in regards to the OTBT of the agent. For example, if he has the alternatives of taking as gift a precious ring and an ugly ring, he will have exercised his free will power if he wills to take even the ugly ring as long as he is simply aware that they are different alternatives.

3.3.2 Practical Level

However, when the free will power navigates through mental resources, supposing that the precious ring contributes to his net well-being to a great extent compared to the other ring, it may produce a different will.

The fire burns, the stone falls, the photon goes at a certain speed, a bird flies, a fish swims, a planet rotates, a human being wills to be safe. Similarly, things may have different implications for an agent based on his/ its creation, truth, and features.

A human being wills to be safe, be in prosperity and peace. He sees preferable what he wills. He wills the object of his will, and he wants to reach it.

Though the person wills prosperity there are other influencers. If he wills and enjoys smoking while he also wills to be healthy, then there is tension and two inconsistent things. And the essence of the agent as the exerciser of free will power may navigate through the

consciousness experiences, reasoning power's outputs... and will a certain will.

It is He who sent His Messenger with guidance and the religion of truth to manifest it over all religion. And sufficient is Allah as Witness.

(Quran: 48/28)

There are factors that push away from the correct path. Reasoning power and free will power are means to come back onto the correct path.

On the other hand, if a person does not see how his free will power works, he cannot be really effective? Not only believing in free will power but also knowing how it works is important for benefiting from it.

The lightning almost snatches away their sight. Every time it lights [the way] for them, they walk therein; but when darkness comes over them, they stand [still]. And if Allah had willed, He could have taken away their hearing and their sight. Indeed, Allah is over all things competent.

(Quran: 2/20)

Freedom requires the existence of correct coordinates and goals. If the location where one is going without being free is no different than where he would go when he is not free, then what would be the value of being free? So, in the existence of such coordinates and goals and sufficient access to them, then the agent is considered to have free will power at the practical level as well. However, he may exercise his power or may not.

In the hereafter, the free will power is eclipsed by the intensity of the presence of punishment and reward. The free will power can be used only when there is no coercion. When it sees the hell, then a likely

change will be because of the hell or paradise. To be counted, his goodness must be above a degree and his evilness must be below a degree, so as he would change without seeing the hell.

3.4 Attributes of Will Power

In this part we will examine the attributes of will power.

3.4.1 Will Is Not Deterministic

A mere debate about whether the universe is fully deterministic or indeterministic will not give a sufficient result on whether free will power exists. Because, as long as a will power is reducible to deterministic or indeterministic spatiotemporal events, there will be no free will power.

However, within a fully deterministic universe, free will power would be impossible. Hence, to reach a correct conclusion about determinism is necessary in our context.

Also, if the only alternative left other than full determinism is a fully or partially indeterministic universe, then again, we have to discard free will power.

So, it is necessary to have a sound conclusion about whether these are true. But if both are false, then we will have to accept that there is a different basis underlying the universe.

In this part I will demonstrate with numerous arguments why full determinism is false. Later, I will also demonstrate that fully or partially indeterministic universe is impossible as well.

Note that if free will power is true, then we should expect to see events which look unpredictable. Also, if free will power is true, it is also possible to see some events that look deterministic in some

ranges. For example, a sovereign agent may choose to brush his teeth every day, and he may also will to skip brushing his teeth on some days. But, also to use sovereignty, and reason, there needs to be some patterns.

In part 3.5.6.4.2 we will also see why the reductionism and physicalism are false.

3.4.1.1 Contemporary Paradigm of Determinism – Indeterminism and The Related Quranic Teaching

The definition of determinism in our context is: “Determinism is the philosophical belief that all events are determined completely by previously existing causes.”⁶² Determinism is claimed without full empirical access to the micro and macro, to distant entities and events within our universe. Therefore, it can be considered as a principle-based claim for the entire existence.

Indeterminism is considered generally the opposite of determinism and the etymology of the word implies this meaning. So, indeterminism is that at least some events are not determined by "previous causes".

That some events are indeterministic suffices to make the entire universe indeterministic. Because in this case indeterminacy would be a possible feature of anything and also because just one indeterministic event will make everything unpredictable through many relationships.

A problem presented by the determinist is this: “If events are not caused by the previous events or by causes that have been existing prior to the event, then what causes them?”

⁶² (Encyclopaedia-Britannica-Editors, Determinism 2020)

Determinism and indeterminism are actually the outcome of physicalist reductionism which says: Events, entities, and beings do not have a reality of their own as causal things, and they are reducible to past or other layers of events, states/ entities.

The free will paradox is not a problem issuing from the essence of free will power of the agents. It is an alleged paradox because of the attempts to reconcile free will with the irrational contemporary paradigm of determinism – indeterminism. There is no free will paradox, and the formulation of causality in accordance with determinism – indeterminism is wrong.

Because of the obvious irrationalities of both determinism and indeterminism, they should be discarded and replaced by what I call multipotential causality. This framework may be a remedy for many other problems of science and philosophy because it offers a consistent, complete, and flexible framework.

A higher order necessary thing cannot be replaced by many lower order things. The God cannot be replaced by the divided and contingent spatiotemporal things.

According to determinism, a cause must be unipotential. In other words, it can have the potential to cause something only in one direction, it can cause only one will. For example, if we suppose that an agent has the options of the red candy or the white candy, he cannot have a multipotential causal power to will red candy or white candy. Even one million years ago, he was determined to will just a specific one of the two. Or a photon can land only on one spot of the screen, hence, double slit experiments look very counter-intuitive for the determinist.

The reason for this deterministic claim of unipotentiality of causes is this: If I have the will power and freedom to will the red candy or white candy multipotentially, and if I actually willed the white candy,

this means that all of the previous causes and states would not be sufficient to predict my actual will for the white candy. Furthermore, there would be a cause which would cause something on its own without any need for the direction of his will any physical cause. In other words, there would be a cause on top of the spatiotemporal. The recognition of such a causal power, would undermine physicalism. This is related to the beliefs of people.

The indeterminist physicalist will not adopt multipotential cause for similar reasons.

According to Islam, alternatives as the causes of what we observe around us in this limited world must be questioned. If they are coherent in their answers, then they can be adopted. If not, they must be discarded. The Quran also warns us against following a dubious way; and it encourages to follow the way of certainty. It is noteworthy that in the very introductory verses of the Quran there is reference to doubt and certainty. And the Quran says that it is possible to reach the clear truth which is relevant for us.

As explained in the previous and following sections of this book, physicalism, physicalist reductionism, determinism, indeterminism as defined in this book are false for numerous obvious reasons. On the other hand, the universe that we observe is true: The sun, the moon, the human beings, our organs, the animals, the atoms, the molecules, the numerous relationships between them are daily observed and confirmed daily. So, if determinism and indeterminism are false, and if there are caused things, then it is clear that there is a true transcendent and multipotential cause above the totality of all contingent things. If a multipotential cause is true in actuality then other multipotential causes also are possible. And as it is demonstrated in negation tests in part 3.4.12.1, at least the human beings have this kind of power. The contingency and coherence of relationships and the findings of quantum physics on the other hand

demonstrate that this multipotential power is not limited to human beings. Other things have this power as well. Space and time are to be reconsidered in this respect.

In Islam, space and time are not absolutely and relationally separative realities. On the contrary, they are unifying features/ units. Spatial or temporal relationships are like relationships of specific equations. A purpose may be the cause of an event through the related agent if there is sufficient and relevant transcendence and multipotential causal power. One of the transcended alternatives may be willed for the transcended goal.

Multipotential causes may cause other multipotential causes: For example, when a couple have a child, they have caused a multipotential cause.

According to the Quran, multipotential causes are accompanied with commands and with permissions. Therefore, the multipotential causes act as elements of design within certain patterns. Nothing that Allah does not will can happen, since Guided Multipotential Causes (GMC) can behave freely within the borders of probabilities that Allah determined.

He said, Our Lord is He who gave each thing its form and then guided [it].

(Quran: 20/50)

All sovereign wholes have multipotentiality as a principle. But designs, OTBTs, commands, limits of borders of permission, conditions, may make some causal actors unipotential in actuality and within certain ranges. Even the conception of a single alternative requires a transcendence and multipotentiality regarding the parts and different aspects of that alternative. For example, one may have only one way of running away from fire through just one door by

causing the door being opened. But yet there may be a range of freedom in a different perspective like opening the door with a key or with right hand or left hand or both. So, going through which way may be unipotential, but opening it a certain way may happen within a range of freedom. Entangled particles also behave as one and as if they are transcending things like in double slit and Bell's inequality experiments.

Freedom of will relates to multipotentiality. So, a question may be whether the agent as a willer is a unipotential or multipotential cause. Under the assumption or conditions of unipotentiality, free will power will be absent. If the agent is unipotential, then he will not be able to conceive more than one alternative. However, it is obvious that we can easily conceive of more than one potential under normal conditions. Multipotentiality is the feature of a human being. In multipotential causality, in a previous state, there is no definite specific prediction.

Some beings or entities may theoretically have unipotential will power. In some cases, there may be a possibility to predict a future event based on a past event. But it is ultimately unlikely for us to predict certainly the future events in most cases.

Instead of unipotential causality, and non-causality a paradigm based on multipotential and unipotential causality and a spectrum in between would be better.

3.4.1.2 Determinism

Allah has power over all things.

(Quran: 48/21)

Say, "Allah is the Creator of all things, and He is the One, the Prevailing."

(Quran: 13/16)

He is Supreme over His creatures. He is the Wise, the Cognizant.

(Quran: 6/18)

When we observe the universe, we see that there is a unity within all things. We let a stone fall; it falls down in a specific way. And we can discover even equations which are applicable to numerous physical events. Upon that, we conclude that there is some commonality and kind of unity within all things.

Consequently, some conclude that there is a God above all things who designed things and assigned physical, logical, psychological, and so on powers and abilities to things, and patterns.

And some conclude that there are many gods who behave like that in certain regions or functions.

And some conclude that space, time or spatiotemporal features are the basis of unity; that there are laws at the top which govern things or which are common within things.

Within the latter group there are those who conclude that everything happens because of spatiotemporal effects. There is no transcendence within anything so as it encompasses things and exercises some sovereign power over other things. Hence, nothing happens except if it has a cause which is sufficient in quality and in quantity to explain what happens based on its effects.

This approach does not see a big problem with the source of the patterns, why they are the way that they are, what causes the execution, what makes things have info about the states they are in, what enables things communicate with other things, and many other

issues. Those who are not deep in philosophical aspects of these, and the layman who adopts this deterministic view, think generally that we observe a specific pattern, so this means that that pattern is necessary. So, they do not see any need for a sovereign power; hence, there is no way that things may be other than what they actually are.

According to the Quran, patterns depend on the design and commands of Allah. They are not necessary, self-sufficient, absolute. Also, according to the Quran, agents, beings, and other creation of God, responsibility, His values, plans are also as real as patterns. So, according to Quran determinism-indeterminism is not a key distinction; and they are not the only two alternatives among which we can choose.

Determinism⁶³ says that every event, including the acts and wills of human beings are the results of laws of nature and previous states of the universe. So, hard determinists claim that if for example there was a being who one thousand years ago knew all details of the state of the universe and all physical laws at that time, it could predict whatever would happen until the end of the universe.

So, indeed, if any will of an agent today depended on the state of the universe as of one thousand years ago and on the physical laws, then we could not say that the agent has any freedom; neither the freedom of will, nor freedom of any other action. He could do only what he has actually done. He could will only what he has actually willed.

⁶³ Unless otherwise specified, or made clear in the specific context, by determinism I mean a full determinism. By full determinism, I mean a determinism which considers every event or entity or being fully and only the result of patterns and any past states. Again, by determinism, I mean a physicalist kind of determinism that is proposed in the context of physical states and laws of nature; I do not mean a determinism that may be claimed in the context of religion.

Hence, it is important to reach a correct conclusion about full determinism. On the other hand, the reality of freedom of will does not require that there is no pattern at all.

3.4.1.2.1 Implications of Determinism Regarding Free Will

If determinism is true, then we as the humanity have no effect upon anything. We generally cannot will and produce willed results directly. But we can will ways and organize things. We are limited; but, we will a certain act within ourselves and with this act produce a small effect in the world. We reason and choose this effect so that it can produce a bigger effect. And we choose this bigger effect to produce a bigger effect. We bring together our small powers, so we reach billions of trillions of times of the effects that we can produce within our bodies. For these, we have to have tools, we have to have connections between tools, we need to have patterns in order to devise, plan, and organize, and get big results. We have this capacity as explained in the following verse:

Have you not seen that God has made all that is in the heavens and the earth, subservient to you (human beings), and has extended and perfected for you His apparent and unseen bounties? Some people argue about God without knowledge, guidance, or an enlightening book.

(Quran: 31/20)

If determinism is true, not only we do not have free will, but also, we are unable to change anything at all. So, according to determinism, we are just epiphenomenal; in one way, just like an illusion.

If determinism would be true, there is not just the impossibility of will and action in another way than what actually happens in the future, but conceiving such another way is not possible either for the subject, since there can be no truth outside physical laws. Because

infinitesimally small spatiotemporal elements of our brains would contain the spatiotemporal data about themselves. One of them would not have a room for containing knowledge about what is irrelevant for itself. What is relevant for another infinitesimal part would be contained in that infinitesimal part.

If determinism was true, then not only what happens, but the features and structure of the agent also would be happening based on deterministic patterns. And changing oneself would not be possible.

If determinism is true, then there is no way to will except one deterministic state and therefore unwilling something has no truth value.

On the other hand, if determinism is true, there cannot be the ought to be truth (OTBT) of the agent. Since, whatever happens is what has to happen. Things that seem to be negating our feelings, can only be considered as things that negate illusions.

Determinism is a false criterion against the existence of free will as a general principle. Because in any case, there may be a Creator with free will who wanted things to behave in deterministic manner. If it was demonstrated as a logical principle or necessity, then we might say that human beings do not have free will. But it is clear that it cannot be demonstrated as a general principle.

Non-existence of full determinism is necessary for the existence of free will power, but not sufficient. If physicalist reductionism is true, then to debunk free will, determinism is not even necessary. In other words, if there is no will power except as an epiphenomenal thing or as a weakly emergent thing, if it does not have impact upon the physical then there is no freedom of will even if there is full or partial indeterminism.

And if the impact of the will is predictable it does not mean necessarily that it is not free. The will may be chosen by the agent to be predictable, or in harmony with the environment.

Since Allah has power over all things, it is clear that determinism is false according to Islam.

So, in the following section, we will examine whether determinism is true or false.

3.4.1.2.2 Determinism Is Unsubstantiated and False

If determinism was true, then any will would be the outcome of deterministic processes over which Allah had no power. Hence according to Islam there is no determinism. In the previous parts, other reasons for inacceptability of determinism according to Islam have been explained.

In the following I will present the evidences and arguments which demonstrate objectively that determinism is not rational.

When we talk in the following parts about the impossibility of determinism, I do not only mean that full determinism is not present in our universe, but I also mean that it is not even possible in theory, and it is impossible in principle. So, some of our counter arguments against determinism apply against the determinism in our universe, and some of them prove that it is impossible in principle.

Non-existence of determinism and non-existence of indeterminism do not result automatically in the existence of free will. But existence of full determinism or full indeterminism or that everything is reducible to a combination of them would undermine free will. That is why for a sufficient understanding of free will, it is necessary to understand why the above are not possible.

An important question is, can determinism be demonstrated empirically? An empirical demonstration of determinism requires full knowledge about the entire existence. If there is a single electron which behaves outside of determinism, then determinism would be refuted. Can we have full knowledge about every action of every electron in the universe? Obviously not. This impossibility is not only because of our lack of means, but also because of the necessary attributes of our measurement processes. Any measurement requires changing what is measured, and what is used to measure. Hence, as of now, it is clear that in principle, determinism is not demonstrable empirically.

Also, note that determinism is closely related to indeterminism. Certainly, if we consider whether the outcomes of throwing dice are indeterministic, we have to have the dice first, with definite numbers on each side. In other words, indeterminism requires some determinism if the only alternatives are determinism and indeterminism. So, when I present arguments against determinism, note that they are mostly applicable against indeterminism as well. So, a good understanding of the following arguments will help you understand our points regarding indeterminism, although I will present specific arguments against indeterminism in a separate section.

3.4.1.2.2.1 Fallacies Directly Related to The Sources of Determinism

According to determinism, a future state of the universe, has a full dependence upon any previous state of the universe and the laws of nature. Hence, if a state of the universe, and laws of nature are known, then based on it, any future state can be predicted and (according to many) any past state can be known.

So, here there are two important elements: (1) A state of the universe, (2) The laws of nature underlying determinism.

If some laws of nature are subject to change, then according to determinism there would be also laws that determine these changes. So, when we say laws of nature, we mean both the changing laws, and the laws upon which the changing laws depend.

Many physicalist physicists and laymen consider that laws are pushy explainers. In accordance with physicalist reductionism, things must be reducible to alleged self-sufficient spatiotemporal bottom elements (ASBE)⁶⁴, and the effective things would be at that level. So, at that level, things would be simple. Upper layers would be just epiphenomenal.

3.4.1.2.2.1.1 States of The Universe

According to determinism, a future state is the outcome of a past state plus the laws of nature. In this part we will see that the past states as part of this formulation cannot be a starting point or a basis at all.

Let us assume that there is one body or mass in the universe and this body moves with a certain velocity. According to determinism, if we have a perfect scan of this universe, and all laws of nature, then we can predict any future state.

⁶⁴ There are also accounts of reductive physicalism which argue for infinite regress. This is addressed directly or indirectly under the headings related to infinite regress.

3.4.1.2.2.1.1.1 The Initial State

One issue with the initial state is, whether this state is also the outcome of laws of nature.

Is there any initial state that does not depend on the laws of nature?

(1) If there is no such state, this means that essentially the laws (or something else) produce the initial state. Can a law exist without any substance, any state, upon which it acts?

If there are laws that produce initial states, do they produce these states in a deterministic way? If this is the case, the laws themselves would be within certain states as they have to be in a specific state and predictable. If they do not, then do they produce these states in a random way? In this situation, the laws would have a random aspect, not even related to probabilistic patterns. But then, the concept of law collapses.

Is there an initial unbiased and unspecific state upon which the laws act and shape that state? This is quite unlikely because since the present universe's states have quite specific features, if determinism is true, then the initial state must also have some specifics. On the other hand, it is not possible to conceive of a totally undefined physical state, especially if future states would be predictable based upon any state. In any case it will have some features.

(2) If there is an initial state which does not depend on the laws of nature, this means that it was not the outcome of determinism. If it was not the outcome of deterministic process, then the future states are based on a state which is not the outcome of a deterministic process. According to determinism, any state must depend on the physical laws. Laws cannot produce a state from an initial state no matter what that initial state is. The laws cannot produce the present state from an initial state that does not depend on the laws. Also, if

that state does not depend on the laws, this means that there is at least one state independent of the laws, hence, laws are not laws, hence, there is something that is above the laws.

Another problem is in the scenario where there is no backward infinite regress, where there is no differentiation within the initial state.

If there is differentiation in the initial state, then we will ask for the cause of the differentiation, since, such a differentiation would be contingent, in that it could be otherwise, but it has been this way. One may say that it is a brute fact, and there is no reason to ask why it was the way was, it would progress into a state in any case. I think it is not a good approach not to question why it is that way. So, as long as it is contingent, we need to find an answer to this question. In Islam, there is a choice behind the differentiations, broadly similar to our choices. A transcendent being who has transcendent knowledge and power over all possibilities, may exercise His will and actualize any possible state.

If there is no differentiation in the initial state, but then the differentiation arises from it, then we will need to ask for the reason of transition from no differentiation to differentiation. The result of this reasoning will be similar to the above line of thinking. If this non-differentiated stage continues backwards, then a similar reasoning will be applicable.

If determinism does not explain the initial state, then it does not explain anything. Because the initial state contains the info of the entire events.

The above points show that the idea of an initial state creates inconsistencies for determinism, no matter whether it depends on the laws of nature or not.

3.4.1.2.2.1.1.2 General Problems with States

There are also issues with the fundamental elements and attributes of a state: If we think of a state of the universe, this means that there are some differentiations within it. Do these differentiations depend on each differentiated elements' own attributes, or is there a unity that transcends all these elements and gives them their attributes? What makes them be contained within a single framework/ coordinate system? Why they do not have each its own coordinate system being incomparable to the other elements? If they are within the same system, then what are the units and patterns of comparison and transition from one point to another? What determines those units? For example, if we say one region is larger than the other region, where does the unit of comparison come from, and how does it transcend all of the regions? Are there laws again which do such things?

The latter point does not apply only to an alleged initial state, but to any state that can be used as a basis for determinism.

Note also that the state in terms of space is also relative and passive. Hence, as the laws are used to connect the states in different times, there should be laws that connect different points in terms of space or anything that corresponds to space which is the background of the distributions within that background.

States depend on the positions and other attributes of parts. But the positions of parts depend on the whole; including the points of space, if we assume that it exists in and of itself: A point x , must have values based on its neighbor or other points; or a point-like particle/ part must be defined based on the space or based on other point-like particles.

Therefore, a state prior to laws or coexisting with the laws at all times is contradictory.

In the next part we will see the problems with the laws such as whether the laws can be prior to states, or coexisting with them at all stages.

3.4.1.2.2.1.2 Laws of Nature

Do they not see the birds controlled in the atmosphere of the sky? None holds them up except Allah. Indeed, in that are signs for a people who believe.

(Quran: 16/79)

Reading the above verse, some will say that there is no need for God for the flight of the birds, there is the law of gravity, there are electromagnetic and other forces related to the atoms and molecules of the air. These forces and laws also govern the atoms in the brains of the birds. So, they fly with no need for any god. If we dogmatically accept the laws, maybe we can say those things. But let us question them:

Where do those laws come from? Who executes the patterns? Who controls them? Where are the laws located? Why are they the way they are? Why are they in harmony with the related substance...

The laws are not generally sufficiently questioned. They look very much like the false multiple gods of old times. They do not have in the first-place attributes different than what they are used to explain. This lack of questioning may be related to their successful use in applied sciences and their weaknesses to stand against any questioning. But after all, a crow uses gravity to drop and crack a walnut without any need to recognize gravity as an ultimate

explanation for anything. Hence, these laws mostly are accepted dogmatically as the very basis of what we observe.

Below, I will note important issues and questions about these laws. Each of the following question demonstrates that these laws are not and cannot be what they are assumed to be. Hence, undermining them, will also undermine determinism.

As we explained in the section about states, note that under determinism, the states should normally be the outcome of the laws.

He said: Our Lord is He Who gave unto everything its nature, then guided it aright.

(Quran: 20/50)

3.4.1.2.2.1.2.1 Who Makes the Laws of Nature?

When we have laws, we also have law maker, law enforcement... but laws of nature are considered by some exempt from these with no reason.

What makes the laws of nature? Why are they the way they are? Are they necessary? What/who makes and sustains the coordinate system necessary for those laws and determinism?

There is no proof for a claim that the laws of nature are necessary. If there is no logical necessity for the existence of laws of nature, then there is no reason to assume that they are self-existent, hence that they are the most fundamental.

Therefore, a claim that “all that exists must be under the control of deterministic laws of nature” is unsubstantiated. So, there is no

reason to say that there is no free will because of determinism and deterministic laws of nature.

3.4.1.2.2.1.2.2 Why Are There Not Other Laws?

Either there are other laws which interrupt the above kind of laws or there are no laws at all. If there are interrupting laws/ fundamental forces it is obvious that they do not interrupt chaotically. If such orderly laws appear, then why would there not appear chaotic laws which would make the universe not understandable at all?

3.4.1.2.2.1.2.3 Laws Must Have Transcendent Abilities.

Can we say under different realms different laws apply as pushy explainers which distinguish each kind of object, their sizes, and other distinct attributes while lacking transcendent abilities? E.g. in the micro realm electromagnetism, in macro realm gravity? This does not sound plausible, since parts of things in the macro realm, are parts of micro realm. On the other hand, a distinction based on the realms would require further transcendent powers to communicate and cooperate. On the other hand, the lack of One designing, executive, and transcendent Power in the numerous laws-based model, makes this model unplausible.

Although a uniform law above requires transcendence, other kinds of laws require transcendence of higher degrees.

He brings the living out of the dead and brings the dead out of the living and brings to life the earth after its lifelessness. And thus, will you be brought out.

(Quran: 30/19)

Of course, the multiple bodies and additional dimensions will require the laws to transcend more things: For example, let us suppose that an object hits an object in direction D1 which requires it to be in position P1 at time T1. Another object hits it in another direction which requires it to be in position P2 at time T1. But the object is at P3 at time T1. The law calculates P3. So, it is aware of these two influences. And determines where it has to be at T1. Same applies for other laws. To determine S3, the law must encompass S1 and S2 simultaneously. It must encompass/ transcend all things states.

If a law acts on parts distinguishing each one from the others, then it causes changes based on the relationship of that particle with the related dimension, if that dimension is ontologically real. It is as if that law moves that particle in the space. In this case, the space has a status similar to the law, because, the object is subject to both the law, and to the space. Therefore, in this case, the law must be encompassing/ transcending and considering the space as much as the object.

If there is a law then this must apply to all layers unless it is able to distinguish between the layers. For example, strong nuclear force which acts on the parts of the nucleus of the atom, would also normally act on the parts of an electron -this is important especially when we consider the need for self-sufficient spatiotemporal elements under determinism and physicalism-. Or it must be able to distinguish the layers. But if it acts on any whole then it must be acting one way or the other on that whole's parts. But if the laws distinguish the layers, conditions, and act differently on each layer then they are very similar to a god who deliberates according to specific situations.

3.4.1.2.2.1.2.4 At Any Time-Scale, Laws Must Contain More Than One State.

In being laws, they contain the very attributes of what they are supposed to cause, and they are caused by what they cause. If a law will transform the state S1 into state S2, then the definitions related to S1 and S2 must necessarily be contained within a law, whatever that law is.

In any case, laws contain within themselves the elements and definitions of more than one time slice simultaneously. Therefore, at least more than one states under the allegedly actual effect of a law, coexist in the same time bracket.

The alleged deterministic nature of laws makes them inconsistent and incoherent, and also incompatible with determinism in other ways.

A law contains the elements of future, present, and the past. Hence, the laws do not explain anything, because the laws contain already the time extensions of events within their internal mechanisms. Therefore, the laws given as an answer by the determinist to the question “what causes the future” are not answers, but rewording of the same question. Hence, the laws do not have a nature to be an answer to that question. Laws cannot explain the future. Because the elements of the future are assumed to be contained within the laws: For example, if the law or force of gravity makes my pen move from position P1 to position P2, this means that any time this law detects my pen to be in P1, it will cause it to shift it to P2. So, if the determinist answers my question “how does my pen go from P1 to P2?” as “because of the law of gravity”, I will say “how P1 and P2 within the law of gravity are the way they are?” This means that the answer of the determinist is no answer.

Furthermore, what is the width of the law's internal extension in terms of time? Is the law like an equation of first degree, or like an equation of more degrees? Also, if we consider that any state cannot be taken as a moment with zero time width, but rather as a range no matter what the time scale is, we will conclude the following: If we predict events in the time range TR3 while we are at time range TR2, we should admit that the law depends on the events TR2, and TR1. Hence, the dynamics of the state before change, during the change, and after the change must be transcended by the law. Therefore, at any stage, the law must transcend more than one existent states. So, necessarily there are at least some consecutive states that are not the product of the laws. These apply no matter what the model of the law is: For example, if the gravity is explained by gravitons, or spacetime curvature, the same thing applies since there will be in any case the above differentiations in respect to time.

Also, the same law encompasses the past states as well as the future states beyond the present state unless each moment is considered to have different law. Yet, if each moment is run by a different law, then there would be a higher-level law which would simultaneously encompass all states.

And, this means that laws cannot explain the future, because the future which is inside the law in the infinitesimal framework, is influencing the laws. Imagine like you are moving the pen with your hand. To move it, you must contain the power on the initial state, on the transition process, and on the final process. If the law has these powers, then, within this law, simultaneously states of change exist, even before the change has been made by it. If there is such a differentiation within the law itself, then, either there is infinite regress, because any such differentiation at any layer will be caused by another layer. Or, these differentiations are not absolute/necessary; and they are contingent. This point demonstrates that determinism is false.

3.4.1.2.2.1.2.5 Laws Would Need a Coordinator Above Them.

The multiplicity of laws would create lots of other problems:

Had there been within the heavens and earth gods besides Allah, they both would have been ruined. So exalted is Allah, Lord of the Throne, above what they describe.

(Quran: 21/22)

When there is another law it destroys the lawness of the former law. Hence, there will be a need for a top principle or law which governs the submissive laws. Yet, can a top and fixed principle devoid of deliberation and flexibility be sufficient to remove the clashes and sustain numerous laws and structures at different layers?

If there are multiple laws that affect same thing, then there would be some kind of conflict between these laws. While one law/ force, for example gravity may require that thing to be in position A, another law/ force for example electromagnetic force, may require it to be in position B. Which one will happen? An average? One of them will have priority under some conditions? Who calculates? Who sets the principles? Are calculations subject to other laws? Or will there be a manifold or universe wherein sufficient dimensions are added/ exist so that both laws happen simultaneously? Or a part/ representation/ feature of that particle occurs in one position according to law A, and another part/ feature occurs at point B? Who or what coordinates among them? If there is a hierarchy, who defined this hierarchy? Are they the effects of matter? Does the matter have an effect on laws? Or do they interact?

If laws depend on other laws is there circularity and infinite regress? If they are necessary what is the principle or cause of necessity? How do laws coordinate and cooperate?

Are the laws changing or are they unchanging? If they are changing according to patterns or according to higher level laws, this means that the above problem applies: Laws as laws are not the cause of anything, because they are run partially or wholly by other laws. A law would cause some attributes of another law; a law would be reducible to another law; the existence of a contingent law is not meaningful, and its interaction with another law in the non-existence of anything else is not meaningful either. If there are no higher-level laws/ patterns for their changes, this means that they and their interactions are arbitrary, and that they are not laws in fact.

If they are unchanging, then they must be fundamentally eternal and same in every possible universe. But there is no reason and no empirical evidence to claim that they have to be the way they are. Logically it will never be possible to prove that they cannot be otherwise in another universe, in the far-past, or in the future. And, as many prominent physicists confirm, in the non-existence of the precise values of constants that relate to laws and forces of nature, this universe would not be existing.

Are laws reducible to other laws? Or to a big law, like in the idea of a theory of everything? Physics proceed in the opposite direction. There are thousands of different relationships at different layers, in different entities, in different regions, new particles or anti-particles that behave differently, and so on.

We cannot speak of laws in the absence of the structures or entities upon which laws allegedly act. If each entity acts in harmony with patterns by coincidence, this brings about a big probability problem. Why would so many things behave in the same way though they are separate entities, structures? Do we see just a realization of tiny probability?

If there is infinitesimality in this respect, in other words, if there is no final smallest level, then parts are not real as they are conceived

and there are just relationships. But what connects the relationships, such as the relationship between point a and point b. But even if point b is point-like, then it is already defined by relationships: In other words, whatever distinguishes it from another point is a relationship. But a relationship is also defined by points. And the relationship between point c and point d is also related to the relationship between point a and point b. Hence relationship cannot be explained by relationship but with something of a different nature. In this sense, the relationship between the spatiotemporal components of a law would also need a higher unity to define the law and its internal relationships.

An electron is subject to both electromagnetic force and gravity. So, if there are separate laws then there must be a kind of a higher degree law which regulates and harmonizes them. If there are not separate laws, but one law does all these things by itself, then it is not only a law which surrounds things, but also it distinguishes, comprises some things and excludes some things. If it or the higher-level law selects and is differentiated in its effects and if this differentiation originates from this law then we cannot claim any determinism, because deliberation would be at the root of the laws as well. And we have to put aside reductionism because there is no unique principle or layer to which things can be reduced.

3.4.1.2.2.1.2.6 Laws Must Have Deliberation Capacity

Another issue is the application of the laws in different layers. For example, gravity and electromagnetic force can apply on the same particle, but in a relationship of task division. If there are different laws for different layers, this means that the laws apply some kind of deliberation, and that reductionism is false. But this also shows again that they are not absolute and that they are subject to higher levels of relationships. Hence, the observed laws are not necessary, they are

contingent. This contingency cancels the possibility of determinism in principle. If the hierarchy of laws does not end up in a necessity, then it will end up in infinite regress. But it cannot end up in necessity, since they are limited, many, and contingent. Therefore, the alleged self-sufficient relationships between laws and their components are just whims. Additionally, the obvious contingency demonstrates a sovereign will power which originates these contingent laws and their products.

If the law has the power to change the position of the object from P1 to P2, from time T1 to T2 respectively, this would require that the law must have the power to produce the effect in the opposite direction as well, if there is no coercive constraint above the law. If for example the momentum of the object before T1 is such a constraint, then the constraint would be arising from the same law, hence in this case it would not be a constraint above it. But if it is not subject to a constraint above itself, then either within the law there is such a necessity, or there is a kind of deliberation within the law which causes the events in the order we observe consistently. We cannot say that it contains any biased behavior can have such necessity. If the states of things constitute constraints, then this means that the law does not drive states, but it interacts with the states. In this case, there has to be additional laws which define the terms of interaction between them; which in turn would require additional laws to arrange the relationships between the new laws and earlier laws and states; and this would lead to infinite regress. Also, this would mean that the states are of the same nature as the laws. If there is no constraint upon the law, then the law would have some kind of deliberation power. Hence, laws as understood by determinism are not possible.

Some argue that the increase in entropy is what determines the direction of time. This might be argued in a lawless universe. But in a lawful universe where deterministic laws allegedly direct things, the

increase in entropy is superseded by these laws. Furthermore, in such a universe, all of the future states would be contained within the initial state. There is a strict connection between all states and they constitute a whole as in a block time where there is no change. There is nothing new. Also, the Maxwell's demon is a good argument against the direction of the time based on increase in entropy. So, there should not be any constraint upon the deterministic laws, but this in turn necessitates a freedom of will for the laws which obviously produces contradiction.

3.4.1.2.2.1.2.7 Laws Cannot Be Self-Sufficient

Based on the above explanations maybe we should say that the laws are just attributes of things. But things are limited and relative as explained in part 2.2.1.1 about the argument from necessity. If we say that a certain thing has a certain size, this size is relative. It does not mean anything by itself. It means something only relatively to another thing. Hence, it depends on another thing which also depends on that very thing. So, they are not self-sufficient. So, they cannot be the source of an alleged determinism. The contingent things cannot be the source of an alleged determinism.

3.4.1.2.2.1.2.8 Contradictions Caused by Time and Laws as Deterministic Causes

Is time a constraint on the law, or is it a product of the law? Time would depend on the functioning of the law, since we do not even experience any distinct benchmark for time. The act on the states must be as we observe within harmony. If it is the law which pushes things, then it is pushing them in harmony. So, the law is not constrained by time, it is producing time. So, how the events spread within time should be determined by the law(s). As explained above

and in part that relates to time, the past, present and future considered separately from the beings and their acts, are just subjective things. And the law(s) must contain past, present and future simultaneously. Remember that the law must not be stuck within a zero-width time slice. And if it transcends state S1 and state S2 without being bound by time, then it must also transcend equally S2 and state S3. This would entail that it transcends S1-S2-S3-Sn with no time distance.

Hence, this would lead to a result of the existence of block time. This will mean that everything exists simultaneously, and nothing other than laws has any effect of its own. But if the latter is true, then there is no effective law since there is no need to produce something based on another thing, since everything that we consider to be in the past and in the future exists simultaneously.

A limited and/or passive being or entity may have limitation in proceeding in one direction; but if determinism is true, then a law must be able to encompass all directions. If a law has a control upon the entities or fields, then it must encompass the past and future. But if it encompasses with no bias, then what would cause it to act within a certain direction? Then the claim of determinism that the future is predictable based on a previous state and a law is not valid. The law becomes something that does not take any specific state and transform it or build from it another state, but something that determines the entire whole like a block-time universe.

A similar argument is applicable against a claim that the laws are intrinsic to/ within the entities, where the laws are not external to the entities. In this framework, then the entities must be aware of what is around and would be transcendent, and they would be encompassing the past and the future.

Are there laws that surround states and direct them? Or are laws contained within the entities/ particles which are transcendent, all

encompassing, which behave in accordance with the laws that they contain? The first seems to be less plausible since it assumes that even in the absence of any real essence, there are laws “somewhere”. The latter is also implausible as depicted above since it requires that an any entity is inherently and self-sufficiently transcendent, and that it contains patterns that relate to and are in harmony with other things’ patterns.

All of the essential problems under the physicalist and hard deterministic approach above persist and undermine determinism. The laws by their very nature are not suited to produce what the physicalists and determinists expect.

However, according to the Islamic teaching, Allah is the being who has transcendence, knowledge, power and will; therefore, He has the attributes that can give things certain abilities. And He has them by default and necessarily as explained in the part about partial and general nothingness.

As explained above, the laws directing atoms are very unlikely. It is also very unlikely that a law gives abilities so as they would be behaving as if they are aware of a wide range of regions. A law cannot enable an object know a meter in front of it or a second in front of it; and it cannot make it behave in accordance with gravity according to Newtonian model, as action at a distance. Accepting that a law does these things, entails that these laws are like God except for the difference of their contingencies, non-transcendence, multiplicities, inconsistencies, and their deficient attributes.

3.4.1.2.2.1.2.9 Laws of Nature Do Not Invalidate Sovereign Things, Beings, or Relationships.

Patterns or laws may coexist with sovereign entities unless a deterministic universe is true. And there is no valid reason to believe that the universe must be fully deterministic.

Do physical laws necessarily encompass all things that relate to consciousness and will?

Laws are not exclusive. Discovery of a new law does not always require abandonment of a previous law. A falling magnet keeps pushing the same pole upward if appropriately positioned, while falling. So, a sovereign thing can simultaneously exist and behave in a sovereign way while some laws of nature apply to it. So, laws can coexist and interact with sovereignty.

If you ask a person why a stone falls, many will say “because of gravity”. According to many, laws of nature are pushy causes⁶⁵. If laws are supervenient upon the structure of things then a problem of action at a distance appears: How does a falling stone know the distance between itself and the center of gravity of the earth and its implications? Because of gravity waves? Or because of gravitons? How the regions of these waves, or gravitons know their locations’ implications? Within the physicalist and determinist paradigm, same questions will be left crucially unanswered in any case. Also, when a stone reacts to or change the direction of an object same problems apply. A secular will overlook these problems with a hope that they will be explained; but without any reason, they expect the explanation to be within the narrow spatiotemporal paradigm. However, under the physicalist approach which is separative, it is not

⁶⁵ (Hofer 2016)

possible that a stone knows what is beyond it; if it knows, then it is not something separable.

3.4.1.2.2.1.2.10 Falsity of Physicalist Reductionism and The Effective Reality of Structures and Entities

Say, "Is the blind equivalent to the seeing?"

(Quran: 13/16)

Science essentially explains things with wholes that are explanatory by their irreducible structures and features which are contingent. For example, biology explains some things with eyes. But eyes happen only if some organization exists. This organization is not self-sufficient, in other words it depends on things. So, determining things ultimately by eyes does not work, since it is not an ultimate explanation.

Chemistry is similar in that it is based on structures of atoms, molecules, and so on.

Physics explains things based on the relations between space, time, energy.

Space, time, energy, reason, and mathematics are in turn explained by an all-encompassing unity. This is the area where our eyes and measuring devices are not able to encompass.

We are not justified in believing that when we explain something with a mass or with a law we are done, and that that law and mass are self-sufficient and unquestionable. But as beyond the spatiotemporal our measuring and controlling devices do not work, it is tempting to believe that what we cannot measure and control can be legitimately omitted.

Here the following problem surfaces: Many sciences build themselves on the unknowns beyond physics, but for many, physics unjustly claims its kingdom based upon the contingent laws and generally says there is no clear guiding science beyond physics.

Recognizing physics unjustly as the ultimate real science entails rejecting the reality of the objects of other sciences. At the end, the human being and its distinct attributes as the will power are tried to be explained in terms of the behaviors of the atoms and other particles.

We also hear some holist voices which say that there are things which are not reducible to those particles, that there are the cells, the animals and other things which are non-separable. Though they seem to reject physicalist reductionism, as long as they are not able to see the unique power above all things, they are not able to get rid of being the victim of physicalist reductionism. Without proceeding beyond physics, one cannot see beyond what can be perceived through one's eyeballs.

According to physicalist reductionism, any behavior of any human being or any animal can be explained completely by the behavior of smallest particles or fields. Hence, the will power, consciousness, or anything that we think we do is epiphenomenal, ineffective in terms of causality. So, as atoms and fields are not considered having any transcendent abilities, they cannot be multipotential causes. Therefore, according to reductionist determinists, determinism can be the only acceptable way if indeterminism is discarded. But even if it is not discarded, as long as indeterminism is true, there is no free will.

But are not the smallest things wholes also reducible?

I explained the irrationalities of reductionism in part 3.5.6.4.2.

3.4.1.2.2.1.2.11 Infinite Regress, Problem of The Beginning

Determinism entails the infinite regress regarding causality, and it causes other problems with the beginning of the universe.

If determinism is true, then the increase in entropy is no explanation for the direction of time. Because, in a deterministic approach, all future states are contained within the past states. And there is no reason to say that a disorderly distribution of things is absolutely more probable than another distribution. Because, whatever state happens, it is what had to happen with hundred percent probability according to an initial state if there is any. If there is infinite regress in the preceding states, the reasoning will not change. So, there is no basis according to determinism for the direction of time.

On the other hand, the beginning state cannot be understood as a moment with zero extension within time, since a moment with zero time-width would not contain the direction of events within time and it could not a power to move in any direction. Likewise, the structure of things within a state of zero temporal extension, would not contain in terms of physics a potential to move anything as well. So, it necessarily contains a progress within time, and within that state, past elements depend on the future elements, and future elements depend on the past elements within it. Therefore, an alleged beginning state with a zero extension in time cannot be the cause of future events.

As there is change in this world it must have a beginning. Because either it has a beginning or there is infinite regress or both.

If there is an unchanging beginning within this limited universe, then starting becomes impossible; but starting is necessary if it is a deterministic cause of existence for a limited universe.

According to determinism, any state S_n depends on state S_{n-1} . However, then we will have infinite regress, since no state is sufficient by itself to indicate the future states, because it depends on the past state(s), if determinism is true.

Any state S_n needs either state 'S_{n-1} plus law' or 'only law'. If it requires the former then there is infinite regress. If there is an initial state which does not need a previous state, this means that this state happened with no need of law and the law started to interact with that state at a certain stage before which it was not interacting with it. But if it started to interact with it this means that there was a previous state in which it was not interacting with it. This means that the state needs a previous state where there was no interaction. In this situation determinism would be false.

Question 32.

Although there is always change, there is also always the matter which undergoes the change. So, why would there be a problem of infinite regress since the matter upon which the changes occur is present at all stages? A change may be happening because of previous change, but there is matter that existed before and after the change. Why would infinite regress be a problem while everything is in change? There is matter which is stable although changes keep happening. So, this matter may have an existence of its own which does not need any other thing, which may be self-sufficient. So, why would the argument that "if every state depends on a previous state then no state will have any effect of its own, hence the whole process is with no basis" be applicable, since there is the stable matter upon which all changes happen?

Answer 32.

If the matter undergoes change, this means that it is differentiated and limited, so that the differentiation is an inherent attribute of the

matter. Otherwise, it would be considered as something that is not differentiated but causes changes in another medium. Hence, it would be past and future eternal, causing consciousness, qualia, and all other events, and therefore it would be exactly like God. In this situation, the difference between a physicalism and monotheistic religion would be just a difference in terminology and names.

The eternal matter as mentioned in the question is very much like a concept of god.

Is it the matter without any shape which transcendently causes the change or is it the matter which has a specific shape at each stage and causes a specific change together with its shape? What is matter with no shape?

Then, in the language of the determinist, it is the shape and the differentiation which has effective, falsifiable, and measurable causal power, not the matter. If it is the matter which causes these changes without changing itself, then it can cause any change hence it is not bound with the shape. In this case, matter would be assumed to have free will power. Again, if we accept these, then matter becomes not much different than a conscious god.

In any case, according to determinism, if there is any shape or state of the matter at a certain point in time, then we can determine the past and future states, no matter what the substance of the matter is, since, a future state would be depending on the differentiation within the matter in its previous states. If the matter is distinct from the changes, and cannot be measured based upon changes, this means that what matters in terms of prediction is the changes relative to each other, not relative to the matter which cannot be linked to the changes.

On the other hand, if shape is an inherent feature of the matter, then the space would have the causal power, because, it would be the shape

which has effective causal power, not the matter; and because the shape would in any case depend on the structure of the space.

In any case, either the shapes would be dependent upon the previous shapes, or the matter or the space would be sovereignly causing the shapes. If the shapes would be dependent upon the previous shapes, then the problems of determinism I explained would apply.

Also, if the noticeable things were only the shapes at any scale, then only the relative proportions of the shapes would be detectable, and an absolute density or value of the matter would be non-detectable and non-measurable. This is also reminiscent of a god-like matter.

Hence, the role assigned to the matter in the question is not compatible with determinism. Also, for the above reasons, it is irrelevant to determinism.

3.4.1.2.2.1.2.12 Why Are the Laws the Way They Are?

The laws are important alleged reasons for determinism. However, since they are very specific, this question arises: Why are they the way they are?

So, is there a power behind them upon which they depend? And since these laws seem to be necessary for the formation of our universe, is the most fundamental a sovereign power rather than deterministic laws?

According to current evidences and data, the laws are contingent. In other words, there is no reason for them to be deterministic, necessary, or fundamental. Therefore, there is no evidence for claiming that at the very fundamental level the universe has a deterministic ultimate basis.

In part 2.2.1.4 about fine-tuning there are further details about this point.

3.4.1.2.2.1.2.13 Multiverse

An argument to support why the laws of our universe are the way they are, is the multiverse. Some claim that it is unlikely and weird that the only actual universe has laws which are so as to enable the formation of galaxies, stars, atoms, electrons, life, and so on. But if there are many universes, then, it will be plausible to find ourselves within one which enables the formation of the above things and of the human beings.

Hence, the aspects of the laws which look fine-tuned, push many people towards the acceptance of a multiverse, although there is no evidence for it from a physicalist perspective.

Multiverse works against determinism: If there are many universes where the laws of nature are different, this means that there is no deterministic principle which requires the laws and their functions to be fixed or absolute or deterministic. The same applies for a claim which says that the laws of nature are changing through the stages of our universe or past and future stages of our universe.

On the other hand, if all universes have some same fundamental particles/laws, then they are more fine-tuned since they are so as to produce not only different atoms/DNAs but also different universes.

Additionally, if no common physical law or relationship is necessary in accordance with a multiverse, and things happen by chance, then there is no basis for logic, since for most physicalists, outside the physical, there is nothing.

Multiverse brings more problems than solutions to a physicalist since it brings in additional conditions to be met: The existence of an

additional atom or any other distinct whole outside our universe means that additional conditions have been met, additional energy became existent.

Multiverse is asserted in a way similar to increasing the number of dice rolls so as to have a more acceptable probability of getting very specific numbers. But dice rolls require in the first place some sustainable systems; hence, in any case multiverse would be an incomplete solution.

In any case, there is no empirical evidence for a multiverse as conceived by its physicalist proponents.

Question 33.

Does not the explanation of God postpone the answer about the unknowns merely one step backward? Would not we ask where does God come from?

Answer 33.

Laws even if true as they are presented, do not have sufficient features so as to answer the fundamental questions. They are not claimed to be so as to satisfy anyone about why they are the way they are, where do they come from. Hence, they are not any different than what they are used to answer; they are irrelevant as answers to the question “what is the ultimate and real cause of what we observe?”. This is because they are in any case partial, and biased within their features and they are contingent.

However, the God according to Islam, who is the Self-Sufficient, the Default/First and Last, the Eternal is relevant for the above question.

Nothingness can exist neither as a partial nothingness nor as a general nothingness. Both types of nothingness constitute a contradiction in terms. Does “nothing” exist as a partial or as a

general nothingness? If it exists, it is not nothing. So, as Parmenides put it, “that which is” is, “that which is not” is not. So, a very fundamental and undeniable result of sound logic is that there is an unbiased, unlimited, absolute “Being” who encompasses all things and all absolute attributes. Part 2.2.1 explains some further arguments for God. It is obvious that through our eyeballs we perceive only limited aspects of things. We see many facts through the eyes of our reasoning power.

So, deterministic laws paradigm has too many inconsistencies and incoherences to be taken seriously as a basis for determinism.

3.4.1.2.2.2 Determinism Is Unsubstantiated

Although determinism is sufficiently refuted in the following parts, it should be underlined first that any attempt to prove or substantiate determinism will fail.

We should note here that determinism has the burden of proof; if it is not proven, we should not assume its truth:

The determinist claims that everything, including the agents, the alleged self-sufficient spatiotemporal bottom elements (ASBE), the alleged initial beginning state of the universe and the elements of that state are all deterministic, and all elements of an allegedly eternal universe are/ were/ will be necessarily deterministic. This claim creates a burden of proof upon the person who claims it. Because, the default is non-existence of a bias toward any direction unless such a bias is proven. And the patterns that we observe do not constitute a proof for such a necessity, since, they can also arise from freedom.

Some of the arguments which show that determinism cannot be substantiated are as follows:

3.4.1.2.2.1 There is no Logical Necessity for Determinism

As we have and will have limited empirical knowledge about the existence, in order to claim that full determinism is true, we need to have a logical necessity for it.

Determinism cannot prove empirically its truth. It relates to infinitesimally small, infinitesimally big, spatiotemporal, and other relationships. Therefore, a claim for determinism requires a complete knowledge about them. We do not have it as of now. And claiming ownership of such a knowledge at any time will be contradictory, since it will imply that we know that which is beyond us. Also, quantum physics, the nature of space and time, and many other considerations show clearly that there are clear limitations around our knowledge and measurement abilities.

Logically there is no necessity for determinism. Let us imagine a universe consisting of limited and/or multiple things, where events and entities happen in a deterministic way. This determinism would only be partial. Because, the events included in that universe would be in any case relative, and not-self-sufficient. That those things have been part of the same universe, that there is movement which needs to be measured in units defined in terms of many things would be proofs that this universe and its contents are contingent. And it would show that none of its contents is necessary and self-sufficient, and that they are built upon “units”, “relationships” which require transcendence and unity. Therefore, the creation would be only a product of transcendent design, and choice. For further related issues see part 3.4.1.2.2.5 and other parts about the infinite regress.

3.4.1.2.2.2 Determinism is Against Null Hypothesis

Before we will something, we conceive of alternatives. Like eating the red candy or white candy. At the end, we will one of them. These are common points between all parties that discuss free will. The determinist claims that regarding any will, there is also a cause beyond the agent that the agent cannot override. He claims that whatever is the actual will and whatever is the overall case, there was a necessity for that actual will.

The null hypothesis is that things are the same as each other, or the same as a theoretical expectation. Normally, one would expect that the offspring of chicken would consist of equal number of male and female chickens, which is the null hypothesis.

If you claim that feeding chocolate to chicken with your method, you got a higher number of female offspring compared to the male, people who will invest in your method will need to be convinced that the deviation from the null hypothesis is not just a matter of chance. The burden of proof will be on you.⁶⁶

So, from a scientific point of view, the determinist will have to prove that there is always a necessity for a specific alternative. And since the hard determinist claims that there is not even a limited free will power, the deterministic claim must be proven for all situations.

⁶⁶ (McDonald 2014)

3.4.1.2.2.2.3 Determinism Makes Claims About the Inaccessible

At the root of determinism, there is a faulty generalization as follows: “Some features of some things are deterministic, so, everything is deterministic.” This generalization has no logical or empirical basis.

However, if something, if some region, or some layer in the universe is unpredictable, then the argument of determinism against free will collapses. Because, if such a thing or layer is possible, then it is also possible that some agents’ wills are related to this.

A rational person cannot claim to know an inaccessible knowledge. And it is obvious that we are not in a position to know all layers in all regions of the universe including our region.

Furthermore, a rational person cannot claim either that a deterministic universe is not creatable by a power who is not subject to deterministic rules.

Additionally, it is not rational to claim that the universe is not contingent; and if it is contingent then it is not necessary and it may be made by a Creator who is not subject to determinism. Hence, in principle free will would be possible.

Determinism, especially regarding the behavior of a physical entity in the brain, is logically and empirically not proven. And uncertainty within the quantum realm, empirically disproves that a physical entity, especially in brain, must behave in a certain way.

Determinism by its nature, must answer the question whether free will exists or not with a yes or no, without something in between. So, it claims that there is not even 10^{-100} free will. If there is even only such a tiny free will, the principle of determinism collapses.

We do not have any ways to confirm determinism. Hence, in the first place, there is no reason to accept it. But we have ways to debunk it some of which are explained in the related parts of this book.

Question 34.

The experiments show that there are laws/ forces that govern the universe such as gravity, electromagnetic force. And they behave according to deterministic laws. So, why would not they be proof that the universe is deterministic?

Answer 34.

These patterns are partial elements of the universe. They apply within their specific regions and contexts. There are also regions and layers where we observe unpredictable features, such as seen in the double slit experiment. Hence, such patterns are not sufficient to believe that everything is deterministic.

3.4.1.2.2.2.4 Problem of Induction

Simply put, if we observe that a rock falls with a certain acceleration, does this mean that it will always fall with that acceleration? Is there such a necessity? Are our observations in the past about its fall sufficient evidence to establish a necessary relationship?

Certainly, there is no reason to claim that the repeated events establish a necessary relationship.

We can empirically observe that establishing a necessity based on past repeated events is fallacious. For example, we can repeat things, we can have a machine repeat things, and then we can stop. And we can clearly see that the repetition does not give us any proof to establish a logical or empirical necessity for the observed pattern.

Also, we observe that things that behave in a certain pattern within a certain set of conditions may behave in a different pattern in another set of conditions. Or as observed in quantum physics, something that appears to behave in a pattern may behave with no deterministic pattern under certain setups.

There is no necessity for patterns even if we go to the root of things. For example, we can observe the waves in an ocean, then we can observe the behavior of water molecules, and atoms... Even if we see repeated behavior at some fields/ ASBEs, this does not constitute an evidence that they will behave that way eternally.

Hence, the problem of induction is an important argument against determinism which has the laws of nature as a key component. If considered contingent, these laws, are important in being very instrumental in developing technology and benefiting from the universe. They are also important as elements of a contingent design. But considering them as necessary, hence as a basis for a determinism is going too far and being fallacious.

3.4.1.2.2.5 Unobtainable Qualitative Requirements of Determinism

Even if we have determined that all particles and fields behave in a deterministic way, this will not give us sufficient reason to believe in determinism. Because, a deterministic behavior requires transcendence in any case:

The fall of a rock on the earth requires an information about the location of the earth. If the earth's location changes, then the rocks' fall will be adjusted. But how does the rock, its atoms, or gravitons, or gravitational waves, or regions of curved spacetime reach that information? Hence, there are alternative regions, alternative ways

for things to happen in any case. And what actually happens is just one of them.

Hence, even if we observe all physical things behave in patterns, we will reserve a room for a selective process beyond the spatiotemporal.

3.4.1.2.2.2.6 Unobtainable Quantitative Requirements to Prove Determinism

If 99% of the universe behaved according to patterns, and only 1% behaved indeterministically, then most implications of determinism including predictability would be undermined. Also, if only one atom in the universe behaved unpredictably, any philosophical justification for determinism would be undermined. And many quantum physics experiments already demonstrate that there are unpredictable events.

3.4.1.2.2.2.7 Quantum Physics Makes Determinism Unprovable.

Determinism cannot be proven because of quantum processes and quantum physics. Quantum physics and quantum world demonstrates that there are limitations in measurements that cannot be overcome. Furthermore, according to very popular interpretations on quantum phenomena, this impossibility is caused not only because of the deficiency of our tools, but also because of the fundamental structure of things.

Question 35.

Even though quantum physics show that determinism cannot be proven, does not it also show that free will cannot be proven?

Answer 35.

The above issues related to quantum physics are not presented to prove free will. Free will is demonstrated through other ways.

But determinism is much based on physics. Hence, the above findings of quantum physics are applicable against determinism.

3.4.1.2.2.8 Impossibility to Demonstrate That an Agent Cannot Will Otherwise.

I may be able to will an alternative, but I may choose not to will it. If I do not will an alternative, this does not entail that I was not able to will it. I may be not willing an alternative, because I am able to not will it. That I may will an alternative does not necessitate that I have to will it. That I do not will something does not mean that I cannot will it. There are many alternatives so I may will many of them. But I do not have to. If one claims that I had to will an alternative that I willed, he has to substantiate, but he cannot. He cannot tell me that I will will to eat the red candy while there is no clear obstruction for the white one.

3.4.1.2.2.3 One Who Claims That There is no Free Will Based on Full Determinism is Refuting That Very Claim.

Or do you have a clear proof?

(Quran:37/156)

If determinism is true, then the claim of the proponent of determinism for determinism has no superior power compared to the claim of the indeterminist. Because both claims are simply the outcomes of particles/ fields which do not have any conception of

truth. These claims are just illusions as claims. If there is full determinism, then a person does not have the ability to assess the alternatives, and choose that which is closer to the truth. The claim or any argument related to it is reducible to the movement of particles and fields which have nothing to do with a real consideration of the truth or truth values.

A claim of truth requires encompassing what is true and what is false; it requires a comparison of the true and false; it requires freely navigating through them. However, in a deterministic realm, everything that happens is what has to happen. Nothing that must not be happens, nothing that must not be can happen.

The basis and the producer of the brain processes of someone who believes that the earth is flat are same with the basis and producer of the brain processes of someone who believes that the earth is round. If we argue, “the brain processes of someone who believes that the earth rotates is substantiated with evidence”, according to determinism, our argument has no superiority related to any criterion of truth as well. In a fully deterministic universe, a truth claim is nothing but an illusion.

If determinism is true, then there is neither freedom nor possibility to reorganize something, or some idea, or some claim, or some potentials, or self-reorganize in a better way as opposed to a worse structure. There is no such active agent or power. Any power, is the slave of the previous and/or undergoing spatiotemporal causes/processes.

If determinism is true, then there is no transcendent power which can observe beyond an illusion, the effect of a cause on multiple things, and which can make deductions.

Also, if determinism is true, then there is no reason, logic, design, purpose, transcendent unity, absolute or relative truth⁶⁷ underlying what we observe in the physical world other than illusions. Hence, in this environment, if a determinist makes a reference to reason, logic, purpose, right and wrong, these have no implications. They are epiphenomal with no concrete implication, but with just an illusory feeling⁶⁸. Therefore, if a determinist claims that what he says is superior, he will also be acting dishonestly and he will be defending what he does not believe in. If he truly believes in what he says, then he is inconsistent.

The claim of the determinist would be assuming that everything happens not because of reason, but because of physical patterns, which do not have anything to do with consciousness, concepts, reason, or freedom.

For the above reasons, the rejection of free will based on determinism, is a non starter as an idea. The one who denies free will based on determinism is like someone who says “my claims are unsubstantiated”. If they do not have free will they should stop arguing, because such argumentation is just something deterministic⁶⁹. You may see a meaningful sentence on the screen, or a static; they should have the same truth value for a determinist, since they are the outcome of no unity. On that static, there may appear things that look like some animals here and there. Even some of them may appear as if they are running after a pray. However, we should not assign any truth, goodness, evilness, or any meaning to it. For a determinist who claims to be consistent, they are just the outcomes

⁶⁷ If there is no truth underlying what we observe, then what we observe is likely an illusion. Maybe we can only have the truth of an illusion.

⁶⁸ For downward causation see part 3.5.6.4.2.6.

⁶⁹ If it was indeterministic, the same would also apply. At a higher level, the problem here pertains to physicalism and physicalists as well.

of physical patterns, and their actual, allegedly logical claims should be no different.

A concept, a meaning, or a truth value can exist only in its relationship to other things, within unity and related transcendence.

Considering oneself as authorized to evaluate and be superior to a physical law is contradictory with saying that everything consists of physical laws and entities. Because then the evaluation is just something epiphenomenal and illusory.

As opposed to the above, Islam teaches that there are laws/ patterns, and dimensions which are not restricted to the patterns and some dimensions. Hence, there is room for freedom, truth, and so on wherein the agents can have judgments overriding some patterns, and can navigate through the more reasonable and less reasonable, and are free to choose the more reasonable.

By the way, in terms of decision making, responsibility, and risk management there is a noteworthy point especially for those who care about truth and are not decided about determinism and existence of free will: If one believes in free will but he is wrong, then he is not in bad situation for a determinist, because determinism caused him to believe that way. If a person believes in determinism but in fact, he is free then he does not have any excuse. So, if none is knowable, belief in free will is more rational and safer in terms of responsibility. Lack of knowledge of free will requires that we behave as if we have free will.

Question 36.

Is not it possible that through reductive evolution and natural selection strong reasoning processes may have developed? Because selection would allow and favor the survival of the fittest and the organizations/ life forms with best reasoning processes.

Answer 36.

In determinism things must be what they have been.

There are four important points here:

Firstly, the particles had to move how they moved according to laws of physics. So, no species and no process would add anything to what happens. An atom within a dog had to behave the way it does whether it is part of a dog or part of a rock. Even if the legs of the dogs get stronger, under determinism, this is no distinct addition. It is like a random shape in a cloud. The dog is just an epiphenomenal thing. The strengthening of its legs may equally trigger a process which will cause its extinction. This behavior is traceable starting from the big bang. According to determinism, if we were able to scan all the fields of the big bang, we could project all the shapes that would unfold from that initial specific state. Whatever dog would be born with whatever features was already encoded within the components and internal differentiations of that initial state.

In determinism there are states and laws of nature as effective causes. Since microscopic particles cannot negate physical laws, DNAs cannot but occur or disappear as their sub-particles require in accordance with physical laws. Whether they occur within a cat or not, does not matter for them. If a group of particles constitute a computer, there is no basis to say that it is superior to another group which does not constitute a laptop. We say now that there is difference between the two. But we say that because explicitly or implicitly we assume the reality of our distinct transcendence. According to determinism, our transcendence is an anomaly and an illusion.

If only the time was reversed as of now, then living things would reverse-evolve, and everything would go back ending up in the primordial soup. So, according to determinism evolution is only

epiphenomenal, in other words, it is not effective. As such, according to determinism, it cannot add any rationality to anything.

If we assume that we are just a bunch of particles in parallel with determinism, what we say cannot be assigned a distinct truth value. When we say atoms in a laptop or organized as a laptop produce better results, we speak as an agent who transcends both groups of particles and who is able to make a comparison by encompassing transcendentally the things that we compare. But in determinism we cannot make this claim; if we make it, it is without any effect, without any use. Our particles are bumping one onto another and this illusion happens. So, by this claim a determinist would be negating himself.

Let us take the example of rocks near the top of a mountain. According to determinism and reductive evolution, in the course of time, the rock rolls, and when it rolls, it becomes rounder, and if/when it becomes rounder it rolls further. Each rolling makes some changes on its surface that corresponds to data. And as it rolls more and collects more data, maybe theoretically it can be predictable that it will become rounder and more prone to rolling. So, it is more preferable to roll more relatively to the goal of surviving more as a rolling rock. Yet the rock does not have any means to change anything about itself or its rolling. And as there is no consciousness, more rolling cannot be a more preferred state as opposed to non-rolling state, since the rock may never say “this is the willable/preferable state /feeling” or this is “unpreferable/ unwillable state”. It cannot say or develop in a being which can say “I will what I willed not, or I will not what I have willed, or this must/must not happen”. No paradox of free will/ responsibility may arise from the rock. If there is not willable or unwillable situation, then responsibility is not imaginable. According to physicalist determinism, there is no law that relates to consciousness, which will equal physical laws, or which will be superior to or exert power on physical laws, or which will have “must be” or “ought to be” predicates which will make physical

laws unpredictable. Even if there are laws which connect the mental with the physical, they can only be laws so that the spatiotemporal affects the mental; the conscious would not affect the spatiotemporal.

So, did the fittest develop as an outcome of determinism, or was it already present within the “random” state of the universe just a second after the big bang?

Under determinism, there is exact correspondence between what happens billions of years later, and the physical state of the universe right after the big bang. Events happening billions of years later, or alleged processes of selection add nothing new and useful to the state of the universe which was present just a second after the big bang. So, how each individual particle would move billions of years later was also contained at that instant. Whether the movement was in a “reasoning process” of a conscious being who conceived concepts and logic, or flowing of a river does not differ. The particle behaves what the laws of nature require in the specific condition. Hence, what appears to us as reasoning processes just corresponds to the somehow existing state of the universe at that instant. And a determinist, cannot even call it a reasoning process; since reasoning process is a transcendent concept which contains elements that cannot be separated by space, time, or anything else. It should be noted that even if some elements were random, this would not add any relevant and valuable reasonability to the deterministic processes.

According to determinism what survives depends entirely on the initial state, not how competitive is any epiphenomenal being. The sub-particles are assumed to behave in accordance with physical laws, though there is no reason to postulate the physical laws as the ultimate ones. That particles/ fields constitute a shape of a human being is just a coincidence of which neither the particles nor any other being are aware. If there is some awareness about such a thing, then this is an illusion. If the determinism is true, then the shapes

cannot have any additional causal effect. If the initial state was different, then what survived in the actuality could not survive, and would not be good.

A behavior that would cause a survival according to that initial state, could cause destruction according to another initial state. If a human being had not survived, maybe, much better human beings would survive. If a thought had not occurred, maybe, much better thoughts might have occurred. So, according to determinism the survival of any specific being and its features have nothing to do with its nearness to the truth.

So, if we claim the truth of determinism, we cannot say that the human beings developed through a selective process and therefore what they claim to be true and must overlap with the ontological reality.

Secondly, when the above implications of determinism are not taken into account, the natural selection process is fundamentally based on the destruction of the unfit rather than the selection of the fittest, since it does not explain well how the fit comes up. But for the survival of the fit first the fit must appear and then secondly it must survive. Reductive evolution does not say anything about the first but focuses on the second which is less relevant. Hence, we cannot say that the reductive evolution adds something in terms of reasonability.

Thirdly, there are multiple widely held opposing views, religions and so on some of which necessarily must be false, even though they are all claimed by reductive evolutionists to be the outcomes of natural

selection. This means that the alleged physicalist evolution⁷⁰ does not distinguish between the true and the false.

Fourth, is survival an indicator of truth? If it is an indicator, what amount of it is sufficient? And what does survival mean objectively? Is it the continuation of a set of conscious activities? Or rather, since consciousness does not fit as a really effective thing, does survival equal to the continuation of a specific structure? Is the average of some years of the continuation of a structure sufficient to show that the being has proven its efficiency, or truth of his acts? So, for example, it may be said that planets survive more, especially if consciousness is considered as illusory. And therefore, according to determinism, the rationality and its alleged outcome of better survival advantage would be irrelevant. By the way, why would not physical size be a criterion for being superior; hence, since reason does not make things bigger should not it be considered as something less useful in terms of reductive evolution? This question cannot be answered by determinism in a satisfactory way.

Determinism undermines concepts as “truth”, “better”, “worse”, and so on. Survival advantage and natural selection cannot be proposed rationally as a basis for the “better” and “worse”. If point-like spatiotemporal interactions produce some shapes at larger scales, these shapes have no reality and implication in terms of allegedly real and concrete point-like realm.

According to Islam, since there is God, and since God is sentient, Designer, and absolute, and since He has assigned consequences to

⁷⁰ Note that there is also a holistic kind of evolution with no hard determinism and as a consequence of the all-inclusive design and guidance of God combined with His other methods of creation. We will not go into its details, since it is beyond the scope of this book.

good and to evil, these concepts have a sound basis and clear outcomes.

Moreover, let us assume for a moment that reductive evolution is true and not epiphenomenal upon the physical processes upon which the feelings of beauty, pain... appeared, survived. Beings wanted to keep enjoying the beauties, and flee from hunters, and these helped these structures to continue more. This means that some elements of future also exist in the present structures, since they want to maintain their joy, and not to suffer in the future. Hence, such an evolution would be a strong argument against determinism, and purpose would be also a part of the universe. This is what is observed empirically at least by human beings, though some determinists will claim that this observation is illusory. Yet, they take their such illusory outcomes as the basis of their claim that this observation is illusory.

Hence, in any case, time and space are transcended by some beings. Since time is transcended by some beings, this means that at least in some regions/ instances, there is no sequentially reducible causality. If alternative states can coexist within the mind of the agent, and if this is real, then there must be ontologically corresponding elements in the related dimensions. Some states are equally feasible or willable by the agent. Some states are equally feasible if there is a challenge against their equal feasibility as in the tests in part 3.4.12.1. Other influences of other things may prevail in the absence of a challenge whose effect is bigger than the effect of other influencers.

Therefore, transcendence is an important aspect of the agent, which has no relevance to determinism and related reductionism. The alleged survival advantage of the alleged deterministic process of reductive evolution is incompatible with this transcendence, hence with any reasonability of the agent that issues from this transcendence.

What “must” happen for the survival of the agent is incompatible with determinism. In determinism, we cannot talk of what must happen; we can talk only of what happens after a certain state. Therefore, claims and related arguments of an agent about what must happen cannot be the outcome of a deterministic evolutionary process. Hence, the agent who claims to be rational regarding what must happen, because of being an outcome of a selective and reductive evolutionary process, is inconsistent.

According to determinism, the agent does not have an existence distinct from the underlying physical processes, and he does not have a distinct effect, and he does not have distinct ought to be truths (OTBT). However, a key aspect of reasoning and truth is what must happen. Any one of his claims about what is good for an agent, will have no superiority of being correct, if he is to be consistent as a determinist. I will explain the details of OTBT in part 3.6.2.

Logically it is impossible to say that we do not have free will, because when we say this, we admit free will. It is like writing “I cannot write”. Saying “I do not have free will”, is like saying “I cannot reach a conclusion”. When I say the latter which is a conclusion, in fact I confirm that I reached a conclusion. Thus, I will be contradicting myself. It is like saying “I willed to say that I cannot will”, because he certainly willed to say that. If he did not will to say that, then he said that without any intention. So, a claim of a determinist is exactly like the fall of a rock.

If it is like the fall of a rock, then it does not have any truth value, since the fall of a rock is something contingent, and as such, without any consideration, he has to admit that the one who says the opposite is equally true. Thus, this leads to a contradiction, and he is not in a position to make any claim. Thus, the determinist cannot say anything about any evil, or any justice, or blame or praise; about their

existence or non-existence. Similar arguments are also applicable for the reductive physicalist.

3.4.1.2.2.4 Negators Against Determinism

Indeed, Allah [alone] has knowledge of the Hour and sends down the rain and knows what is in the wombs. And no soul perceives what it will earn tomorrow, and no soul perceives in what land it will die. Indeed, Allah is Knower and Aware.

(Quran: 31/34)

There are three facts that negate the deterministic processes: (1) Free will power negation, (2) ought to be truth (3) logic. These contain elements that negate or can negate some deterministic processes.

3.4.1.2.2.4.1 Free Will Power Negation

Part 3.4.12.1 explains through the free will power negation tests that if the universe was deterministic, then its implications could be negated. In this part, I will give a small summary of the broad picture.

If we know the predictions about some future states, we can change some predicted events. In this respect, determinism is something which produces a contradiction.

If I know that x will happen, and I do not want it then in many cases, I may do y to prevent it. If I know all causes and I can forecast what I will do then I can negate that. So, if determinism is true, then its opposite is possible as well, hence, there is a contradiction. Hence, determinism is impossible.

Let us give another example based on a simple universe. In this universe, there is a simple law/ first degree formula for the trajectory of a rock; and its initial position is known. The rock will fall in a

specific region⁷¹. At a prior time well before the stone approaches a specific setup, there is a prediction about on which region the rock will land. And there is also a switch and a machine connected to it. If the rock is predicted to fall onto region R1, the machine changes the position of its plate to position P1 from position P0 so as to change the direction of the rock to make it land onto region R2; and if it is predicted to fall onto R2, the machine changes the position of the plate from position P0 to position P2 so as to make the rock fall to R1. This mechanism is depicted in the following:

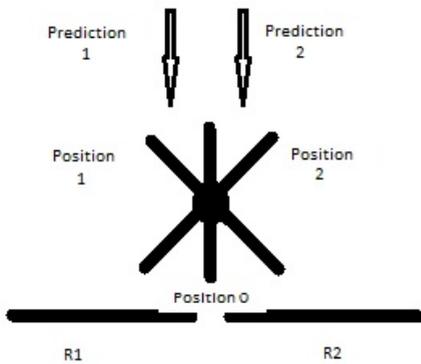


FIGURE-2: MECHANICAL PROBLEM OF DETERMINISTIC PREDICTION

So, a true prediction that cannot be negated by the machine is impossible⁷². The mechanism of the machine also will be taken into

⁷¹ Note that we do not claim that the negation can happen in all situations. In some structures, the prediction may be prevented, in some situations not. The same applies for the agent as well. For example, if a big meteor will hit the earth, and there will be no possibility to do/ will a certain act, then there is no free will power in that respect. But if there is no limitation in the means, this also can be negated.

⁷² This is not necessarily because of a conscious agent, since a similar setup may in principle appear without conscious agents.

account in the prediction. The reason is that whatever may be the prediction, the machine will reverse it.

An important problem causing this is that two moments' implications are tried to fit in one moment, in other words, two opposing states are tried to fit into one state. However, a more fundamental problem behind this, is that these multiple momentary states constitute one whole. The states of different moments do not only define each other, rather, they constitute a new whole. The prediction would combine to contradictory events: The rock will land on R1, and the rock will not land on R1, since any prediction is followed by its negation.

Can we say that the setup cannot have a prediction since it does not have access to all of its particles? Access to such details is irrelevant. Since, the setup has access to the previous trajectory of the rock, and it is well confirmed that whatever is the trajectory of the rock, the setup can be changed accordingly. For example, if the access to all of its particles produces a prediction that the rock will fall on R1, then the setup will change its position to position P1.

Is it a good counter-argument to say that if the setup did not have access to the prediction, then it could not negate it? Let us suppose that the setup is ready, and the rock is approaching the setup. Let us assume that someone outside this universe observes it without influencing it. He predicts before the rock reaches the setup what will happen. But the setup does not have access to his prediction. Then, the prediction would not be negated. Determinism claims that always and in principle future states are predictable based on previous states and the laws. This does not contain a condition of inaccessibility of the prediction. There is no necessity that the prediction would not be connected to the setup. Furthermore, if the setup can negate the prediction when the prediction is known, then it has the conditional capacity to negate it when it is not known (the condition is: if it could

be known, then it could be negated). Knowing the prediction does not have any influence in reducing the power of the negator since the negator cannot get out of determinism. Knowing the prediction, has an influence of reducing the power of the prediction. Therefore, if while having access to the prediction the setup can negate the prediction, cancelling the setup's access to the prediction has no effect to reduce its potential power to negate the prediction had it had access to that information.

This example has implications against reductionism as well: The setup with its sensors detects at time T1 where the rock is headed. The universe does not have any complexity to disable any knowledge. But the setup will also consider its own structure to get the prediction and to negate the prediction contained within that universe. If it takes its structure as well into account, then to find a prediction that it cannot negate, it has to deny itself. Because otherwise, whatever is a prediction, its negation is combined with it. Particles are not all that have effective causal power. The setup is also a distinct reality. Setup is an effective part of the prediction. Here, we come to the irrational influence of reductionism: If we reduce the setup to its smallest elements, how do we know that these smallest elements are not reducible? Any such smallest elements would be explained in terms of other things as well. Hence, this example shows that the predictability as claimed by determinists is impossible -unless there is a power who has some control over all things-. But more importantly, it shows this impossibility based on the reality of wholes who can have overriding power over their parts.

The conclusion is that there are situations where deterministic prediction is impossible in principle and must be discarded in favor of the negators. Since there are human beings, this impossibility is actual as well. Also, even if there were no human or other transcendent beings, there would be no rational basis to claim that setups similar to the above are not possible.

In determinism, every cause that produced a will, is considered as being a coercive cause: If a beggar asked a person 'would you give me one dollar' and if the person gives it then it is assumed that the request of the beggar compelled him to give that money -of course the beggar was also compelled to beg by previous events-. According to the opponents of free will, if the person gave, he did not have any other choice; if he did not give, again he did not have any other choice. But in fact, some choices are compelling, some are only influencing and not compelling. The above deterministic presuppositions for the non-existence of free will power are unjustified.

As underlined in the last quoted verse above, the rule is unpredictability except for God who is One.

If I knew not only deterministic things, but uncertain things, then I could change them as well, as explained in the following parts.

There are some implications of free will power negation:

1. It does not affect only the predictability which relates to the future, but also the very interaction of the will power with the so-called laws of nature.
2. At least in some situations, there is no law or no combination of laws which coercively causes an agent will a certain thing.
3. A human being may negate the requirements of his own truth, since they (the things that MUST BE -as not smoking-) can be the components of deterministic processes.

Question 37.

One can know that he will go to work the next day. Does not this show that things can be predicted?

Answer 37.

Nobody can give the guarantee that he will go to work the next day. And note that some things are and must be predictable to some extent in order to exercise free will power effectively. But only Allah encompasses the future. The future is encompassable. But not through determinism.

Part 3.4.12.1 contains detailed FWP negation experiments related to the free will power.

3.4.1.2.2.4.2 Ought to Be Truth Negator

The determinist says that a rock must fall, or that a photon must proceed in a certain way. And these are considered to be effective laws.

But they do not recognize the requirements of agents as effective. An agent does not will to enter fire, this relates to the ought to be truth⁷³ (OTBT) of the agent. We often say “I must do this”, “I must go there”, “I must not fail in the exam”, “you must not use drugs”, “this had not to happen”.

However, in an allegedly deterministic universe where everything is supervenient upon fields and laws, what can be the cause of these preferred or “must be” future states? Why do consciousness and qualia appear in such a universe? Why would they be considered ineffective?

There is no reason to make a distinction between these two types of events so as to consider some as totally ineffective. Hence, there are things that should happen in a certain way according to our wholes

⁷³ OTBT is explained in detail in part 3.6.2.2.

and our qualia. And as the law that we name which implies that the stone must fall a certain way, our very qualia which require things to be in a certain way are also real. Likewise, our free will power to act according to any kind of patterns or qualia or truth is also real. And there is no reason to claim that they can never oppose others or interact with them.

Hence, the free will power negation experiments can be done against the laws of nature in favor of our ought to be truths and wholes.

3.4.1.2.2.4.3 Logic Negator

In a deterministic universe are we entitled to say that we are being logical? Or are we entitled to claim that our argument complies with the truth? Is our claim that our argument complies with the truth, an outcome of particles bumping one onto another deterministically or indeterministically? When we say “this premise is wrong”, what do we mean by “this premise”? If it is a sequence of symbols that occurred through deterministic processes, what do we reject/ negate, and what is that which negates? Are these negations only illusions? What is the difference between an illusion and any qualia or conclusion which is not an illusion?

Obviously, for many things, when we say this is true, or this is false, we believe that our statement is not an illusion. Hence, again, the allegedly deterministic processes are negated in another layer. And these negations have implications in the real world, in other words, on the layers which allegedly run under the control of deterministic or probabilistic laws of nature.

Therefore, we cannot say that determinism is a fundamental principle unless we reject our potential for logic and consistency. If we claim that a claim has a truth value and “must be” implication, and can be used so as to make a difference in the universe, then we believe that

the allegedly deterministic laws of nature can be superseded by or integrated to our intellectual powers.

3.4.1.2.2.5 Infinite Regress

If a girl is caused by her mother, and her mother is caused by her grand-mother... until infinity, does any mother fully explain the existence of the chain or of any person in the chain? No.

Even if the causes are of different kind, the same issue applies as long as they are all non-self-sufficient, and/or contingent.

If determinism is true, then there is infinite regress, and nothing has any distinct effect over anything. Because everything and every act fully depends on the past or on other structural layers. But if everything depends on its past, then there is nothing that has any effective influence, since there will be no stage which is self-sufficient.

The infinite regress does not only relate to the above sequential aspect of determinism. It also relates to its mechanisms and structures: If the law is like a processor that processes state S1, and gets state S2; then processes S2, and gets state S3, these would happen according to which procedure contained in the law? So, there must be a transcendent principle in it, if it is a law. But if there is a deterministic principle in it, then this principle will require a higher-level principle which will relate to its internal relationships. This will require a further higher principle for the similar reason, and so on. Hence, this will lead to an infinite regress of a different kind.

Moreover, determinism requires reductionism as explained in part 3.4.1.2.2.8. If this is the case, then any whole is just reducible to parts. Parts acting and having values only relatively to each other requires that all parts constitute a unity, and depend on a holistic connection. So, if things behave relatively to other things, this means that they behave as a whole, hence the act of each item relatively to the whole

is meaningful, and, we should consider the events as the action of a whole. This is another aspect of infinite regress of determinism.

3.4.1.2.2.6 Determinism Entails That the Past and the Future are Static as in the B Theory of Time.

According to determinism, in every moment, the laws are also contained. Hence, the information and energy of the entire states is contained within any moment, since any past state and its laws are sufficient to produce all future states. So, no moment's state produces a new information, or any change in the information. Therefore, no act of a human being is influenced/ caused by any past event, since no past event produces any change in and of itself.

If we imagine a block universe in a B-theory of time, what we mean will become clearer: Imagine that every event is present and frozen as in a 4D framework. Which part will cause another part? No part has any effect. Actually, relativity theory also complies with this, hence facing similar problems among others.

So, for example, if determinism is true then reductive evolution is false as an effective process. Because every future life form already exists within any one of the previous moments. There is no survival effort, since there is no need for any effort, there is no real effort. Whatever happens would necessarily happen.

Whatever caused any initial state and its details, has also caused all states. In that initial state, not only any species that would appear were necessitated, but also, what a specific member of that species would eat at a specific second was fixed.

On the other hand, no state has caused another state according to determinism, since any state must be a predictable result of past states. If any state appeared out of randomness, then determinism would be debunked since in that case, we would have to admit

processes outside determinism. Hence, determinism must submit to either randomness or infinite regress, any of which requires the rejection of determinism.

A determinist may say “let us assume that randomness happened at the initial state”. However, randomness would not be a remedy for the problem. Because in order to obtain randomness, first that which became or is random must exist. In order to have a random pair of numbers, first we must have the dice or things that correspond to dice.

Supposing that a state with a time slice of zero width is sufficient to start the deterministic chain, requires that in that time slice there must be elements that appear out of nowhere, in a specific region, with necessary attributes and connections. This entails the rejection of determinism as an all-encompassing principle.

3.4.1.2.2.7 A Moment of Time Cannot Contain the Future.

Determinism says that the future may be determined based on a past state and applicable physical laws. How much does this state extend in time?

If it extends for more than one moment, in a time bracket whose width is more than zero, then we can conclude that there is a range in which determinism does not apply: Because inside this simple range which has an extension in time, there is a relative future which does not depend and which is not explainable based on the past contained within that range. In this range, the past and future must not be separated in order to define any movement. Note that the same will apply for that past within that range.

In other words, if the time width of a non-separable state is more than zero, then within that width there would be no causal

connection and determinism would not be applicable within it, hence full determinism would be discarded for the reasons explained above.

If a state is in non-separable relationship with a state beyond its immediate vicinity, then there will be no deterministic relationship, since this relationship is non-separable. If a state directly interacts with another state which is distant in the future or in the past, which is separated by other states in between, then we cannot talk of determinism since, the states in between will not be sufficient to predict that future state.

If the time width of a non-separable state was more than zero, then there would be a fundamental direction which cannot be reversed. This situation in the microscopic scale would correspond to the direction of light signals from the lamp to the book and through nerve cells to the memory cells. The reductive physicalist has hard time answering why the opposite process does not happen. But determinism would require for the reasons in this part, that there is at least a minimally small state in which there must be such irreversible processes.

Also, if we assume the existence of the applicable law in each moment, the definition of a law and its equation requires the simultaneous existence of more than one moments.

Imagine three objects which move each in a trajectory from past infinity to future, and which do not intersect. Can their past be ontologically separable from their future? Is one moment with zero extension in time sufficient to explain what is going on “in that moment” for example with a falling stone and its direction? Or do we need two points in time to have at least a simple vector to define a movement? Or do we need more than two points in time in order to define it or more complex movements? Obviously, only in theoretical situations two points in time might be sufficient to

understand what is going on in a present specific moment. A movement cannot fit into and defined by a moment of zero-width. If it is the law that which provides the direction of the movement in terms of time, then the law must contain this range. Hence to define any moment or event we need more than one non-separable points in time.

If this is true, then in any case, a set of past and future that are non-separable as causing and defining one another, is necessary in order to define a movement, an event, or a state. A moment of zero-width in time cannot be contained in another moment like this.

Therefore, a state cannot be reduced to the contents of one moment. So, there is at least one past to which, “what is going on now” is not reducible; there is at least one past which is non-separable from its immediate future, which constitutes a unity, which does not have any sequential causal effect on its non-separable future. These past and future of that minimal time-slice, are so that its internal future is not reducible to its internal past, and they are complementary for a whole and they are non-separable.

Now, another question is this: Are two points in time sufficient to define a movement? If this movement of one object is represented by an equation of a first degree, then theoretically it can be possible. But if this equation is of second or more degrees, then two points in time will not be sufficient to define this movement. And if there are multiple objects which influence the trajectories of other objects, and which start and end into other trajectories, and if we do not know the degree of the equation of each object, then there will be no limit to the number of the moments and to the extent of the range which are necessary for the existence, and definition of these movements necessary to define a state, and hence to predict a future state.

For sufficient precision of what is going on, we need a range for this that is constituted probably from an infinity of instances.

So, what is the minimum range of movement or of events that would be sufficient in order to predict the future? Assuming that there will be such a minimum range, requires many presuppositions including that the laws are unchangeable, that the degrees of the related equations are sufficiently limited, and that we have infinitely precise information about infinitesimally small points within a certain range.

Above we have seen that at least a set of two non-separable points in time are necessarily to be combined outside causality in order to have and to define a movement/ an event. Now, if determinism is true, the past state within this smallest set will be non-separably connected to at least one other state of a previous moment with a minimal and non-zero-width time-slice. From another perspective, it is indispensable to see that the other sets are not and cannot be separated from other such sets: Because each state does not consist of a single point/ particle which moves, and all minimal moments related to each particle are intertwined.

Therefore, as opposed to determinism, we understand that the states cannot be separated in order to build one upon the other.

There is a need for an explanation for the whole because there is no necessity, possibility, or justification to separate any part of the entire patterns/ states from the others. On the other hand, if one part is explained by a past part, then it is not any explanation because past part is also a future part for an older past part.

Hence each moment would be necessary in order to know the future where there is a circularity and from where we conclude that each moment has a distinct contribution in the development of the system. Ergo each moment and its contents have effective causal power.

Actually, the above is in harmony with our consciousness, will power, experience, and their transcendence: I perceive the future, and I shape the present in accordance with the potentials in the future. If I transcend time in a way to be above it and to create negating scenarios then this means that I am in a higher dimension that encompasses the time and states in a unity. Sovereign wholes who transcend moments are sustained by the One Power, and they can interact with other sovereign wholes.

But if there is this higher, more real, and more effective dimension, then other things and time as well must be defined, connected, and operating in accordance with it. So, whatever the number of allegedly deterministic dimensions or relationships, there is also a dimension where these allegedly deterministic dimension sets can be controlled and managed. Unilocality observed in quantum physics demonstrate that the allegedly deterministic relationships are just parts of bigger reality that we can perceive with some of our limited capacities. Interpretations in favor of retrocausality in quantum physics also support this.

Another point related to the above is whether a state can appear out of nothing: Each state is a reality combined with its applicable laws. If according to determinism, the future is something new, produced by the past state, then where does it come from? It “was not”, but “now” it is? What increases the number of states through time? Because a past state and future state have the same nature. The past state does not have a production capacity of its own superior to the future state; it is allegedly a result of the past states. According to determinism, neither the past state can contain the future state, nor the future state can contain the past state since they are extended in time. Within the same coordinate system if every region is self-contained, then there may be no relationship, and no region or point can be defined, except if they are connected within a higher dimension.

Under the light of the above explanation, another contradiction of determinism appears: we conclude that if determinism is true, then prediction is impossible. Firstly, because if determinism is true, the overlapping of the prediction with what happens in the future can only be a coincidence. Again, negating a prediction would also be a coincidence because what the negator will do is not connected to the predictor. They are determined separately. Secondly, because prediction means instantiation of a moment in another moment, in other words, the future state is instantiated earlier within the prediction. However, if determinism is true then no two moments can fit in a moment. Because, if two moments can fit in one moment, then, negation would also be possible and there would be contradiction. So, determinism is a self-contradicting concept in many dimensions.

3.4.1.2.2.8 Physicalist Reductionism Is False

The unsubstantiated claim that everything is reducible to the spatiotemporal entities and relationships is at the basis of determinism. The line of thought that connects physical reductionism and determinism is as follows: The human being is seen as reducible to his atoms, electrons, fields... Hence, if we explain their behaviors, then allegedly, we will have explained how a human being behaves and wills. Those things behave in accordance with deterministic or probabilistic laws. But the latter laws may be probabilistic just because of our lack of means to determine their precise course of action. In any case, it is unlikely that something behaves in a certain way without any cause. Therefore, determinism is the only clear and plausible approach.

So, the refutation of physicalist reductionism will also show why determinism is false. More specifically, for example, if my will power is not reducible to the behavior of my atoms and so on, then determinism will be shown to be false.

Part 3.5.6.4.2 refutes reductionism with obvious strong reasons. The falsity of physical reductionism demonstrates that human beings, animals, qualia, and preferences are as real as the atoms, electrons, and their patterns.

Once, a will is not reducible to the deterministic entities and relationships, then there will be a need for strong arguments against our immediate experience of sovereignty which are clearly demonstrated in tests in part 3.4.12.1. And in the absence of such arguments, there will be no reason to accept determinism.

Note that among the arguments against reductionism, I put also the falsity of determinism. The falsity of each supports the falsity of the other. However, there is no circularity here, since there are many reasons for the falsity of each which are different than the reasons for the falsity of the other.

3.4.1.2.2.9 Quantum Physics Disproves Determinism

Determinism requires separated sequence of unidirectional causes. On the other hand, it requires uniformity of laws and indirectly a uniformity of structures. However, superposed states, non-separable parts, totally different mechanisms related to quantum phenomena and quantum physics framework demonstrate that neither a sequentiality based on separability, nor the presumed unity of laws required for determinism are possible.

However, this is a partial argument since we cannot say that we found out all details of the quantum world.

Yet, the most popular arguments based on certain experiments such as Bell's inequality experiments support the truth of unpredictability. For further details see the parts in this book about such experiments.

Question 38.

Even if there is uncertainty in quantum physics, there are also probabilistic patterns. Does not this imply that there is a determinism underlying uncertainty?

Answer 38.

When there is uncertainty, this overrides patterns because though there is a pattern on the screen, the order of positions, or each position in the sequence is unpredictable. Hence, the behavior of each particle is unpredictable even though there are some predictable aspects.

The points for uncertainty must be understood in our context only as some auxiliary explanations in favor of free will power.

On the other hand, note that the findings of quantum physics are used in this book only to disprove determinism, not to prove uncertainty or indeterminism. As explained in part 3.4.2, uncertainty or indeterminism defined briefly as events with no cause is also to be discarded according to the Quranic teaching.

3.4.1.2.2.9.1 Quantum Phenomena Disprove an All-Encompassing Sequentiality.

Before explaining the implications of quantum physics regarding determinism, let us underline some important aspects of determinism that are relevant to this section:

Determinism implies that an event at time T2 is determined based on another event at time T1: An object O1 in location L1 influences an object O2 in location L2 unipotentially, and O2 may influence O1 in L1. But when for example O2 is influenced, it is allegedly influenced at time T2, which is different than the time T1 of the

origination of the influence by O1. So, in terms of spacetime, O2 in spacetime location SL2 is only dependent in spacetime location SL1 and can never influence O1 in spacetime location SL1. So, each position is strictly and distinctly separated from the other. Therefore, spatial separation is indispensable in determinism, and it is the basis of the sequentiality.

Past-future relationship is a function of space and the alleged distance between the past, present, and future is related to speed which is a function of spatial distance. So, the state two of the universe is claimed to be separate because it takes time for all objects and waves to change their locations. Hence, spatial distance is related to temporal distance, and things in the past cause things in the future, and things in the past are defined by their spatial positions which need to be changed so that an object may influence another one in another location. In this framework, a state of the universe at time T2 is influenced by a state at time T1 in a deterministic way. If things interact without the passage of time and/or by transcending distance, then determinism and one-to-one and point-to-point prediction and relations through time would not be possible.

And if space is no distance as shown in quantum physics then there is no room for determinism. Certain quantum phenomena demonstrate that locality is false, therefore, space is not an insurpassable absolute or relative distance.

The need for the tests about certain quantum phenomena arose because of the difficulty to determine the position and momentum of a particle at the same time. Because, in order to determine them they needed to be changed. When we fire a photon to a particle, to detect where it is, we change the position of the particle significantly. And as of now, there is no observatory tool, -such as a particle small enough to get information from a photon for example without

affecting its position or velocity- which will not change the measured attributes significantly.

This difficulty produced a solution based on determining different features of different entangled particles which have interacted, and combining their data in order to determine both the position and the momentum of a particle. So, determining the position of one, and the momentum of the other would give the wanted answers. But to do this, all data about one of the entangled photons must not be influenced by the measurement of the other photon. If the measurement of one of the entangled photons influences the other entangled photon, then the goal would not be achieved. Because, it would be like firing at the same particle and changing what we wanted to measure. Yet, numerous tests have shown that if we measure the particle P1 which has interacted some time ago with another particle P2 in this way, the measurement made on P1 influences instantly or almost instantly P2 even if P1 is kilometers away from P2.

Since these phenomena are very different than what we generally experience, they may be difficult to understand for some. So, I will give a simple example first: Imagine that Ali and John are in very distant locations; and they have been given envelopes, and in each envelope, there is a paper with a shape of either a triangle, or a rectangle, or a circle. After mixing all envelopes sufficiently, first, they number the closed envelopes in order as 1, 2, 3... and open the envelopes simultaneously for each number, and they share what came out from both persons' envelopes. They check whether there is any correlation between the shapes for each number, they analyze the shapes perfectly and conclude correctly that they are without any order or pattern.

Then, while they are in their locations, they are asked to write down a guess for the shape that will come out of each envelope, and after

that to open each envelope for the remainder of envelopes. And they have also to write down what shape came out of the envelope for each number. They do the second stage for sufficient number of envelopes. Then they are shared what the other wrote down for each same numbered envelope as a guess and as the observation.

They analyze again, and they find out that for each same numbered envelope, whenever both guessed the same shape, either the same shape was observed by both of them, or none of the two observations overlapped with any one of the two guesses. This was weird, because it is as if any paper P whenever observed to have the same shape with the guess of both observers, informs the other paper with same number to change its shape into the shape of P. So, if they both guessed “triangle” for 532nd envelope, either both observe “triangle” coming out of the envelope, or none observe “triangle” coming out of the envelope.

At the third round, they agreed to write down as guess only circle for the remainder of the envelopes. Other than that, they go through the same procedure. And this time, when they shared the outcomes, they see that for each pair of same numbers, either both observations were circle, or none of the two observations were circle. This confirmed definitely the weird conclusion of the second round.

Note that here, first they made sure that the envelopes were well mixed, and that for numerous envelopes in the first round, they made sure that the envelopes were fair, in other words, they contained these shapes with no pattern. But when they ran the second round, whenever they wrote same shape say circle as guesses, it never happened so that one had circle and the other had rectangle, or one had circle and the other had triangle. How was this possible?

In the quantum world, the same corresponding outcome happened in every experiment. In some quantum experiments, the polarization

angle of each photon was used instead of shapes. So, for example, in each of two different and sufficiently distant locations, there are three measurement devices: one of them has an angle A_1 and checks whether an incoming photon has the angle A_1 , the second does the same for angle A_2 , and the third for angle A_3 . The measurement devices are shifted randomly to make the measurement for incoming entangled photon. And from a center, two entangled photons are produced and sent to each observation unit. Entangled photons here mean photons that originate from the same quantum event so that they have some related properties. So, like the case of Ali and John, whenever both measurement devices measure, the same angle, either both photons have the same angle, or both have different angle than the angle of the measurement devices. How is this possible? How does each photon detect where the other photon is? How does it communicate with which angle it was measured? How does the angle of the wave of the other entangled photon restructured and what organized that? Why all these happen? Here, one possible solution concerning the question on communication might be that each photon in each pair has a local hidden variable which would make the outcome possible.

The possibility of hidden variables has been searched with numerous experiments since 1970s, and many of these experiments contained millions of measurements. These tests are called Bell's inequality experiments. However, in all of those experiments the non-existence of hidden variables has been confirmed.

So, somehow, the particles even though they are very far apart, they communicate without any limitation of the speed of light.

Bell's inequality experiments confirm this, and therefore undermine the fundamental position of space as a basis for deterministic relationships.

An implication of these experiments is that the entangled photons communicate with one other much faster than the speed of light, if not in a synchronized way. According to some interpretations, they are inseparable in certain respects. Yet there can be a non-local causality which will be non-limited with space; whereby, with the elimination of the fundamental role of space, we can welcome a transcendent causation.

Hence, the necessity of unipotential causation can be discarded and a multi-potential causation which is compatible with free will becomes plausible. Because, the important point in the above, is not just the matter of communication, but also the content of communication and purpose. The photon has also a wave-like nature. If it is a wave, then a wave has a wavelength, a frequency... So, let us assume that there is a communication; what region of the photon communicates, does it have a whole? Does it have a center, an essence, a contact point? And how does its polarization change, what manages it? How are the structure of communication, structural connections, and interactions? And why if the two measurement devices have same polarization, the photon adjusts itself, especially if any kind of local or non-local hidden variable is true, in other words, if two polarizations are acceptable. If there is no hidden variable, again, though a certain polarization is acceptable, then why the polarization adjusts to the state of the measurement device? This is an issue that complies with the contingency of the universe: The universe is special in that there is no necessity for it to be the way it is, like the above photons do not have necessarily to behave exactly the way they did.

These are in parallel with the double slit experiments where different particles that pass through the double slit and land on random places on the screen, gradually form patterns on the screen even if there are long times between the passage of each photon, electron, or atom that passes through the double slits. Furthermore, according to some

observations and interpretations, if after a photon passed through the slits, there is a decision and act of observation to determine the state of the photon, the photon restores how it passed through those slits.

These sound counter intuitive. However, if we think about it, everything in the universe, including the macro world, behaves similarly. After all, the elements of the quantum world are part of the macro world.

3.4.1.2.2.9.2 Quantum Physics is Probabilistic.

Copenhagen interpretation is one of the most popular interpretations of some important quantum phenomena. According to this interpretation, quantum events are truly unpredictable. So, the very essence of things is like mathematical probabilistic equations. In some situations, particles do not exist in just one state, but exist in superposed multiple states; until there is an observation/ interaction. The unpredictability of things is not an issue of measurement. They are ontologically unpredictable.

So, for example, in a double slit experiment, we cannot predict where an individual photon that passes through double slit will land on the screen. Yet, multiple photons will display a wave pattern on it.

However, unpredictability can only be an outcome. A process itself cannot be inherently probabilistic, since, things must be connected to unipotential or multipotential causes.

All causes cannot be unipotential causes, because of wave aspect of the matter, since a wave is a non-separable whole wherein beyond a point, we cannot find a sequentiality. This is a logical and empirical result of space-independent flow of information and space-transcending quantum phenomena, as explained in the previous parts of this section.

Copenhagen interpretation is better aligned with argument from unity and transcendence. However, its emphasis on uncertainty which looks like an uncertainty in the processes themselves is different from the Islamic teaching.

In Islamic teaching, the cause of uncertainty is sovereignty and multiplicity of alternatives. There are no causal effects issuing out of a true nothingness. And as measurement limitations related to quantum physics demonstrate, there is no possibility to prove that uncertainty rules at a fundamental layer. However, there are reasons to reject a fully random event.

Quantum physics negates the spatial separation as shown in numerous Bell's inequality tests. Therefore, at certain scales there is no fundamental sequential priority of a specific region, and everything has simultaneous influencing capacity to some extent. This is also against uncertainty because instead of no reason for an event there are two or more causes which resolve in resulting acts, features, and struggle of many contributors each of whom has alternatives in certain ranges. And these tests demonstrate that a thing transcends space -individually, mutually, or multilaterally-.

These are in contrast to determinism. According to determinism, there must be separation of a previous and following state, or of a region of space from another region at any scale. But if things transcend other things, then they cannot be separated. The unity of entire existence as explained in part 2.2.1.3 demonstrates this. Bell's inequality is an example in a small-scale.

3.4.1.2.2.9.3 Quantum Phenomena as a Demonstration of Non-Uniformity of Laws and Structures

Experiments in the area of quantum physics show strongly that unilocality (non-locality) and non-separability are true. Two

entangled photons constitute a whole unseparated by space; an electron which is also a wave constitute a whole... Therefore, it becomes obvious that wholes which appear at many layers also have irreducible holistic aspects and distinct causal power. Therefore, these findings have important implications against determinism which in fact is reductive. These findings show that instead of sequential deterministic causation, transcendent and unitary causation is much more plausible.

Some interpretations of quantum physics' findings argue that there is retrocausality as observed in delayed choice quantum eraser experiments. If true, this would confirm that the allegedly deterministic laws which are considered as a fundamental basis of determinism are not encompassing all things in a deterministic and future-oriented way, and therefore, they are not so fundamental. According to such interpretations, there are not only future oriented effects, but also the opposite. This would also support that the laws are not top-level things, and that they may be inapplicable under different conditions.

If these laws are results of structures of things, then they do not have any causal effect on the formation of structures. Hence, they are secondary.

This is related to the multiplicity and discontinuity of things. So, a process that is observed in a region or in a scale is not always necessarily observable in another one. Hence, a law is not applicable at all layers or in all regions. This is an important sign of design.

If things can be stable in their different structures, then of course, we cannot expect processes to be uniform and predictable. If a thing behaves differently and autonomously in a scale as opposed to another one, then unless we encompass all structures, we cannot predict fully what will happen next. Whatever we predict based on a pattern or law, may enter in or may be influenced by a whole in

another realm or of another layer. But more importantly, this shows that our reason to expect law-like uniformity within anything, and establish a “necessity” for such a uniformity is undermined. This also undermines a predictability based on an assumption that there will always be necessary law-like uniformity between structures, stages, or parts of the structures of things.

Photo-electric effect is an important example as well related to quantum phenomena and differentiation of layers and regions. The differentiation within different wholes demonstrates that there are related but distinct unities.

Question 39.

Is there a clear evidence about whether a signal from one point to the other travels instantly, or faster than the speed of light? If there is not, and if there is in reality a maximum speed limit much higher than the speed of light that applies to the travel of any signal, then would not the quantum counter argument fail? And maybe our tools do not yet allow us to measure precisely such a maximum speed limit, but maybe such a limit is valid.

Answer 39.

Firstly, the important thing to note is that in quantum physics, the idea that everything consists of only grain like particles has been discarded. It is generally accepted that things have also a wave-like nature. A wave does not and cannot consist of an indivisible grain like particle. It displays a unity which is defined by its wavelength, frequency, and so on. It is not limited to a point in space or time. Hence, it has a distribution and unity through space. So, space is no boundary within such wholes and outside of such wholes. Likewise, it is much more likely if not necessary that time is no boundary at all for the existence and events. It is rather a nature and a derivative of space and things other than time.

The tunnel and twins-paradoxes are two examples which demonstrate clearly the irrationality of theories that are based on a speed limit.

Also, it will never be scientific to claim that there is a specific speed beyond which there will be nothing that may travel faster. It is a claim for a negative. And certainly, it is an unfalsifiable and unscientific claim, since in order to falsify it, one has to know the entire existence.

Quantum phenomena and experiments falsify clearly the mostly adopted maximum speed limit, which is the speed limit of light.

Question 40.

Even if time is not seen as a barrier, there may be logical connections between events. In other words, even if all events happen with no time separation, but we just see those separations as separations from our perspective for convenience or as a result of evolution, there may be logical connections. So, in this case also there may be causal connections. How can we say that these causal connections are not elements of determinism?

Answer 40.

In determinism the event or the agent at time T_2 is reduced to another event at time T_1 ⁷⁴. So, it is claimed that the event at time T_2 has no causal power of its own.

In a timeless, equations-like set of relationships, where an event E_3 is fully reducible to event E_2 , and an event E_2 is fully reducible to

⁷⁴ This question and answer are also applicable from a structural perspective. In this case, reducing to another space/time would correspond to reducing human beings to atoms, molecules...

event E1 in an infinite regress as in determinism, most problems of determinism will exist. But if they are not fully reduced in an infinite regress, these problems may not exist.

3.4.1.2.2.9.4 Quantum Phenomena Undermine Locality Which is a Basis of Determinism.

As explained in part 2.2.1.3 about argument from unity, locality is not a top-level truth. Quantum phenomena support this point while disproving locality. Can unilocality (non-locality) coexist with determinism? Determinism requires unipotential causality. If there is a multipotential cause, which can cause state S1 or state S2 equally and unpredictably, this will invalidate determinism.

For a physicalist, causes are essentially spatiotemporal. And time is a function of space and a change correlated in terms of space. So, this correlation which is the basis of time relates to space again. The unilocality (non-locality) invalidates an absolute distinction regarding absolute or relative change in space and based on space, and therefore the basis of determinism.

3.4.1.2.2.10 Determinism is Inconsistent with Daily Life Experiences.

The determinist says that blaming and punishing a criminal is wrong since he was forced to do the crime because of deterministic things; he can only be rehabilitated. But if blaming, praising, punishing, and rewarding work and have positive influence on how people behave, this will imply the likelihood of truth of arguments against determinism: if we suppose that the above are effective, then we are accepting that a person has an autonomy in willing to blame or not to blame, or in willing to behave in accordance with the blame or may will to not comply, or in rehabilitating or not.

If determinism was true, then people would not waste their energy to discuss whether to punish or not a criminal; they would not even see more than one alternative; their particles would behave the way they have to, in accordance with deterministic laws; there would not even be wholes of agents who see more than one alternatives.

Hence, any praise or blame reaction for or against anything that happened is an evidence against determinism. Because they are closely related to the transcendence of the human being through which he sees two really possible alternatives none of which is coerced. This transcendence is closely related to free will power.

The determinist also behaves as if human beings have the sovereign free will power. They transcend multiple alternatives, not just one. And they use the freedom to will one of the alternatives, and they expect people to exercise their freedom. In the following I will give some examples in this respect. These examples are daily quasi-experiments about the use of the free will power over any alleged deterministic pressures. The determinist may claim that these examples do not demonstrate that there is free will power. I claim that they do, and in free will power negation and brain observation experiments, we will see detailed analysis of the effects of the free will power. These experiments will show that our free will power really overrides many spatiotemporal patterns. Through these experiments, it will become clearer why in the normal daily life situations everybody assumes the sovereign free will power, and why even determinists have to assume the existence of free will power.

The following examples are closely related to those experiments.

3.4.1.2.2.10.1 Contradiction and Inconsistency of The Denier of Free Will in Terms of Responsibility

Are We to make those who believe and do good works the same as those who corrupt the earth? Are We to make the righteous as the wicked?

(Quran: 38/28)

An important implication of the denial of free will based on determinism is the rejection of responsibility. A person will be either believing in free will power, or reject it, or be agnostic about it. The one who believes in or is agnostic about it, will not have any objection if he is blamed for a crime he committed. But a denier of free will, may reject responsibility based on determinism.

For example, the disbelievers in the times of prophets said that they are disbelievers because they found their forefathers upon their path. The examples are not limited to the religion and they are applicable to worldly blames, including crimes. It is also applicable to praiseworthy situations.

Free will is a very first foundation of all our acts. When we buy a chocolate, when we sell our house, when we get married, when we hire someone, when we invest, when we drive our car, when we applause an artist, when we dislike something... we assume the truth of free will. We transcend many alternatives, and we observe that in many cases nobody forces us to will one or not to will one.

Determinism entails some hypocrisy because of its inconsistencies which will make a determinist behave differently than what his belief entails. For example, a requirement for the ability to enact contracts is sanity. To enact a contract, a person must have some freedom of will, be able to distinguish and have a sufficiently good judgement about what is preferable and what is not. Also, this person must have

the freedom to sell his house or not, or for different prices. If he is not sane so that he will sell it for any price, then he may try to revoke the sale.

If a determinist signs a contract to have an obligation to pay 1.000.000USD without anything in return, to a person who pointed a gun to his head, then, he will go to the court to be released from this obligation, and claim that he unjustly suffers because of the situation. But let us suppose that he sold his car worth 20.000USD for 21.000USD. And the buyer goes to the court and claims that he bought it because the neurons/ particles of his brain behaved according to physical laws and forced him to do so, and he could not do anything else, and that he needed the money for something else, he will not accept the reason of the buyer. If he accepts such reasons, then, he will be accepting that no contract he enacts will be binding for the other party and for him. But determinists also make such contracts and consider them binding.

Those who reject free will behave and must behave as if there is free will. Otherwise they had to accept any claim to abolish any contract for lack of free will.

Also, while enacting the contract, he knows the consequence and accepts it. If he did not have free will then why did he make the contract in the first place? If then he denies it what is the superiority of his judgement for the absence of his free will compared to someone who argues for free will and wants that the contract is applied?

What are the implications of someone behaving as if there is free will, though he believes that he does not have free will? The need for this behavior is important for those who reject free will because there have been experiments which show that those who believe less in free will tend to cheat more. So, a denier of free will will scientifically have to accept that he tends more to do evil.

Those who argue against free will, seem to have no other option than behaving as if they have free will: They will generally applaud a good performance, they will make contracts with agents who have no free will and no responsibility according to their own view, they will generally hate killing an innocent child, and they will argue trying to develop arguments against those who believe in free will.

But then, this entails behaving as if something wrong is true. This is like someone who does not enter a building and who believes that the building is not in fire but behaves as if it is in fire.

To be more specific, let us imagine one of the workers of a company, does not enter the building though it is working hour. The manager calls him, “come in and do your work”. He replies “I behave as if the building is in fire”. The manager says “But it is not in fire, is it?” The worker says “No, I believe that it is not in fire.” The manager says “So, why do not you come in and work?” The worker says “It is more convenient for my position”. Of course, this is a pathetic behavior and thinking, and for the determinist opponent of free will there is no way to explain this hypocrisy.

So, for example, when a determinist denier of free will lends some money, he can ask for it to be returned if it is overdue, behaving as if he believes in free will. But when he is the debtor, and he did not pay on time, and assuming that he will never need to borrow anything, and the lender does not have any power to collect that money, and assuming that there is no benefit for the opponent of free will in returning the money, then why would he behave as if there is free will? He does not believe in it, and there is no benefit at all in behaving as if there is free will? And if there is no free will, then he will not be doing anything morally wrong, since, once he defaulted and not regretted, it will be clear that he could not behave otherwise.

One may say that it is because of the internal consistency of this opponent of free will. However, according to determinism, the only consistency is the consistency of the particles bumping one onto another in accordance with the laws of nature, in the brain of the opponent.

As we see in the free will power experiments, even determinists experience everyday that they transcend more than one alternative, and that there are normally no coercive causes that block them from willing one of the alternatives.

The determinist may bite the bullet and say: “I as a determinist behave as if there is free will power, but I know that I am wrong in behaving like this. For example, I must not be angry at a criminal who killed an innocent child.” If he is replied as: “So, you admit that you are distinct from your particles and you negate what your particles entail in admitting that you are wrong”, he may say: “I admit also that I am wrong whenever I say that I am wrong. I am neither right nor wrong. There is neither right nor wrong, just the particles and their behaviors.” As we see in his last statement and all his statements, no matter what he says, there is an “aboutness” in his statements. His “particles” have an awareness about things which are not particles or which are other particles. Furthermore, he is aware of alternatives which might not even have actualized. And he may negate in many contexts allegedly correct predictions. When people blame an evil act, this is because of this power; the current legal, criminal and other systems are structured as they are because of the empirical reality of this power. Yet, the determinist denies it without any empirical or logical evidence but based on an unjustified presupposition that at any layer known or unknown things behave deterministically.

Question 41.

The determinist may behave like that not because he believes that. For example, when he thanks, he may be willing just to communicate that he has been happy because of the other person did. So, how does that argument refute determinism?

Answer 41.

He may not be “willing”, he may not “communicate”, he may not “be happy”. If determinism is true, all those things are happening not because of him, but because of particles in his body. However, he experiences that he is real, and he as an agent transcends alternatives.

Here I mean that if he feels some appreciation for a favor done to him, this feeling of appreciation is contradicting his recognition of determinism. Nobody would deserve appreciation since nobody allegedly can do anything other than what he did.

Question 42.

Even if he has such feelings, his recognition of determinism is something logical. So, why these feelings would constitute a noteworthy contradiction?

Answer 42.

As explained earlier, the determinist cannot claim to be logical either. All he feels including feeling convinced, rational, or feeling appreciative are just what has to be as a result of particles' states billions of years ago.

3.4.1.2.2.10.2 1.6.2.1.1.10.2 The Determinist
Contradicts Himself When he Proposes
Rehabilitation as the Only Reaction Against
Crimes.

Passing on red light is fined. Willfully killing an innocent person is punished and blamed. According to determinism, nobody should be punished, blamed, rewarded, or praised. Because, nobody can avoid any act he commits, good or bad; nobody had any power to do what he did not, and nobody had any power to avoid what he did; and nobody can claim any ownership for what he willed or did.

However, some determinists claim that as for health reasons some people are isolated from the society, the criminals also can be isolated and rehabilitated for the benefit of the society. Yet, obviously this does not save the day for the determinist, since, in determinism there is no possibility to rehabilitate anyone, or to make any change for the benefit of society. Because the will power to rehabilitate, or to will a better state for the society are also illusions.

If the particles, fields, laws of nature and the like coerce the rehabilitator, the rehabilitator cannot do anything else; his will power is no more than an illusion. If the society was determined to be rehabilitated, then it will be rehabilitated; though rehabilitation is also just an illusion, since there is only the acts of the particles and fields. So, the rehabilitation argument of the determinist is invalid, since there cannot be a future goal for anyone other than an illusion.

Actually, when the determinist claims that instead of blame, we have to act for rehabilitation, he experiences his transcendence and the reality of his freedom of will. Hence, when he denies free will power, he is being inconsistent with his experience.

3.4.1.2.2.10.3 The Rehabilitated Will ask for Compensation, and the Praised Ones Will Have to Return Their Benefits.

Let us assume that a society fully accepts determinism. An agent passes on the red light and he is fined. He says I willed to pass and I passed because it was determined that I passed. So, it would be a benefit for society if I did not pass. Yet I had no choice. So ok, my society can fine me but as it is not my fault, the society must compensate for the fine, the time, and other costs I incurred.

The determinist will either say, it is your bad luck that you passed and were fined; and the society will not compensate even though you were unable not to pass on red; upon which the agent may say that it was the bad luck of the society that he passed on the red light. Or the society will accept compensating in which case fining would not be possible as it would be paid back to the agent.

Or the determinist law-maker and enforcer will say: You had to pass on the red light, but we had to fine you as well. Therefore, you are not guilty, and we are not guilty. So, we will collect the fine. Hence, either the determinist will reject the concept of justice and its reality entirely, or he will approve unjust behavior as OK.

By contrast, according to the Quran, the one who commits a wrong behavior deserves an appropriate sanction, since he has the free will power.

The application of determinism would cause a fully criminal society: If a criminal is punished without compensation, then he is punished unjustly. If he is compensated for the punishment, this means that no criminal is punished ultimately. Imagine a rapist, or fraudster, or killer who are caught and ask for compensation not only for the

punishment, but also for the cost they incurred for performing their unsuccessful crimes.

Is it a coincidence that all particles while behaving in their layer in accordance with the laws of nature, overlap with our conclusions and practices for the benefit of our society, for the punishment of the criminals, and rewarding of the good ones? What is the probability of such an overlapping?

Obviously, these probabilities are quite small, and accepting that these happen because of such coincidental overlapping is rather irrational since such a coincidence would require trillions of conditions: For example, at least, the numerous acts of trillions of particles within hundreds of millions of human beings in whom these ideas emerge would coincide with these ideas and conclusions.

The overlapping between the determinists' attempt to justify their position and the behaviors of their particles is also a really small probability.

A social order would be impossible to practice consistently with a deterministic intellectual framework. Therefore, there is a permanent inconsistency between what hard determinism requires in terms of social order, and what we experience. This empirical inconsistency fundamentally negates hard determinism. Especially if we assume as some determinists and compatibilists claim, that consciousness is an illusion. Because, if determinism was true, one would expect a social order where no illusion against determinism has such big and permanent causal effect: In the deterministic thought framework, "A crime happened, this must not have happened" becomes no more than a conjecture, an error, and an illusion which could not produce any result.

Again according to hard determinism what happens is what must happen, and what does not happen is what must not happen and there is no room for improvement.

And there will always be an empirical inconsistency between this and what human beings do. That is why even those who reject free will, will generally behave as if there is free will. But within the Quranic framework, current and permanent social order and the concepts of good and evil, and “must be” are consistently explained and justified.

3.4.1.2.2.11 Without Will Powered Existence, Nothing can be Deterministic.

Whatever we observe in the universe is contingent. We do not have any logical necessity for why it is the way it is. If this contingency continues infinitely through all causes, then there will be infinite regress. Therefore, there is a need for multipotential cause(s).

If there is a multipotential cause, then the transition from multipotential cause to unipotential may be possible by choice. One might propose randomness as another alternative way of transition. However, as the details will be explained in part 3.4.2, randomness theoretically can only be an aspect of an outcome, not an effective cause, nor part of an effective causal process and entity. Randomness, in order to be -supposing that it can be-, needs an effective entity, being, or agent.

An event or act in a specific direction, needs first a framework; and then information of direction, time, and power within spacetime. Such information may be had by transcendent beings/ entities.

So, when we eliminate determinism through our reasoning about contingency, and randomness, we reach the need for sovereign beings so that events with specific directions may occur.

3.4.1.2.2.12 What Determines Events are not Past Events, but the Disposition of Things.

If a car moves, it is not caused by what happened in the past. It is caused by the disposition of the atoms, by the structure of the car, and so on which exist now and in the past. If there is an inflationary period at the beginning of the universe, it happens not because of a past, but because of the disposition of the starting singularity.

Are the properties of things determined by determinism, or is determinism determined by the properties of things? Properties of things cannot be determined by deterministic processes, because, deterministic processes cannot fit within a zero time-width state, as explained in part 3.4.1.2.2.7.

Moreover, if there is energy, where is the energy contained? Any minimum state wherein it is contained, must have an extension in time. Because energy is defined by including a range in time: $\text{Energy} = (1/2) \text{mass} * \text{speed}^2$ or $\text{Energy} = \text{mass} * \text{speed of light}^2$ contain in any case a bracket of time, since speed equals distance/time, where time does not denote a point but denotes a bracket of time. It is clear that according to both philosophy and physics, energy is real. Hence, no moment with zero bracket of time can be considered as a cause of any future state.

So, if we know a state as in the claim in Laplace's demon analogy in the part about negation experiments, what do we really know? A moment with zero time-width? If it comprises a time bracket wider than zero, then at least we need to have a range of non-separable states rather than a state. But this means that knowing one state is not sufficient. At this point the question is what is the minimum number of states needed in order to predict the future. And once we need more than one, this number of states becomes arbitrary and indeterminable. Part 3.4.1.2.2.7 explains why there is a need for more than one state so as to be usable in the formulation of determinism.

This sub-section is about another problem of determinism: Is it sufficient to have a state that will allow only some unqualified actual movements? Or do we need a previous state which will be wide enough to contain the necessary wholes? We understand that a previous state in this formulation does not need to be wide enough to contain the life of a human being. But it is obvious that unqualified points of space would not be sufficient as active wholes. So, "if" the atoms were the runner or objects of the laws, then a minimal previous state had to be wide enough for the formation and lifecycle of an atom. If it was not the atoms but the protons, or gluons the runners or objects of the laws, the same would apply to them. Otherwise, by what wholes or upon what wholes would the laws be applicable? So, any previous state must also be wide enough to allow the formation of such fundamental wholes. Inside a state which has less than a necessary time width, the above laws cannot be applicable, since the formation of those fundamental wholes would not be finished. Hence, the necessary time-width of the minimal state, wherein determinism is applicable and which can be a basis for future states, must be quite considerable; and within it things will not be sequentially separable so that one sub-state may be sequentially prior to another in order to be able to fully cause the next sub-state.

Many problems about infinite regress of different kinds may be raised here. But let us come to the main issue of this part: Since these wholes are independent variables along with the laws, as the laws cannot act upon those wholes within the time width of this considerably large state, why would there be a need for a law that would run those wholes?

Instead, the wholes would be the origin of the alleged laws within those states. If this is true, then neither any ambiguous and arbitrary state, nor any ambiguous law would be needed to have any causal effect on anything. Rather, the wholes would have the effective causal power.

If the wholes have the effective causal power, then it would be a fallacy to restrict this power to any specific whole. Hence, there may be many types of sovereign wholes. These facts entail that the weight would be upon the wholes instead of the laws. This is in accordance with the Quranic teaching on a “command” and “sovereign wholes” based universe.

I will explain the mechanisms and relationships of sovereign wholes in part 3.5.3.

In any case, the above explanations show that laws and states are ambiguous and irrational bases for any formulation of determinism; hence, determinism which is build upon them is false.

3.4.1.2.2.13 There Are Things Beyond the Physical Patterns Such as Logical Laws and Transcendence.

Determinism entails that each infinitesimal thing is caused by a corresponding thing, and that each infinitesimal thing causes a corresponding thing. If an infinitesimal thing was not caused by a corresponding thing, then obviously things would not be predictable at all based on past states.

However, there are wholes greater than infinitesimal things which have distinct and transcendent features. As human beings we are a good example in this respect. We have transcendence as it relates to the time and to the space. The information we contain is not just an information of the moment, or information of our own cells, atoms, or infinitesimal parts... We transcend multiple infinitesimal wholes. Especially we encompass the future and internalize it. We not only encompass a single future, we also encompass possible future states, and make calculations based on them. We also perceive a future preferable state and a future unpreferable state. An animal also has such perceptions and transcendence.

Even the photons look like having some similar abilities as observed in double slit experiments. In these experiments, though they pass from the double slit and land on an unpredictable part of the screen, and even if there are days between each photon, at the end they constitute a pattern on the screen.

If every infinitesimal thing has a corresponding effect in the infinitesimal realm, then our transcendent attributes must be appearing out of nowhere. But it is obvious that our transcendent attributes interact with the infinitesimal realm. Even if we grant the determinist that we are just supervenient on the infinitesimal, we are a reality; there is at least a broad bottom-up oriented causality wherein an upper layer reality is not reducible to the bottom.

These transcendent features show that the wholes are distinct realities. These are evidences against the unsubstantiated implicit claim of determinists that infinitesimal things are not wholes. Because if smallest things are wholes, then they will have constituent elements, and determinism will have lost its basis since every whole would have added something new of its own to the chain of causality. Part 3.5.3 examines the wholes and sovereign wholes and their implications which further substantiate our point in this part.

Question 43.

Is not it possible that consciousness and qualia are just illusions?

Answer 43.

Illusions are tested and determined to be illusions. What we do while we do these tests, are not illusions since this way we distinguish what is an illusion from what is not. If all consciousness and qualia are just illusions, then we will not be able to distinguish the illusory from the real. In Islamic teaching, our observation capacity is real.

3.4.1.2.2.14 Minimum Complexity of Elementary Wholes Necessary for Determinism Cannot be met.

Have those who disbelieved not considered that the heavens and the earth were a joined entity, and We separated them and made from water every living thing? Then will they not believe?

(Quran: 21/30)

Laplace says: “We ought to regard the present state of the universe as the effect of its antecedent state and as the cause of the state that is to follow. An intelligence knowing all the forces acting in nature at a given instant, as well as the momentary positions of all things in the universe, would be able to comprehend in one single formula the motions of the largest bodies as well as the lightests atoms in the world, provided that its intellect were sufficiently powerful to subject all data to analysis; to it nothing would be uncertain, the future as well as the past would be present to its eyes.” (Laplace 1820)

According to Laplace, not only the future, but also the past can be precisely known based on the data about the present state.

In this part, I will examine the following questions:

As noted earlier, the components of determinism are states and laws. The states would be consisting of things. If smallest things acceptable to determinism in those states were like an electric motor, then would determinism be considered true?

No, because if the smallest element of the state with narrowest possible time width was as complex as an electric motor, this would mean that the smallest element would require a transcendent cause which is not reconciliable with determinism. Because, as it would be the smallest element, neither it nor its parts could be explained by

things like reductive evolution, previous states, and laws. Each cycle and component of the engine could not be explainable with a previous state, but rather with a transcendent element.

Then, can a basic element less sophisticated than a minimum necessary degree, yield or work with laws so as to produce our current universe?

To address these questions, we need to evaluate the implications of basic elements which fall short of necessary sophistication.

If the smallest elements cannot be as complex as an electric motor⁷⁵, what minimum complexity can it have?

If it can be less complex, then can the universe produce the complexity we have? What constraints would there be if the basic elements are not sufficiently sophisticated?

If it cannot be less complex with no reductive explanation, then why would not there be more complex bottom things which are not fully reducible to other things?

Can an atom, or something else which simply moves in the space, be less complex than an electric engine in its systematic properties?

Can the layers of a bird, its atoms, and the most fundamental elements of the world behave consistently while each behaves according to their distinct features without all being effective and interacting wholes?

⁷⁵ The complexity of an electric motor does not have any special aspect regarding this point. It is used just to help the reader conceive a level of complexity. Considering what we observe in our layer, we can safely conclude that any alleged most fundamental element must be much more complex than an electric motor.

In the following, we will analyze these questions through a billiard balls worlds (BBW) thought experiment.

Firstly, let us analyze the case where the universe consists of elements simpler than an electric motor.

In fact, it is impossible to imagine a most basic thing which just moves within the space and which is less complex than the macro structure of an electric motor. Especially if we consider that it moves in certain patterns comparably to other simplest elements.

However, for the sake of our analysis, let us assume that such simplest elements are granted.

Now, to make things easier to understand, we will make some thought experiments with a team.

So, as a team, we have a huge billiard table with sufficiently numerous billiard balls with different colors. These balls correspond to the simplest elements of our actual universe. There is no friction. We record everything that happens.

The first day experiment corresponds to simplest basic elements and some aspects of the universe that they would result.

We start the test by moving the balls which were in a random initial distribution. We observe the balls. We notice that sometimes they constitute shapes which look like life forms. For example, we notice a pigeon which flies forward, flapping. We wait enough and we also see parent pigeons having chicks which grow and fly.

But since we observed long enough and sufficiently many balls so as to see the above birds..., we also noticed pigeons flying with just one wing, pigeons flying backwards as in a rewinded video... The number of these weird observations are normally much more than the orderly observations. We make calculations and find out that the pre-

calculated probabilities of normal observations within weird observations overlapped with the distribution of related actual observations.

In the next step, we watch our video recording of the movements of balls in reverse. We notice again almost similar numbers of normal pigeons and flights, and similar number of weird pigeons and flights. The calculations gave similar results.

Sometimes later, we do the same experiment again with the same balls. Some findings of this experiment correspond to our actual universe. Here we will see the implications of the deficiency in the necessary sophistication. I will also give some idea about the things that might compensate the deficiency in the necessary sophistication. And also we will grasp to some extent that a minimum degree of sophistication would be necessary, and whether any degree of sophistication of the basic elements together with some compensating elements at that basic layer and state would be sufficient to produce our actual universe. We will also see some related requirements and constraints.

In this part of the experiment, we notice that the observations are different: We notice only the normally flying pigeons. There is no pigeon flying normally with one wing, there is no pigeon flying backwards. To check, we run the video recording in reverse. We see that there is no pigeon flying forward while playing in reverse. Same thing for all other life forms. This totally negates our pre-calculations.

Why the processes at the layer of the balls are consistent within themselves, and the processes at the layer of the pigeons are consistent within themselves, and why they both overlapped since the balls were parts of the pigeons in the same time? And not only that, the similar consistency happened also at the middle layers like the movements of their wings and feet.

Did the aerodynamic shape of the bird have any effect on how the balls behave? Or do the balls behave to carry the bird forward because its eyes are in the front, looking forward? Is the pigeon real and effective? Is its transcendence and consciousness real? Are the balls able to inject consciousness in the bird? Is its behavior like free will being true as in the tests in part 3.4.12.1, which support that the wills of wholes are also effective and distinct and irreducible to his particles?

The first experiment was fine. There were birds behaving normally, but there were also birds which behaved weirdly. So, we could say that the real things are the balls. The regular bird behaviors were just coincidental.

But, in the second experiment there were unexpected consistencies within and between layers. We could not say using the probabilities that one layer was the supervenience basis, and others supervened on that.

The second experiment is what we observe in the actual universe. There are consistencies like that. And as explained earlier, according to determinism, it is necessary that there are some most elementary things which correspond to the balls. Therefore, we needed to deepen our analysis:

So, overall, either, in our second experiment, some layers are dependent upon the other; or they are interdependent partially, that is some behaviors of the balls depend upon the birds, some behaviors of the birds depend upon the balls; or there is an unbelievable coincidence.

One imaginary colleague says: The cause may be a coincidental special distribution of the balls at the beginning. If they were positioned in a specific way, they could display a specific progress.

For example, if they were positioned next to each other, then afterwards, they would be spread apart.

Another colleague replies, adding an analogy with the actual universe:

If we could explain the results of the second part of the experiment by the special distribution of the balls, then we would also be able to explain the actual universe in the same way. The most likely situation is that the elementary parts of the universe may have a systematic complexity below a necessary level, hence that they are like the balls in the experiment. So, normally, they would be unable to form other wholes through systematic, stable but also flexible connections so as to form stable wholes and end the connections whenever appropriate. In this situation, the appearance of such wholes at multiple layers as happened in the second experiment would be impossible. Then, to have our actual universe with wholes at numerous layers connected through billions of years, with such elementary parts would have a probability like $10^{-1000000}$... For instance, if the situation was to be explained by the distribution at the initial state, then half of the most elementary parts of the universe at the initial stage might be positioned at different scales and regions so that we would observe a reverse evolution mixed with normal evolution. Again, if the situation was to be explained by the initial state, like the initial state of the balls, it would be likely that some portion of the most elementary parts of the state of our universe were positioned so that they were proceeding backward from the heat death. How can all of those elements be positioned coincidentally so as to be appropriate parts of the big bang so as to produce the consistent progress that we observe?

A colleague adds:

Why would we expect that for example the middle of our experiment would not be considered as the start of the experiment? So, if the

starting state of our experiment has any special aspect, then the middle of our experiment would also have the same special aspect since we do not see the reverse formation of pigeons in any half of the experiment. The same applies for any quarter or any other smaller portion of our experiment. This makes the problem worse, since in the second part of the experiment we and in the actual universe we do not observe just two states, but infinitely many states which present the same problem.

Another colleague says:

I think we do not even need to consider such probabilities about the initial state. The question is whether unchanging elementary parts may overlap with the behaviors of the pigeons without interaction or not. Because after all, the pigeons have specific behaviors. And as the balls are not as complex as the pigeons, then how can it be possible that these two things entirely overlap? For example, parts of the beak of the pigeon stay together. The balls have no feature to stay next to each other stably. So, if we zoom sufficiently, we will see that the behavior of the pigeon and its parts are distinguished from the balls.

Then he adds: Why do not we zoom in and find out where their behaviors are differentiated?

We zoom in. Watch again and again the videos of the second experiment. But we cannot find any differentiation.

A colleague says: Maybe the balls are changing at every stage. So, for example, whenever a ball combines with another one, maybe its structure changes. So, for example, the balls at the end are different than the balls at the beginning. If this is the case, then naturally when we play backwards, we would not see any formation of pigeons.

One colleague says: If the behaviors of different wholes at different layers have irreconcilable features with the assumption that the balls

cannot have a systematic complexity and that they have to be fully simple, then we have to discard this assumption.

Then the balls are not as simple as we thought of. They combine with other balls in specific ways under certain conditions. When there is a combination, this combination may be combined with other combinations as well in specific ways.

The balls must be so that if a ball B_1 interacts with another ball B_2 , it will produce combination B_{1-2} ; if B_1 interacts with ball B_3 , it will produce combination B_{1-3} . If B_{1-2} is combined with B_3 , it will produce B_{1-2-3} . Everything cannot be combined. So, B_1 contains numerous potential possibilities, and numerous potential impossibilities. How many are these? These depend on B_1, B_2, \dots, B_n 's features.

We can end our thought experiment format here.

In the above thought experiment, I tried to illustrate that in any case, the most fundamental elements have to have an unnecessarily and impossibly substantial systematic complexity if other wholes do not participate effectively in the working of the universe. If we try to squeeze and reduce the complexity of wholes in the higher layers into things at the lower layers, we do not necessarily reduce the total complexity; rather, the entire complexity will be accumulated in the lower layers which will render the most elementary parts more and more miraculous. Furthermore, the addition of infinite number of random trials through multiverse or through the addition of "free" infinite time adds nothing to the systematicity of the relations. Moreover, with this substantial complexity, explaining a higher layer's whole with a lower layer's whole is built upon the unjustified assumption that the lower layer wholes are superior to the higher layer wholes for being so flexible as to constitute any parts of the higher layer's whole. In an unjustified manner, the lower layer whole is considered to be superior in kind to the higher layer whole as if it is ultimate, and not constituted by parts; although, to be consistent,

its assumed changeability, adaptability, and dynamism necessitate that it should be reducible also to other parts.

Hence, it is impossible to have any deterministic framework. According to determinism, there cannot be any state devoid of sophisticated parts upon which any deterministic law can act.

There cannot be purely simple “balls” that may combine in such ways so as to produce what we have in our universe. New things have to fundamentally contribute so as the events and entities in the universe may happen. Freedom of will, sovereignty have a keyrole in the universe and in the creation.

Explaining things in the universe with the initial states assumes the existence of alleged self-sufficient spatiotemporal bottom elements (ASBE) which are able to combine at convenient points with other ASBEs and separate at convenient points so as to produce necessary wholes for other wholes. Such ASBEs must not be reducible to other particles because otherwise they will be a secondary layer and they nature will be exactly like the nature they are used to explain. If they are not reducible then there may be sovereign wholes at any layer and new creation. ASBEs are not possible, because they must have a systematic and holistic complexity above a certain level. Therefore, they will have parts necessarily. Hence, if non-separable wholes at higher layers are not possible, then non-separable ASBEs are impossible either. Furthermore, the minimal deterministic states and workable deterministic laws are not possible either.

For further details see ASBEs in part 3.5.6.4.2.8 and sovereign wholes in part 3.5.3.

A logical result of the above is that according to the deterministic and reductive physicalistic understanding, any reductive physicalist science will not give us any really reliable knowledge about how things work, as long as we do not comprehend the very bottom

fundamental layer. When we do such science, we are only observing and working on epiphenomenal things. All the behaviors we determine at the higher layers, are not real behaviors, and they do not have any causal powers of their own.

According to the Quranic teaching this is not true. Many layer may have distinct entities and events which have at least some additional causal power. Hence not only parts of a bird cause to some extent the bird's behavior, but also being part of the whole, of a bird causes parts to behave at least partially in a specific way.

Question 44.

Why would we consider the playing in reverse of the video recording in the above thought experiment? Does not the 2nd law of thermodynamics, which states that the disorder increases in a future-oriented time flow show that time has a necessary direction from past to the future?

Answer 44.

In the presence of deterministic laws, entropy is overridden by these laws. These laws will apply irrespective of whether entropy increases or not. They follow precise lines at every level of detail. So, if we rewind any allegedly disorderly state, we will reach the orderly state.

If determinism is true, then if we play the time backwards then the same past will happen as underlined in the quote from Laplace in part...

On the other hand, the thought experiment called Maxwell's demon refute entropy increase. Loschmidt paradox also clarifies the same issue.

3.4.1.2.2.15 Logical Determinism Is False.

Logical determinism says that it is true at all times either the agent A1 will will the will W1 or the will W2 tomorrow. If that he will will W1 is true at all times, then he cannot will W2.

However, that W1 is true does not require that it is true without the sovereign free will power of A1. It can be true through the exercise of sovereign free will power of A1.

3.4.1.3 Compatibilism

In part 3.1.1.4 I gave some details about the compatibilist definition of free will.

Compatibilism claims that the universe is deterministic, and yet there is free will. They say that free will power and determinism are compatible. Those who do not claim anything about the truth of determinism, but claim that “even if determinism is true, free will would be existing” are also classified as compatibilist. In other words, compatibilist means someone who accepts the existence of free will even if determinism is true.

Compatibilists see a need to reconcile determinism with free will. They consider the free will as an important and indispensable basis for contracts, responsibility, and many other human needs.

As the compatibilist says that determinism is true or may be true, all arguments against determinism are also applicable for compatibilism. So, compatibilism is false. The responsibility seems to be the main motivation for the compatibilist to defend free will. But for responsibility, they need a basis for praise and blame. They generally present reductive evolution as this basis. They say that because of reductive evolution, there developed better and worse behaviors. So, some behaviors are superior to others and may entail praise or blame.

Yet, in the similitude of a rolling stone, we can see that the idea does not work: Let us say that a stone which became rounder and kept rolling more because it became rounder compared to another stone. One may say, stones that roll more become rounder, and the rounder they become, they roll more. Yet this does not cause stones to become or will to be rounder, or feel bad when they do not roll or do not become rounder. Or this does not make being round or rolling praiseworthy activities.

So, imagine two exactly same rolling stones rolling on exactly same hills. If consciousness had arisen, and if they could differentiate their rolling compared to the other stone, then we might say that they had goals and that they could make a difference. But in compatibilism, they do not see more than one alternative. They cannot be better or worse than the other. So, there is no room for the desert of praise or blame.

If a person does not pull his hand back from the fire, and if his hand is burnt, a determinist cannot say that this is a bad state, or this was a wrong behavior, because there is no “must be” state. And saying this was wrong is just like saying that the movement of a stone should not happen. If one says that not pulling his hand from the fire was wrong, the compatibilist should not oppose to that, since his opinion is not superior to the other person. According to the compatibilist, both opinions are like rolling of the stone.

The compatibilist cannot say that his opinion is more correct because of reductive evolution, because all kinds of people with different and opposing ideas some of which are necessarily false keep surviving.

Anyway, the arguments against determinism show that determinism is impossible. Hence, the same arguments make the discussion about the distinct claims of compatibilism redundant.

3.4.2 Indeterminism is Unsubstantiated and False.

According to Islam, the randomness of anything cannot be the basis of will power. It is also impossible that any event originates itself without the support of God.

In this part, we will see how indeterminism relates to the free will power according to Islam.

3.4.2.1 Definition of Indeterminism, Randomness, and Uncertainty

Physicalist reductionism which is the main source of the ideas against free will, which discards any transcendental causes and multipotential causes, offers two options about causality: An event occurs either (1) because of unipotential causes, or (2) without any cause. The first is explained mainly in the parts related to determinism. The second will be explained in this part.

There are several interpretations about indeterminism.

One of the two main approaches is the idea that things always have unipotential causes but because of our limitations, there are seemingly unpredictable events. This idea is in essence deterministic, because according to it, if we had the ability to access and process all info for any state of the universe, then we would be able to predict a future state. Hence, it is not what I examine in this part. This interpretation can be considered in accordance with our explanations about determinism.

The indeterminism, or uncertainty, or randomness that will be explained in this part, are defined by the ideas underlined in the following quotes:

According to Encyclopedia Britannica, “Indeterminism is the view that at least some events in the universe have no deterministic cause but occur randomly, or by chance.”⁷⁶

Hitchcock (2018) lays down more precisely the idea of indeterminism that will be explained and criticized in this part: “The central idea behind probabilistic theories of causation is that causes change the probability of their effects; an effect may still occur in the absence of a cause or fail to occur in its presence.”⁷⁷

In other words, the uncertainty, and randomness that we criticize here can be defined as the feature of a thing or event that does not fully or partially depend upon any cause. Indeterminism is the approach which claims that there are partially or wholly random and/or uncertain things in the actual spatiotemporal world.

Most of the arguments against determinism are also applicable against indeterminism.

3.4.2.2 Implications of Indeterminism Regarding Free Will Power

3.4.2.2.1 Indeterminism is not a Source or Cause of Free Will Power.

Some physicalists try to use indeterminism to open room for free will. However, without the truth, sovereignty, and multipotential causal power of the agent and the will power, this effort will be useless. And once these attributes of the agent are admitted, then there is no need for any indeterministic process where effects happen without a cause. Indeterministic actions allegedly happening in the

⁷⁶ (Encyclopaedia-Britannica-Editors 2020)

⁷⁷ (Hitchcock 2018)

brain of the agent, will not give the agent any free will power. The claim that indeterminism does not give us free will, is correct.

Will as a power, is not a simple slack, indifference, or indeterminism. The agent and his will power are multipotential causes. If there is no involvement of the agent, any uncertainty, randomness, or slack is not effective on their own.

If the will is the product of indeterminism or determinism and not of the agent, then the agent will be subdued to something other than himself; so, he can not be considered free.

According to the Quranic teaching, the claim that an event is either deterministic or indeterministic is a false dichotomy. The falsity of the dichotomy is because of the falsity of both.

Free will power (FWP) is a distinct power of the distinct reality of the agent.

There can be causation related to patterns. Also, there can be causation where only the outcome may have a distribution which looks indeterministic though there is a sovereign and multipotential cause.

Free will power is a multipotential cause. Hence, in many situations, a person with will power has an equal ability to will for each alternative among many alternatives. Therefore, what will be willed is not predictable. This unpredictability is not because of the lack of knowledge about any previous state. It is because of the power to will equally any alternative from within a range of alternatives.

The freedom of the agent to choose an alternative does not mean that the alternative was chosen by chance. Like the aboutness which is above the spatiotemporal as explained in part 3.6.1.6.3, free will

power is above the spatiotemporal in that it can be free from at least some allegedly deterministic influences and negate them.

3.4.2.2.2 Indeterminism is not Necessarily an Argument Against Free Will.

If indeterminism is used to mean an occurrence of an event without any cause, its usage will be against free will: If a neuron fires for no reason, without any cause, and if its owner wills a certain thing because of that firing, then we cannot say that this person has free will regarding that will.

But allegedly indeterministic processes may also be used to mean a range beyond patterns so as there is a slack wherein the exercise of free will power does not produce an inconsistency with some patterns. In this case it may be compatible with free will. If by indeterminism, it is meant the unpredictability arising because of sovereignty of entities' and beings' exercise of will power, then, it is compliant with a will power and a necessary attribute of the universe.

3.4.2.2.3 Indeterminism is Part of a False Dichotomy.

Determinism-indeterminism is a false dichotomy against free will power. They do not mean anything about free will, and this dichotomy distracts the issue from its main axis. The question is whether will is real and distinctly effective or not.

This dichotomy presumes without any basis the non-existence of transcendent and sovereign entities or beings.

3.4.2.2.4 A Multipotential Cause Will Produce Events or Things Which Look Indeterministic.

If there are agents with will power as multipotential causes, then some alternatives will be equally willable. Therefore, the wills of the agent will not be predictable and deterministic.

If the physical universe includes such agents, then there will be unpredictable things.

Unpredictability in the universe is compatible with the claims for the freedom of will power. If all events were deterministic, then it would be impossible to claim a free will power for human beings. The unpredictability we observe is the result of multipotential causes.

3.4.2.3 There Is No Evidence for Indeterminism.

There is no necessity which requires that a cause must be a unipotential cause, so that its effect must be only a specific effect or in a specific direction.

On the other hand, quantum physics' findings demonstrate that there are fundamental limitations on our measuring ability. Hence, currently we cannot claim at any point of detail in any observation that we have reached the ultimate point and detected that deterministic or indeterministic processes underlie the reality.

Determinism is false as explained above. That the determinism is false does not show that things happen with no cause, in other words, it does not show that the indeterminism is true. Things may have no unipotential causes; this does not mean that they have no causes: They may have multipotential causes.

Things may seem to be random just because we lack information or because of multipotential causes.

The randomness, if true, would be built upon a framework which would contain relationships in any case. To have a probability for dice figures, in the first place there must be the dice. Space, time, or some other basis would be accepted as necessary truths upon which uncertainty may happen. And they would be accepted as transcendentally contained and processed.

Therefore, unpredictability is only observed partially. So, indeterminism cannot be a necessary thing and it cannot be as a law or principle. And there cannot be a necessary thing or principle behind it.

3.4.2.3.1 The one who Claims That Things are Random Undermines his own Reasonability.

A statement made based on random processes cannot be rational, like a statement which defends determinism. If any reasoning is reducible to the acts of particles/ fields that have no transcendence and truth value, then the resulting conclusions will not have any truth value either.

Some speak in the following lines of thought: Through reductive evolution which occurred as a result of a combination of chance and determinism there appeared beings with logic; so, deterministic and indeterministic processes may be a basis for reasoning. The ones who have logical capacity survive.

Obviously, if we flip a coin to find the answer to a problem, the result of the flipping will not have any logical value, even if the result sometimes may overlap with a truth and even if it may be systematically useful in some cases. In accordance with this, it is clear that many people with opposing views on big issues survived, and keep surviving although it is clear that all of them cannot be true at the same time. This issue is examined in detail in part 3.4.1.2.2.3.

3.4.2.3.2 The one who Claims Uncertainty has the Burden of Proof.

If someone tells me that the table will move two meters to the right without any cause, then he has the burden of proof for his claim. Because that which does not exist, cannot make itself exist. The power necessary for moving the table which does not exist cannot make itself exist.

If he claims that I have to prove the opposite, then he claims that I have to do an impossible task, in that there can be billions of claims which I will have to take seriously. Also, if he is correct in his argument, then I can claim that the table will not move, and he will have to prove the opposite of my claim.

Likewise, if one claims that a specific atom will decay or a particle/wave will change its trajectory with no cause, then he has to prove this.

3.4.2.3.3 Quantum Physics Demonstrates That Indeterminism is Unprovable.

Indeterminism cannot be proven because of quantum processes and quantum physics. Quantum physics and quantum world demonstrates that there are limitations in measurements that cannot be overcome. This impossibility is not caused because of the deficiency of our tools, but because of the fundamental structure of things.

For example, there may be a deterministic mechanism that connects one particle to another, which causes the allegedly indeterministic findings in Bell's inequality experiments, or in double slit experiments. So, because of this, in principle, neither determinism nor indeterminism is provable.

Question 45.

Is quantum physics relevant for the macro world? If the quantum world is indeterministic, would not big numbers of probabilistic events balance and cancel out?

Answer 45.

The macro world contains the quantum world. Hence, it is influenced by it. In case there were no systematic interactions of the quantum world events with the other systems then we might say that they would mostly cancel out. But quantum phenomena are parts of systems. Hence, as such, they have implications in the macro world.

3.4.2.3.4 Any Will Cannot be Demonstrated to be Based on Indeterministic Processes.

Unpredictability can be only an aspect of the outcome, not an aspect of the process. Regarding the effects of will, only the outcomes are observable, while the whole process is not.

We make certain choices through random-looking mechanisms. For example, to delete two things on the mobile, it may not be worth thinking which one to delete first. So, we may delete one according to a trivial memory, or according to a firing of some neurons. But maybe had we thought we could have found a reason to delete a specific one of them first. But its cost would be bigger.

This does not mean that we could not delete the other one first. To let it to the minute physical processes of the brain or not is up to us. Saying the opposite is a faulty generalization. Saying that we could not do another thing, is without any basis. So, even if some outcomes of the willing processes look random, this does not show that they happened without any cause, or that there was no multipotential

cause behind it. Even if there was no unipotential cause behind it, there was a cause.

The statistical distribution of the outcomes of multipotential causes may in some cases -especially where the OTBT is not applicable- equal what is called a random distribution. But such cases or results will not be evidence for the existence of random events based on random processes. In any case, an agent with a free will power as a multipotential cause, may choose to produce wills which look random as much as possible.

3.4.2.4 Indeterminism Is False

3.4.2.4.1 Negation Tests

If any will is claimed to be uncertain or reducible to uncertain spatiotemporal events, then the agent may will in a way to negate that claim. This issue has been examined in detail in part 3.4.12.1.

3.4.2.4.2 There Cannot Be Indeterministic Events.

Indeterminism requires an event that originates from nothingness. It requires that that which was not, is. Obviously, that which was not cannot cause itself. If something causes it, then it is not indeterministic, if indeterministic is defined as something with no cause.

Indeterminism requires an effect without any cause and not controlled by deterministic forces. If there is a random-looking behavior, there needs to be a source of power which makes the swerving from the deterministic path. The source may be God or a multipotential cause. If a particle goes out of its deterministic path, there needs to be a source of power which causes this change.

Can a random process exist? An effect can be traced back to a whole, or to a whole prior to it or structurally below or above it. A non-existent cannot make itself exist. And we cannot trace back something so as to produce infinite regress, since in this case, nothing would be a self-sufficient cause of that effect. So at least theoretically we have to assume a theoretical whole that is the basis of effects.

If there was an allegedly random coercive influence of a part of the agent on the agent which produced an alleged will, then this would not be a will if the part does not have the elements of the will. In this case, the influence would be a physical influence, and no matter whether it is deterministic or indeterministic, the alleged will would be no more than an illusion.

3.4.2.4.3 The Points Against Determinism are Applicable for Indeterminism as Well.

As noted above, uncertain events allegedly happen within the broad deterministic spacetime and relationships. To have an uncertainty in the decay of an atom, in the first place there must be the atom. Therefore, the points against determinism are applicable for indeterminism as well. For example, if the decay of the atom relates to the atom, then the problem of infinite regress, and the problem of beginning are also applicable for indeterminism.

Also, there are common points between determinism and indeterminism. This is another reason for why many arguments against determinism are also applicable for indeterminism. For example, if a zero-width time bracket is not possible and it requires some kind of transcendence within time for determinism, it is also applicable for an allegedly uncertain event or effect.

One who maintains indeterminism, refutes this very claim, since it cannot claim to be logical. Such a person will also be within the inconsistent situations regarding the daily life, similar to the

determinist. No matter whether the universe is deterministic or indeterministic, there are wholes at different layers which are the causes of what happens.

In most of the above issues, indeterminism has weirder consequences. Hence, indeterminism may be refuted even more strongly than determinism.

For the counter-arguments against indeterminism that overlap with the arguments against determinism see part 3.4.2.

Question 46.

Even if determinism is false, and indeterminism is false, is not a combination of the two possible and sufficient for the working of the universe?

Answer 46.

Note that our arguments are applicable in any range or scale. For example, the problems of laws of nature are applicable for any scale. So, if one says that the laws apply up to this range, but beyond it indeterministic processes take over, the arguments against laws will invalidate that the laws are applicable in that range. Also, the arguments against indeterminism will be applicable beyond that range.

3.4.3 Will Is an Irreducible Power.

And within the land are neighboring plots and gardens of grapevines and crops and palm trees, [growing] several from a root or otherwise, watered with one water; but We make some of them exceed others in [quality of] fruit. Indeed, in that are signs for a people who reason.

(Quran: 13/4)

Irreducibility of the will overlaps in many respects with the irreducibility of the agent. I will explain the irreducibility of the agent in part 3.5.6.4.2 as it is more relevant with the agent. As the arguments in that part are applicable for the will power as well, we will not get into the same issues here.

3.4.4 Will Power Is Not Fully Coerced/ Forced.

And it is not for a soul to believe except by permission of Allah.

(Quran: 10/100)

From the verses and explanations within the previous parts, it is clear that according to Islam, freedom of will does not mean that we as agents are not influenced by anything else. An event, a person, a verse, a physical condition, or something else may influence our wills. The verse above shows clearly that the freedom of human being is within a certain range, and subject to conditions. Yet the will power is real and categorically immiscible. For example, you may have the ability to turn the steering wheel to whichever direction you want. But imagine that you are driving on a road to the left of which there is a cliff. Are you able to turn it to the left? You are able, but you probably will not turn it to the left. Yet, if you want to turn it to the left, you can navigate with your free will power through your resources, remove what prevents you from turning it to the left, and turn it to the left: For example, you can change the position of the car, or stop it and turn the steering wheel to the left.

Freedom of the will does not mean that the agent is free to produce all states or any combination of states.

Whenever there is a positive will power which has the potential to make a change in the universe, there is the freedom of will. It is not necessary that this power has been actualized. By change I do not

mean the execution of the will, the formation of the will also is a change in the universe.

However, there may be situations where the agent is unable to will a specific will. For example, there may be a better alternative totally inaccessible to the agent. In this situation, the agent does not have the free will power regarding that alternative. Therefore, he does not have responsibility either regarding it. Note that free will power is not the sufficient condition for responsibility.

Partial coercion by prior or simultaneous causes other than the agent upon the agent does not always mean that the agent does not have free will power.

However, if an agent is coerced so that he does not have any room for freedom, then he does not have any will. If determinism was true, there would be such a situation.

Some claim that free will must have no limitations by definition. Some say that it may have limitation by definition, but even a free will with some limitations does not exist. Some, based on religious convictions, claim that based on the foreknowledge and power of God, even a limited free will is not possible. None of these are acceptable according to Islam.

Question 47.

If someone is hypnotized, or has a tumor in his brain, is he coerced?

Answer 47.

Some hypnosis professionals say that though under hypnosis it is not possible to make the agent will certain activities. For further details see the question about manipulation in part 3.4.12.1.1.1.3.

Tumors may cause behavioral changes. Likewise, neurons influence the will. There may be situations where objectively the agent cannot overcome the effects of the tumor. Or the effect may be in a spectrum, maybe making the act of the agent 90% or 80% predictable. Beyond a certain level, it may not be expected from the agent to behave normally. But below that level, he may be expected to overcome the effects of that physical condition.

And if he overcomes stronger effects, then he will have achieved a praiseworthy success. In Islam, the agents are not expected to be totally free from any conditions that push the agent to behave badly. On the contrary, there are almost always challenges such as physical, environmental, intellectual, financial conditions and so on.

Some of these conditions may remove the obligation to do or not to do something. This is in accordance with the Quranic principle that Allah does not charge anybody beyond his or her capacity. For example, if there is nothing to eat, a person is allowed to eat pork although normally it is forbidden. Hence, it is not a black and white issue. Also note that the existence of free will power does not mean that the person necessarily has all requirements of responsibility. Delaying smoking for one minute by using the will power is a level of freedom of will.

On the other hand, a person with a tumor in his brain that affects his behavior is in an abnormal situation. A clock in whose cogs a strange object got stuck does not show the correct time and it does not work. This does not mean that a clock which does not have this problem loses its ability to show time correctly.

That tumor is not a permanent and essential element of the agent, and it may make the agent will that bad behavior. So, it is possible that the agent is not able objectively to be rational and that the tumor which is not a rational thing overrides or suppresses the reasoning of

the agent. It may also be possible that the agent has the capacity to prevent the influence of the tumor.

Showing the tumor cases as examples corresponding to neurons is fallacious. Because in the above example, the cause that prevented the clock from working correctly does not exist in the normal situation. There is no reason to assume that it will not perform its functions in its normal state.

Also, there can be disorders within the fabric of the brain as well. This will correspond to the tumor again. A person runs away from the fire. This person is normal, because this relates to the OTBT and the agent's capacity to process it. If the agent cannot will for any reason to run away from the fire, then it is likely that he is not responsible and that he does not have the necessary capacity to be responsible. So, in most cases in worldly issues, there will be such objective benchmarks which can demonstrate whether the agent has free will power or not.

For example, someone who has brain tumor, may behave very badly to a specific person on certain occasions; but in the presence of others to whom he wants to look like a nice person, he may behave very kindly to that same person.

Sometimes, it may be difficult to distinguish whether the person with the tumor is under its influence or not. Anyway, Allah knows what is going on in the brain and in the mind of the person with that tumor. In worldly terms, we may develop tools to make such a distinction.

Some opponents of free will say that the procedures within everybody's brain is as coercive as those within a brain with a big tumor. We cannot say that every agent's behavior is coerced like

someone who shot tens of people because of a coercive tumor in his brain.

If the agent acts in accordance with an objective OTBT, we cannot say that he acts as if there is a tumor in his brain. If a woman does not want to be burnt alive and escapes, we cannot consider her as if she has a disorder like a tumor, because she willed against the irrational custom of her society.

Many norms are obvious, common, and binding like “not killing an innocent person”. Under determinism or indeterminism, if a person kills an innocent person, one may say that it is like a tumor case.

In a tumor case, there may be a divergence from the norm that the agent with a tumor may know. He does not want himself to be the victim of such a divergent act. Then we can say that the agent should try to prevent his act against the clear norm, especially if he is in a state so that he would try to prevent such a crime if it was against him.

3.4.4.1 Types of Limitations

Free will may be limited in different ways.

A classification of limitation is related to accessibility or inaccessibility of knowledge related to an alternative. For example, the agent may have limited and inaccessible knowledge about the alternatives. A person who lived in the old times, may have no knowledge that producing a specific tool might make certain things easier. This accessibility may relate also to the attributes of alternatives. A person in a certain environment may have no access to the knowledge about the bad effects of smoking. Hence, he may smoke.

One of the limitations is generally classified as nature and nurture. An example related to nature may be like a person's forgetfulness, or jealousy. An example related to limitations related to nurture may be the quality of education one has got.

Another classification of limitations is internal and external limitations. The traditions of one's society may influence a person. This is an example about external limitations. A person may be blind. This may be an example for internal limitations in accordance with the borders of the agent.

A third classification of causes which produce limitations is structural and sequential. An event which caused a person's parents move into another country, because of which that person has been exposed to a specific culture which influenced him sequentially caused limitations upon that person's wills. A structural limitation may be an internal or external influence that causes or influences the will power in a certain direction. For example, the legal system of a society may influence the wills of people in a certain direction. Or the agent's internal structure such as being woman may prevent her from willing to do certain jobs.

A fourth kind of limitation may be related to the ability to perform the will. For example, if in a certain context the person does not have enough money to travel to a certain country, then he may not will to buy the flight ticket to travel there.

In some cases, like the limited access to knowledge about an alternative, it may be impossible to overcome these limitations. But in some cases, some of these limitations may be overcome.

These limitations may also be enhancers for the will of the person in a certain direction, like instead of limiting the access to certain information, allowing him to access specific information. An example for this may be the information pollution which make people will

unnecessary activities. Yet in an absolute sense, even if they enhance the will of the person in a specific way, as those influences may affect the direction of the will in whatever way, in total, we can consider them as limitations.

The limitations are not generally like the walls through which a person cannot pass but between which he can move freely. They are rather, like walls plus coil springs tied to the person and to the walls which limit the movement of the agent. So, for example, when the person wants to move toward the right wall, the coil spring tied to left wall pulls him in the direction opposite to his preferred movement. There may also be many spring coils some of which push, some pull in many different directions. Yet, the agent has its inherent power. This similitude is very indicative of the deniers of free will who say that in any case there is a cause for the will: In whichever direction the agent wants to move, there are indeed some coils which push and pull him in that direction. Yet, this does not mean that their powers are always bigger than the agent's powers. There can be coil springs which are more powerful than the agent; even in this case, the agent may have his some free will power, even if he cannot overcome the specific coil spring. And in any case, if because of such a spring he cannot reach the optimal wall, we cannot say that he is to be blamed, we can say that his freedom was limited so as to remove his responsibility.

3.4.4.2 System of The Limitations

Our reasoning power and knowledge have influence upon the formation of wills: As an agent who has free will power, I can will to fly to the sun unaided. But I am a human being. I do not have the power to move within the space unaided. Here we see the influence of my physical structure and the environment upon my will. Let us suppose that I have the means to move in the space unaided. Then, shall I will to go there? I will consider that I have feelings and how

long it will take to go there and come back, and that I will miss my family, my city, and so on.

Here, we see that our capacities within the immediate vicinity of our will power, such as our qualia and consciousness limit our wills further.

Hence, by default we can have a huge set of potential wills. But, each aspect of our own being and environment narrow down those potential wills if we want them to be actual. However, I can will that without disturbing anything, I would be going there and coming back very fast without missing my family, being shielded from the sun's harmful effects, and so on.

If we consider that in essence, the will power is potential in its nature; those limitations apply essentially to the actualization of the will, rather than its formation. In fact, this will power which produces goals gave humanity its present status above many other things, even though many goals have not been actualized.

On the other hand, in Islam, the will has a value of its own even if it has not been actualized. The Prophet Muhammad (PBUH) said in a hadeeth, "the works are evaluated (by God) according to intentions"⁷⁸. Therefore, according to Islam, if a person had a sincere will to perform a certain good deed, but he failed to perform it, then he may be considered to a certain extent as if he did it. A statement of the Quran in parallel with this hadeeth is as follows:

Whether you show what is within yourselves or conceal it,
Allah will bring you to account for it.

(Quran: 2/284)

⁷⁸ (Bukhari .)

3.4.4.3 Limitations on Free Will and The Context

It is important that the limitations upon the will must be considered in their relationship with and in their relevance to the context. A limitation on a certain will in a certain context, may not be a limitation in another context.

For example, if a person does not have driver's license, his will to drive to the school will be limited. But this limitation will be somewhat irrelevant regarding what he will eat in a restaurant.

3.4.4.4 Semantics Underlying This Book and The Limitations of Free Will

In our context, a certain range of freedom for the exercise of free will is fundamentally sufficient, no matter how large is this range.

Suppose that all human beings are manipulated by aliens except for one will relating to one act of one human being who is otherwise not free in his will. Shall we say there is free will? Yes. Even if there is a limited range of free will power, this is sufficient for the purpose of this section. This is the setup of our semantics in our work. Note also that the free will power is not necessarily something limited to the human beings.

So, we say that an agent is not free under certain conditions and he is free under certain conditions. There may be actual situations where we do not have free will. In cases where there is no free will, we say there is no responsibility. Hence, if it is possible in one range, then this entails that it is possible that one "can" reach freedom of will in certain ways, as long as certain conditions are satisfied. If these conditions can theoretically be satisfied, the statement 'there is no free will' becomes false within the general conceptual framework of this book.

3.4.4.5 Limitations Do Not Always Mean That There Is Necessarily Tension with Certain Circumstances

As human beings, we move with the rotation of the earth, whether we will or not. We also move around the sun. Also, we move with the sun within our galaxy. We may have big limitations in stopping our movement with the sun within our galaxy. However, this does not mean that we cannot move within our city.

Hence, the range of free will power is not necessarily in tension with other processes in other trajectories or scales.

3.4.4.6 Some Limitations on The Free Will Power May Be Useful or Necessary.

Limitation on wills is not necessarily a deficiency. For an agent who does not feel any pain or who does not have necessary reasoning power, it may be more likely to will to enter for example a fire. Some limitations may cause the formation of more productive and permanent systems. The limitations upon the agent may make him produce better wills. For example, our lack of knowledge about quantum world may prevent from willing to produce certain things; hence, we may want to learn more about that world, and this knowledge may open new ways for new wills.

3.4.4.7 Within the Range of Responsibility There is Full Freedom.

Allah does not charge a soul except [with that within] its capacity. It will have [the consequence of] what [good] it has gained, and it will bear [the consequence of] what [evil] it has earned.

(Quran: 2/286)

Absence of freedom cancels responsibility. Hence, in respect to the range of responsibility, there is full freedom of will.

Limitedness of free will relates to the above verse of the Quran where responsibility is said to depend upon capacity, where capacity relates also to the will power. Outside capacity there is no responsibility. So, if there is even any limited free will then it has some aspects related to responsibility. If there is a limited freedom of will then that is sufficient to defend free will and responsibility: There may be responsibility whenever and as much as there is free will.

Let us address some points related to the range of responsibility:

Free will is not a black or white issue. Once the existence of free will is established, its extent will not matter very much. Once it is established, then we can work on how to optimize and extend it. Then our discussion will be about its kind, degrees, and categories. And more specifically, whether human beings can have this free will in the context of responsibility is one of the key issues.

The free will power is an attribute of the agent in general, and not an ability related to a specific choice situation. This ability is intrinsic to the agent, and exercisable in the right conditions. That the conditions of a specific situation do not allow its exercise, does not entail that it does not exist, and that this ability is inherently limited or absent.

If a person overcomes once some pressures by his free will power, this shows that this power is not inferior to those pressures, and that it can overcome them. Hence, this specific occurrence can be extended to many other cases: therefore, he has and can have free will beyond that specific case. Responsibility does not require the absence of any influence. There can be influences, but in order to remove or limit responsibility, they must be coercive.

For example, if someone stole one million dollars, this may be influenced by his bad education on ethics. So, to be punished, should not he be fully free in order to be fully responsible? In this situation, the agent has full freedom as it relates to his act. If someone predicted that he would steal, he could negate it for a better result, for instance for 2 million dollars⁷⁹. He is smart enough to know that his act is not good, if we assume in this case that he is a normal person with the ability to manage his daily affairs. And accordingly, he would react negatively if someone stole his money.

Let us take another example: If the red candy is poisonous, and if my genes have a tendency to eat/ choose the red candy, and if I know that the red candy is poisonous and if I will to eat it, then I am fully responsible since there is no coercive cause to eat it. In this example, the tendency arising from genes is not coercive, hence it does not have any influence in removing or diminishing the freedom of will.

3.4.4.8 Alternatives

An alternative broadly is a willable thing as opposed to other such thing(s). The moment we have said alternative we have already implied freedom of will, because, we conceived them transcendently. As a broad term, the “alternative” is without being yet filtered through the reasoning power of the agent. Alternative is external to the will power. The will power is there even if there is no alternative. It is the object of the will power. Further details about alternatives will be given in parts 3.6.5 and 3.7.1.

3.4.4.9 Implications of Recognizing the Boundaries of Free Will

Having free will in certain ranges and conditions enables us to work on what these ranges are and what are their conditions and

⁷⁹ See part 3.4.12.1 about tests for further details.

boundaries. Recognizing free will and its limitations will enable us to find out how we can overcome the limitations, enhance our free will power, and get better achievements.

3.4.5 The Will Power Interacts with The Universe.

Energy is broadly defined as follows: “the ability of a physical system to do work on other physical systems”⁸⁰. Hence, the will power which channels energy, interacts with the universe. So, it influences things. It is not an epiphenomenal concept. Nor it is supervenient upon the physical.

Two magnets within a falling box pulling each other behave in accordance with the related wholes of which they are part of. The essential is the transcendent in the atom, electron, gravity, consciousness, time, or space. The wholes have their distinct realities. There is no reason that the agent or the will power do not have their distinct wholenesses and features. And there is no reason to claim that would not they interact with other wholes. Parts 3.4.12.1 and 3.5.3 explain in detail how they are distinctly real, their processes, and their interactions with the universe.

3.4.6 Will Is A Sovereign Power.

He said, "Indeed, Allah has chosen him over you and has increased him abundantly in knowledge and stature. And Allah gives His sovereignty to whom He wills. And Allah is all-Encompassing [in favor] and Knowing."

(Quran: 2/247)

He said, "Is it other than Allah I should desire for you as a god while He has preferred you over the worlds?"

⁸⁰ (Wikipedia 2020)

(Quran: 7/140)

And surely, We have honoured the children of Adam, and We carry them in the land and the sea, and We provide them with good things, and We have made them to excel highly most of those whom We have created.

(Quran: 17/70)

And [mention, O Muhammad], when your Lord said to the angels, "Indeed, I will make upon the earth a successive authority." They said, "Will You place upon it one who causes corruption therein and sheds blood, while we declare Your praise and sanctify You?" Allah said, "Indeed, I know that which you do not know."

(Quran: 2/30)

The word "sovereign" in relation to the owner of the will power is used here with the meaning of "having a distinct capacity to make changes upon the universe". It also implies not to be epiphenomenal and/or supervenient upon something else. Spatiotemporal patterns are not superior in kind to the will power. With our free will power we can create laws or patterns like legislation or routines of doing something that are similar to the physical patterns.

Physical laws seen as pushy explainers by some, allegedly drive the behavior of so called fundamental/ elementary particles. So, they are considered superior to other things in terms of efficacy. However, as we explain in parts relating to holism and falsity of reductionism, every sovereign whole⁸¹ is real and influences other things to some extent. Likewise, the agent is also real and has intrinsic influence.

⁸¹ The sovereign wholes are explained essentially in part 3.5.3.

The presumption of some is that if the agent wills an alternative, we can trace it back to a physical event. This may be true, but tracing it back to a physical event does not mean that the physical event was unchangeable by the will power.

As explained in part 3.5.3, parts are open to change to some extent. They may change their behavior when they are part of a specific sovereign whole.

So, a sovereign whole is free and can override the allegedly deterministic relationships within a certain range. Likewise, the will power of a sovereign whole is not reducible to any parts.

Also, as we see in the following verses, the sovereignty of will power entails making positive or negative changes on the owner of this sovereignty:

That is because Allah would not change a favor which He had bestowed upon a people until they change what is within themselves. And indeed, Allah is Hearing and Knowing.

(Quran: 8/53)

And [by] the soul and He who proportioned it

And inspired it [with discernment of] its wickedness and its righteousness,

He has succeeded who purifies it,

And he has failed who buries it [in corruption].

(Quran: 91/7-10)

We are subject to many influences toward specific directions. But also, we have the power to control them, or let them govern. A person with a narcissist personality or brain tumor may choose to go to a

doctor for cure, and the doctor according to available means may cure or not.

Or the person may choose to think and learn for behaving better, and think that he has to behave to others as he expects others to behave to him. He can improve himself.

However, it is also possible that his good side is buried, his good light is extinguished, and bad desires and evilness invade and take full control of him, and he becomes an agent of evil, and the agent's whole becomes evil.

In the following verse, we see the supplication of Prophet Solomon (PBUH) to God so that He makes him have the attribute of gratefulness:

So [Solomon] smiled, amused at her speech, and said, My Lord, enable me to be grateful for Your favor which You have bestowed upon me and upon my parents and to do righteousness of which You approve. And admit me by Your mercy into [the ranks of] Your righteous servants.

(Quran: 27/19)

A sufficiently consistent person able to continue a daily life has sufficient sovereignty to be responsible.

Sovereignty automatically implies freedom. If something has a distinct capacity to produce changes, then it also has freedom. Having even a small amount of power means at least a limited freedom. As the agent has certain transcendence, he may exert his power over a range as opposed to deterministic understanding where power is instantiated and transferred between infinitesimal things.

This sovereignty combined with a transcendent knowledge produces a big power and freedom in that the owner of these attributes can

exert big effect by planning and organizing based on these attributes. Hence, the freedom is not necessarily proportional to the direct physical effect of the agent upon the physical world.

The default is the sovereignty of the agent and hence, the freedom of the will. Because the agent is distinct, and logically first there is the agent; then there is the will. If there is a constraint, then this means that the constraint is secondary. Let me clarify my point with the example of a compatibilist: For a compatibilist, does an agent have sovereignty? The compatibilist views the agent not as a transcendent multipotential cause. Therefore, we cannot answer this question positively. For the compatibilist, determinism where there is only one actual alternative, may be true along with the existence of free will power. However, it is obvious that with just one alternative and without the agent being able to go beyond it we cannot claim the existence of any sovereignty, hence a freedom of will.

Freedom of will does not require that there is no cause for the will. There may be a cause but the agent has the ultimate proper power to will an alternative or not. Every cause is not coercive upon the agent. The agent may have willed to eat blue candy and this may be caused because of a nice day travel in the sea and due to relevant neuron firings. But if the agent can supersede this, then he has sovereignty. So, this ultimacy and unboundness of the will power is an important sufficiency element for the freedom of the will. Here ultimate means that in the relevant context, it is the strongest power and it is the top or highest power above which there is no coercive power other than the permission of Allah. The negation experiments and brain observation experiments in part 3.4.12.1 are relevant in this respect.

Question 48.

Why did God create the things that influence toward evil and sovereignty instead of not creating negative influencers? This way would not the world be a better place?

Answer 48.

A better place is a subjective concept. A place where one cannot have more than what he has been explicitly given, or where a person does not have the freedom to reject God, or where a thief is not allowed to steal may be seen not so good by some. In this world, everybody gets what he wants and takes risks. On the other hand, a world where there is no distinction between the good and evil, and where the good and evil are dealt with in the same way may not be so good.

Question 49.

If everything has this sovereign power then why things behave in patterns?

Answer 49.

Because Allah defined and ordered certain things to behave in patterns in certain ranges, and in freedom in certain ranges. Also, some relationships like patterns are necessary so that a sovereign whole may will and act. For example, without having foreseeable implications of a will, a sovereign whole cannot exercise his free will power in respect to his goals.

Question 50.

A verse of the Quran says that even if the disbelievers have been returned back, they would return to what they did. Does not this mean that they cannot do otherwise and that they do not have free

will power? Does not this mean that they have a nature which causes them to choose the evil, though they have not chosen their nature?

Answer 50.

A person may choose something even though he is not forced to choose it. Although such people did not “have to” choose evil since they are considered responsible, they chose the evil as said in the following verse:

But what they concealed before has [now] appeared to them. And even if they were returned, they would return to that which they were forbidden; and indeed, they are liars.

(Quran: 6/28)

And even if he is sent back, he would choose the evil though he did not have to choose it and though he saw the consequences. He chooses it because he prefers it. If he had to prefer it because of his unchangeable structure then he would not be responsible. But his structure is not unchangeable.

Let us imagine a robber who is caught while robbing. If he had the opportunity to go to the past, it is possible that he robs again after making some changes to his plans. Doing the same things if returned does not entail the absence of will power.

But they became divided into sects, each party rejoicing in that which was with them.

(Quran: 23/53)

Low effort and arrogance are important aspects of being evil.

Therefore, exercise patience like the messengers of perseverance before you exercised patience, and do not be in haste regarding them(, the disbelievers).

(Quran: 46/35)

And an average person knows this. Hence, those who do not do what this knowledge entails are making a choice.

The evil is not generally perseverant. This is a key aspect of failure while having free will power: They fail because they do not use this power together with their other powers, not because something forces them. They see themselves self-sufficient unjustly and unreasonably.

As shown in the parts related to determinism and indeterminism, both are false. If they are both false, then there is one alternative left: There are sovereign beings, that either originate or are assigned this sovereignty. Either Allah or those that He empowers and sustains do and direct things.

The ability to have done otherwise without sovereign and distinct power does not mean much because if it could be otherwise by random things or events, this would not mean that the agent had freedom. So, the key is sovereign power. So, if a sovereign and distinct power of the agent enables him to do or will otherwise then this ability will be relevant.

Hence sovereign will power requires the ability to will otherwise. But mere ability of an agent to produce a different result while being supervenient upon things, does not mean that he had the sovereign will power. Because the ability to do or to will otherwise in exactly same multiple states may also be related to other sovereign wholes instead of the sovereign whole of the agent in a specific situation. And such an apparent ability to will otherwise would neither mean nor demonstrate that there is a distinct sovereignty of the agent in

that specific situation: Though the agent has his free will power, in that specific situation it may be unexercised.

As there is no determinism and no randomness, at the very bottom there is deliberation. The result of the will power can not be separated from the very being of the agent. His being good or evil is not prior to the will module of the agent. The agent is not normally fully bound with any limitation. So, by willing it becomes good or evil. See part 3.4.12.1 related to negation experiments and brain observation experiments which prove the sovereignty of this module. Also in part 3.5.3 we will see the details of the sovereignty of will power.

Question 51.

If Allah is One, if there is no room outside Him, if nothing can have any power against Him, and if everything needs Him in order to exist and behave, how is it possible that Allah creates beings with free will power, and with sovereignty? Does not the creation of sovereign beings mean that there are autonomous multiple centers of power, and would not these mean that there is no just one God? Even if the powers of these sovereign beings may be limited, would not this mean that there are different centers which are not different in kind but only in degree? If the unity of God is an absolute necessity how can such sovereign beings and centers of sovereignty be created and where can they be created if there is no room beyond and outside God, beyond His power? Would not then such beings mean that God is limited and there is basic multiplicity at the level of God? And therefore, would not the existence of free will for things other than God be impossible due to the unity of God? Similarly, Allah for example being the Seer, how is possible that He creates beings who have seeing capacity which are not God? How can Allah create consciousness for another being?

Answer 51.

Allah is the fundament of all existence. He is the Self-Sufficient, the One. There is no room of divinity that relates to consciousness, energy, knowledge, sovereignty, and so on outside Him.

And there is not a thing but that with Us are its depositories, and We do not send it down except according to a known measure.

(Quran: 15/21)

By our sovereignty we can create a number system wherein there are certain relationships. Within that system, a specific number that we determine will have certain effects, though it was not before. Likewise, God's power and sovereignty is able to create such systems wherein He can determine specific sub-sets and elements to have effects. Hence, He creates canvases like black paper, which is limited but wherein each point is assigned certain powers and those that relate to sovereignty. Those canvases are not parts of God; since anything belonging to the person of God is with no limitations. But canvases that He creates are with limitations since in the first place they are sustained and designed by God. We do not have the capacity to create new mass, but we can imagine things. And what we imagine is real, though it is imaginary, we make it exist as an imagination.

The "potential" of each existence already exists within the power of God. Though their specific and absolute location does not exist specifically. Like black points on a black paper. A specific black duck may be a combination of different black points on that paper. Which black points they are is not important and their specification is not necessary since these points are also defined and sustained by God. This is just a small similitude for the sovereignty power of God to give an idea about why there may be other sustained sovereign beings.

Within this basis there is no room for randomness or fundamental determinism. Allah has whatever the creation needs in order to exist. The black paper contains whatever the black duck picture needs. But they do not and cannot have actuality by themselves. That is why Allah says:

Indeed, Our word to a thing when We intend it is but that We say to it, "Be," and it is.

(Quran: 16/40)

When He decrees an affair, He only says to it, "Be," and it is.

(Quran: 19/35)

Before, it is not in an actuality state but in a potentiality state within the creating power of Allah. This power contains the potential for any attribute that we know or we do not know, that a being may have, such as consciousness, will power, sovereignty, space or time that anything can occupy...

This is a communication, like a command containing the will about what points will be actualized in a unity. Note that these are similitudes translated in our concepts, the essential of potentials is different. Not activated means that that thing does not exist as itself. It exists as potential within the power of God to be created. So, before a cat is activated it does not exist as a cat with four legs and other parts, except in the knowledge of God, as something that is possible. This state of potential is not a distinct potential of a self-sufficient cat. In other words, we cannot say that we are eternal as God but God merely activates us. Our potential of being created with our powers within the creating power of God is not what we actually are.

Even though all the dots of a drawing of a black panther exist on a black sheet of paper, we do not say that that drawing is there. This is only a similitude because it contains inherently our limitations.

The power of God does not correspond to that black sheet of paper. However, all that is necessary to create the creation is comprehended by God, yet, God is not limited to those.

As explained in the context of non-existence of nothingness in part 2.2.1.2, any dimension that is considered physical, mental, concrete, or abstract is likewise comprehended in an infinite extent by God. No such dimension is surrounded by any general or partial nothingness since nothingness does not and cannot exist. Whatever we need in order to exist, that is the power of God and His unity, exists. However, it is possible that Allah creates an essence from which He creates all things.

And there is not a thing but that with Us are its depositories, and We do not send it down except according to a known measure.

(Quran: 15/21)

Have you not considered your Lord how He extends the shadow, and if He willed, He could have made it stationary? Then We made the sun for it an indication.

Then We take it to Ourselves, taking little by little.

(Quran: 25/45-46)

In the above verse “We take it to Ourselves” may mean that the shadow does not exist any more as shadow but returns into the potentiality it had before existing.

In the above verse, taking to God is like a return into potentiality.

A return to God may have a meaning of getting closer to God’s communication because of the removal of certain barriers like ignorance, false gods, and so on and being in direct presence of God’s

judgment, His direct favors, and His more intense presence... The following verse mentions such a return:

Say, "Is it other than Allah I should desire as a lord while He is the Lord of all things? And every soul earns not [blame] except against itself, and no bearer of burdens will bear the burden of another. Then to your Lord is your return, and He will inform you concerning that over which you used to differ."

(Quran: 6/164)

Things are not reducible to God since God is of different nature.

When something is created, it is assigned the powers by the One, without whom it can be neither defined nor exist. $1 + 2 = 3$. Here 1 is real thanks to the Unity of the One and by the creating of the One. This potential belongs to the One, yet these numbers are not part of the One. It is not possible to take out "1" from the set of numbers, so as to destroy the set of numbers.

A whole constituted of parts can be deficient by the removal of parts. However, God is not constituted of parts and the creation are not parts of God.

Some parts may be thought of without their wholes. We can see some metal bars while they are not shaped to be a chair, while there is no chair. But in the logical order, the creation cannot be thought of before the unitary power who creates them.

Therefore, the Creator is always higher than the creation. Creating sovereign wholes never restricts the Creator.

The wholeness, completeness, independence, and unity of the One are fundamental, prior, and reached without reference to the

creation, though the potential of the creation can only be reached logically by reference to the One and Whole.

There is the potential of sovereignty of each creation within the creating power of God, though this sovereignty is not self-sufficient. It is given the command of 'Be', whereby it is activated and enabled to behave in accordance with its design and sub-elements. The powers of the creation is activated within the whole which is created, it does not exist self-sufficiently: If a human is created, it is created within the context of a space, earth, food, eyes, ears, atoms..., that is within the context of its parts, environment, past, future and so on. It needs not only God but also all those things and those things need him, though they all have sovereignty. The small relatively to the big is small but due and thanks to the One. Though its creation means being assigned this unity, it is not self-sufficient, yet it has a potential to be and to be connected to other potentials.

Unities of the sovereign sustained by the One and Self-Sufficient God are not independent unities. They are not unities of the same nature as the unity of the Self-Sufficient.

And because of that power of Allah to do all things, there is no fundamental determinism. Yet if Allah empowers a creation with sovereign power, then it behaves according to that power. From outside it may look like a random behavior, because sovereign power may produce both random looking and deterministic looking events.

In Islam, there is no false dichotomy of effective determinism and indeterminism since both are impossible and the reality is sovereignty. Sovereign power is an existent by definition with no bias, though designed conditions may constitute coercive and non-coercive biases. Determinism would mean a fundamental coercive bias and limitation for God. Randomness would also mean a

limitation, and plus it would mean that something originates from nothingness which would be an impossibility.

How to create a center that sees as a different being? It is an empirical and obvious fact that we have each our distinct consciousness. Both its unity within each agent and each agent's consciousness being distinct from another agent's demonstrates that it is deeply related to the unity observed within all things. We do not know how Allah creates distinct consciousnesses, but logically, the One who is able to create all things, is also able to create our consciousness. The relationships of the spatiotemporal with the consciousness, and the common points between the two demonstrate that the Creator of the universe and the Creator of the consciousness is the same.

If three objects constitute a shape of a triangle, then each point in terms of position is defined by their whole. The same applies for their parts. So, the unity surrounding all is necessary for all things. The same applies for consciousnesses. Hence, our consciousness is created and sustained by the One Originator of all. As in the example of the triangle, the parts depend on the wholes and on the unity which surrounds them. The space that connects the triangle is also unitary, but all unities are also surrounded, sustained, and united by the One Creator and Sustainer of all.

That certain patterns look like necessary and deterministic makes the sovereignty of the agent and his free will power look like contradictory. However, their fundamental nature is same, sustained and contingent. There is only a difference in degree, not in kind.

Question 52.

So, if God sustains things, is an object that we touch a part of God?

Answer 52.

An object is the creation of God. When something is created or activated it has a different nature. It is limited. It is mortal. Its existence with that nature can end. Such objects constitute another realm compared to the divine nature of God. Their relationship with God is different than their relationship with other objects. God's nature is different than the nature of that object. God surrounds all things. God is not that object, that object is not part of God, like a thought is not part of us.

However, there is a very special nearness between God and anything as emphasized in the following verses:

And We have already created man and know what his soul whispers to him, and We are closer to him than [his] jugular vein.

(Quran: 50/16)

And He is with you wherever you are.

(Quran: 57/4)

Also, note that the distances are also the creation of God and part of the unity between things.

Question 53.

What is the reality of the will module other than its parts?

Answer 53.

The reality of the will module in relation to its parts, is like the reality of its part in relation to that part's parts.

The details about this will be given in part 3.5 about the agent and sovereign wholes, and in part 3.6.1.8.2 about Libet experiments.

Question 54.

When we will something, we will according to how and what/who we are. But we have not determined how and what/who we are. So, how we may have the power to determine what we will?

Answer 54.

What and who we are are inputs for the free will power, they are not necessarily coercive causes upon it. They are also objects of free will power to some extent.

The question presupposes that “how and what we are” does not contain any sovereignty and/or any freedom. It also presupposes that parts have like a magic power different than the wholes. These presuppositions are unsubstantiated and are based on circular reasoning fallacy.

The free will power is a means. It is especially necessary to head toward what we have to be optimally, or what we have not to be. For example, I have consciousness and I may suffer if I am not healthy. This requires certain behaviors. But also, my certain attributes may urge me to do behaviors which are harmful for my health. In this example, that I will or do what my nature and good shape necessitates is not inconsistent with my free will power. My free will power is exercised in willing between the two types of behaviors. This issue will be examined in detail in part 3.6.2.

Question 55.

If the sovereign agent wills on his own, how can God be fully sovereign? Cannot the agent surprise God?

Answer 55.

The alternatives that we face do not originate out of nowhere or ultimately from the sovereign agent. They originate from and are created by Allah.

Since Allah knows all probabilities and the alternatives that the servant evaluates, and since He creates these alternatives and gives access to the servant for these alternatives Allah cannot be surprised. Furthermore, no will is finalized without the approval of Allah.

3.4.7 Will Is A Transcendent Power.

Willing entails perceiving one of two or more alternatives. If one perceives a whole set of alternatives, he can also contemplate just one of them.

As opposed to such a transcendent power, within a reductive physicalist view, point-like influences reach point-like parts of the agent. These influences act on those point-like parts in accordance with the spatiotemporal laws, then they create the illusory impression of agency. According to this view, for example, many photons from the red candy pass through many cells of the agent, each point-like elements reach point-like places within the brain. Even though some point-like elements interact, these interactions are also point-like. Hence, the whole of the candy is instantiated nowhere as an undivided whole. There is no such place wherein the holistic aspects of the candy can fit. The holistic perception of the candy as an alternative within the agent, is considered as an illusion.

We can translate the points in the universe into our brain. Or enlarge any region in our brain to correspond to the universe and choose a point from within it. We can will infinite amount or combinations of wills within certain boundaries. This is because we transcend ideas, concepts, ...

A counter-argument might be: “The points in our brain may be combined in infinite combinations even though there are less points in it”. However, here it is clear that there would be an essence or a power which would do the combination that would transcend the spatiotemporal distance between the points.

The agent encompasses a range in unity, rather than a point. This range may contain what he will actually will, and what he will not will. This range contains what is possible, and what is impossible. With his free will power, the agent does not consider the feasibility of each alternative within the range. So, at this point, without the consideration of the alternatives the agent may will any of the alternatives. He did not exercise his reasoning power at this point. And he does not need to exercise his reasoning power for all alternative sets. If the choice is important, he may need to exercise his reasoning power. But in any case, he may choose not to exercise it. In such a case, if he wills a specific alternative, this may be traced back to a neuron firing for example. But this does not mean that the neuron is a coercive cause. The whole of the agent and his essence is a distinct power to reverse what the neuron entails. The important point here, is that the agent encompasses all of the alternatives transcendently. And before the exercise of the reasoning power, which is not something that the agent needs to do necessarily in all cases, the pure state of the agent entails the ability to choose any of the alternatives. Whether the agent is obliged even under these conditions is explained in part 3.4.12.1 about the negation experiments and brain observation experiments and in part 3.1.1.3 about the causal relationships and the definition of free will.

In Islam, the agent is not reducible to point-like parts. And the agent can contain the unities of the alternatives. In this respect, the parts of the agent constitute wholes. The apparent distances between them are in fact connections within the whole of the agent. The

explanations about the sovereign wholes in part 3.5.3 clarifies the issue further.

3.4.8 Will Is A Distinct Power.

As the agent is a whole, it has its existence distinctly from its parts. As a sovereign whole has an existence distinct from its parts, sovereign powers and acts of a sovereign whole also have a distinct existence from the powers and acts of its parts. This distinctness does not mean that there are no interactions or overlapping points between them.

Say, O Allah, Owner of Sovereignty, You give sovereignty to whom You will and You take sovereignty away from whom You will. You honor whom You will and You humble whom You will. In Your hand is [all] good. Indeed, You are over all things competent.

You cause the night to enter the day, and You cause the day to enter the night; and You bring the living out of the dead, and You bring the dead out of the living. And You give provision to whom You will without account."

(Quran: 3/26-27)

In this respect, we see many examples of non separability, instant communication, goals of the wholes distinct from those of the parts. Likewise, parts may compensate duties of other parts and they can change and reorganize themselves for the goals of the wholes.

For example, the meaning of pen is not reducible to the letters of 'p', 'e', and 'n' in the word 'pen'; 'pen' has a distinct reality of its own. In the word 'kalem' in Turkish there is also this meaning though it does not contain the same letters. Again, each agent has his own consciousness and unity distinct from his atoms.

In part 3.5.3 we will examine that layers of wholes have their different characteristics. The essence, free will power, OTBT, knowledge, and consciousness of the agent have their distinct nature and influence over other layers, including physical layers and relationships. As the influences of consciousness, knowledge, OTBT, reasoning power are related to the free will power, they change the universe through their relevant layers. Their influence is not fundamentally different in kind than what the relationships between sub-atomic particles do. And as they influence other things through free will power, they have also their distinct nature and their own freedom. For further about holism and reductionism see part 3.5.6.4.1 .

A rock that is falling upon the earth, is also rotating around/with the earth. Both falling and rotating are distinct, even though taking into account all its movements within all frameworks and considering its overall trajectory, we can see that it is neither a line representing a fall in a certain direction, nor a line depicting a perfect rotation.

But the fall may be changed while rotation goes on, or the opposite: If something stops the earth from rotating, the gravity relationship between the falling object and earth continues; or if the gravitation relationship is stopped, the rotation of earth may continue in certain ways. So, they are distinct and the will power is distinct likewise from other relationships.

We are also rotating around the earth, but in the same time, we are being conscious, we exercise our free will power.

3.4.9 Will Power Is Unitary.

The will power has many inputs, and related powers. But the essence of the agent exercising the will power will mobilize them. This will will also be encompassed by the unitary consciousness.

3.4.10 Will Power May Be Very Effective And Efficient.

And We have certainly honored the children of Adam and carried them on the land and sea and provided for them of the good things and preferred them over much of what We have created, with [definite] preference.

(Quran: 17/70)

A question may come up as to how the direct spatiotemporal effects of the will power which seem to be so tiny as to be beyond our measurement, can have an impact on the macro world.

Assuming that a distinction between the micro and macro is reasonable, we should note that there is not necessarily big difference between the micro and the macro regarding the impact in the macro world.

A photon within a photocell operated door may open the heavy door, though without it, you may need lots of “macro” energy and tools to open it. Even a photon may be used to destroy the earth. So, the key is not energy but the structure, transcendence, knowledge, and truth. There is no proportional relation between the initial energy used by the will power and the results produced. Also, the same applies between wills, a small will may cause huge changes in other wills thanks to relevant powers of the agent.

Hence, though the free will power and its origin may seem small, its flexibility, transcendence, and other features make it superior to many other things. Again, like a bird who uses the orientation of its wings smartly goes very high with little use of energy, the agent with the use of his will and intellectual abilities may accomplish big results.

The amplification of small effects in the photocell example is applicable in the daily life as well. For example, if someone slept at 3 AM and he has to wake up at 6 AM for morning prayer, he may have difficulty in waking up though he set up the alarm and heard it. But let us suppose that he slept late because he watched a movie that he could easily have willed not to watch, since he was almost indifferent about watching it. Had he chosen not to watch it he could avoid missing his morning prayer. So, if things are difficult, probably there are stages where with timely and good decisions and wills a person might have avoided big troubles.

The goal is not to have more challenges. Life is already sufficiently difficult. Prophet Muhammad (PBUH) says “Make things easier not more difficult”⁸². It is not a virtue to make things more difficult and to overcome more difficult challenges that require bigger will power. Islam is very result oriented. We already need maximum will power to reach big goals shown by God and one should not waste his will power. If a person or community does not make good planning and prioritization, then they will achieve little results by big efforts. Allah emphasizes in the Quran that even He makes things according to a plan. So, planning, being proactive are necessary to make things easier and to reach bigger results with the power we have. If one does correct activities in correct times, he can be successful and get bigger results with the use of the same will power. Otherwise, in order to be successful, he may need a will power that is much bigger than what he already has and he may fail. The will power is something that can be depleted, so it must be used effectively.

One may buy a car for 100.000USD though a car worth 20.000USD would be sufficient. Therefore, he may need to pay interest, and then he may default, and lose his wealth, and get divorced then commit adultery and fight someone who asks his loan back and kill him...,

⁸² (Bukhari .)

his will power weakening all the time and his challenges growing... These do not only cause worldly problems, but also problems in his relationship with God.

Also, if individuals in a country are generally like this, then problems like current account deficit, inflation, and financial crises... may occur. If humanity does not take these into account, in global level similar things along with environmental problems, wars... may happen.

Hence "will power management" is quite important. Leadership in this respect from the individual to humanity is important.

Having well-designed routine and a good strategy will help us save will power which we can use for bigger goals.

Question 56.

We cannot resist gravity. For example, we cannot float in the air against the gravity even if we will to float. Likewise, if there is a very strong urge to scratch a certain part of our body, it may be likely that we cannot resist it, even if we will not to scratch. Though, we may know that scratching would be bad in certain situations. So, how and why would the neurons in our brain resist to such an urge while the neurons lay at the root of such an urge? And in any case, how could they overcome that urge?

Answer 56.

Our will power does not arise in the macro world. We cannot will to float in the air, and cause this way the floating of our body in the air. Some things happen in our brain and within our essence. Within our brain there are parts that correspond to our hands, feet, skin, heart, lungs and so on. There is also our consciousness that relates to conscious behavior, and in our consciousness as well there are parts

that correspond to the above-mentioned organs. There are particles within our brains that at least interact with our consciousness.

As a consequence of all these things, even if the gravity pulls our leg downwards, we can raise our leg upwards, though it is heavier than our brain, or the related neurons.

Our transcendence enables us to access the energy within other things. As of now, we know that the human beings are very special in this respect.

Even though the will arises unlike a force observable as the patterns of gravity or electromagnetic force, it is not the domination of the brain over the entire body. Rather, as explained in part 3.5.3, everything has a relationship with sovereignty; hence, it is a task sharing between the parts of the entire whole of the agent.

Hence, the effective aspect of the agent should be considered rather as an intellectual and cognitive activity qualified importantly with wider transcendence. In this respect, instead of the spatiotemporal composition of the agent, it is more correct to evaluate the OTBT of the agent, the powers of the agent, the powers of other influencers, their weights, relative positions, and so on.

In this context let us give an example to show how cognitive powers of the agent may constitute a big leverage to overcome the spatiotemporal factors that have influences on the agent:

A person may have an urge to scratch a part of his body, and the urge of this power may be 90 units. This person, may detect that this urge comes 80% of the times after eating something hot. The power of the urge to eat anything hot, may be determined to be 40 units when there is something hot on the table, and the power of the urge to buy it when shopping may be detected to be 10 units. The person has a resistance power to urges that amounts to 50 units. So, if an

urge to scratch comes, he cannot overcome it, he scratches, then, a wound, bleeding, and some other problems occur. But knowing these figures, that he will have trouble resisting against the urge to scratch after eating something hot, he decides to not eat hot things on the table.

In another scenario, he may have a resistance power of 40 units. So, he notes that he cannot refrain from eating the hot thing once it is on the table. But in the shop, he can stop buying the hot thing, since the urge to buy is just 10 units, which is below his resistance or will power. Like this, even with less will power, he can manage his wills, and exercise big power with his small will power. And, it is also possible to train and increase his will power.

Although our legs are heavier than our brains, our wider transcendence in terms of knowledge, qualia, and other respects, may outweigh the influences of the physical, since the physical has a narrower transcendence. According to the reductive physicalist or determinist, all things are considered to be reducible to the spatiotemporal, therefore, the effectiveness of the will power would be considered as unacceptable. But as we explain in part 3.5.6.4.2, physicalist reductionism is against logic and our empirical observations.

In this respect, the daily prayers, fasting, charity, pilgrimage are also tools to train and improve our will powers.

An important point here is that, we do not have full free will power, we have a limited amount of it. However, with the support of reasoning and arranging things upon which we can make changes, we can reach in many cases results as if we have full free will power.

3.4.11 Location of The Will Power

If the agent observes parts of the brain, and changes them, then where is the will power located? Do the parts of the brain change themselves? Is there something like quantum entanglement which relates to the location of the will power?

3.4.11.1 The Concept of Location in Respect to Will Power

Some see the laws of nature as pushy explainers. But what for instance would it mean that the gravity is a pushy explainer? Whether we adopt a Newtonian or relativistic or quantum explanation, where is the power that makes the related equations happen? Is it in the things that are subject to those laws? Do the things which are subject to these laws/ forces execute them? Are they transcendent? Is it in the fabric of space? Or do they transcend it?

Can “one” object within a space move? Can it move when there is no other object? If it cannot move when there is only itself, and if it can move when there is another one, then does one object create an infinite space to enable the movement of the objects? Can we conceive of an object without a space? What is the power that connects, defines, and relates the points of the space?

Do the quantum phenomena show that there is no real local limitation?

These questions are related to the facts which demonstrate that in fact the real power of unities is above the spatial distances. They demonstrate that the real powers transcend the space and time.

What we perceive through our eyeballs are only certain aspects of the existence. Generally, we spend our energy following things that move, that change their locations: Cars are coming, a customer is

going... We do not train ourselves in focusing on the end point, unitary and transcendent aspects of what is moving: We are not trained in focusing on ourselves since “we” are granted. Because of focusing on the moving and on the external, we have a strong tendency of seeing things as within separate boxes of space and time. Yet, that which is moving also has the same unchanging aspect as explained in part 2.2.1.3 about the argument from unity.

Note that this is not to underestimate what we see. What we see is important, but if we focus on the skin of what we see, we will be misled.

The unitary aspects of things relate also to concepts, relationships that are not instantiated within alleged point-like particles.

And they ask you, [O Muhammad], about the soul. Say, "The soul is of the affair of my Lord. And mankind have not been given of knowledge except a little."

(Quran: 17/85)

In this sense, it is not very reasonable to consider a person as a brain divided into compartments. The divisions are also unifications. The brain as such has a unity of its own. Yet, the brain is tightly connected to the essence of the agent. These two also constitute a whole of their own. These are elements of design and unity whose parts are not separable.

Our visualisation reflects our myopia and our hypermetropia: At a certain stage we see from far the atom and not seeing the lower layer due to our myopia we say that the atom is the final thing which makes things happen; and due to our hypermetropia and disability to see the holistic attributes, we say that the molecule does not have a distinct reality of its own. However, the atom is within the molecule since the molecule is designed to be constituted of atoms, but the

molecule is also within the atom since the nature and design of atom contains its potentials to constitute molecules.

The agent with his essence, unity, identity, reality and being distinct from his parts, encompasses the parts and can perform sovereign acts about which he is empowered by God. And the impacts of this performance are explicit on the parts of his brain and on neurons like the entangled sets of particles in quantum physics, which act as one single whole even though they are miles apart. Likewise, the acts of each neuron upon its parts such as microtubules are also like the acts of the agent compared to the parts of the brain. The same is applicable between an atom and its subatomic particles.

These holistic interactions do not need to be between just two neighboring layers: The agent's distinct act may relate not only to the neuron layer, but also simultaneously to the subatomic layers as well; and they do not need to be just in the top-bottom orientation, but they can also be in the bottom-up orientation. So, the agent may also encompass the society and influence it as the physical states of neurons may influence the agent.

The agent is distinct from his parts, and there are differences as well between the whole and its parts.

And you see the earth barren, but when We send down upon it rain, it quivers, and swells, and grows [something] of every beautiful kind.

(Quran: 22/5)

Do the neurons contain the power that the agent has, through something like entanglement, as they behave in accordance with gravity? If they do, would the actors be “they” or the atoms that they contain? If an agent observes a neuron in his brain, is the observer

the agent or the neurons? If it is the neurons, why is it not the atoms? If it is the atoms, why is not it the protons?

In the example of the following verse, the clay is reorganized and given powers to behave in another way, being given powers to see, hear, fly...:

[The Day] when Allah will say, "O Jesus, Son of Mary, remember My favor upon you and upon your mother when I supported you with the Pure Spirit and you spoke to the people in the cradle and in maturity; and [remember] when I taught you writing, and wisdom, and the Torah, and the Gospel; and when you designed from clay [what was] like the form of a bird with My permission, then you breathed into it, and it became a bird with My permission; and you healed the blind and the leper with My permission; and when you brought forth the dead with My permission; and when I restrained the Children of Israel from [killing] you when you came to them with clear proofs and those who disbelieved among them said, "This is not but obvious magic."

(Quran: 5/110)

Things can be structured in different ways. The structuring itself is tightly related to unity. When things are restructured, they can have different and new features.

When the reductive absoluteness, permanence, and fundamental nature of the alleged self-sufficient spatiotemporal bottom elements (ASBE) are rejected, then there is a need for other bases. These bases are beings/ entities that behave and communicate within unity. The state of an atom integrated to the brain is different than an atom which is not like that. And when the former atom separates from that system, it becomes different.

If we copy all atoms of a person in another person, we will not have exactly same persons. Because, firstly, if the second person is alive and if he has a different essence, then he is not fully equal to the first person. And secondly, according to the unity and reality of a higher system, such as space, they will be two, and they will have distinct qualifications.

When a new whole is produced, there may appear new features such as consciousness. These features may be due to the extension or amplification of already existing features or the production of totally new features.

On the other hand, it should be noted that certain single cell organisms which do not have brains, such as paramecium, hunt, mate, evade predators very similarly to the animals with brains. This single cell contains functions of movement, communication, and many other functions of the animals like lions, birds, and so on.

3.4.11.2 Can We Determine A Part of The Brain as The Location of The Will Power?

To address this point, we have to consider the part-whole relationships first. This also relates to action at a distance which is observed from micro to macro scales. This also relates to alleged wave-particle duality: I say “alleged” because as I explain in part 2.2.1.3 neither wave, nor particle fits well into our empirical observations and logic.

Anyway, let us use these in a conventional way and consider the point in the heading: In order to understand well the location of will power, we have to understand further details about the wholeness of the agent, and also the part-whole relationship.

What is the difference between the case where the part in appropriate circumstances constitutes the whole and affects it, and the case where

the whole changes the behavior of the part? If the part notices the whole and behaves accordingly, this means that it notices its environment, the other parts of the whole, and it behaves differently, and that the whole does not have any effect. This does not need to be the noticing by the part, the conditions may be so that the part changes, not through conscious awareness. Then what does condition mean? It again means the states of the other parts, or the states of other parts of other wholes, or merely other wholes. In this case we can say that the whole is inactive or maybe inexistent. Now, in the case where the whole notices the part and changes it, this means that the part is passive. But, how can the whole detect the part and change it? Because the whole was non-existent before its formation and before the parts came together.

However, we should note that the part was non-existent either, since the part is also a whole like other sovereign wholes. So, we accept that the part detects its parts, and changes them and itself; then, we face the problem with the above whole. If the above whole was non-existent, then its part would also be non-existent. We are not justified to give the sovereign whole of the part a superior status compared to the whole that that part constitutes.

So, should we assume that there is an indivisible part in the bottom layers? But if we accept that unsubstantiated alleged possibility, then there is another problem: If no other layers of wholes have any effect on what we observe, and if these ASBEs are the only active ones, then these would behave miraculously in a way to internalize all laws, and as if they are aware of and want to comply with all the wholes and their different actual trajectories related to different laws. If there are such active parts on their own, then all layers will be ineffective and these bottom parts must be managing all of the layers, all of the trajectories in the same time.

The above points show that neither infinite regress, nor believing in miraculous ASBEs as an explication of wholes is an intelligible solution. Both of them just produce unnecessary problems without solving the problem: In both alternatives, we again have to have wholes. In the first alternative, it is assumed that there are infinite relationships between layers. In the latter alternative, we again have wholes, but we need to assume that these wholes are magic. Why should we deprive all upper layer sovereign wholes from their distinct identities and effective functions, and charge all of these functions to imaginary and unsubstantiated ASBEs?

I argue that there is no need to such farfetched solutions. As we directly experience, as our consciousness and free will power demonstrate, we have our distinct and effective wholes as human beings.

If a human being has his distinct whole, then there is no need to relocate his free will power directly related to his whole to lower level wholes. When a human being runs, do we say that his running is located within his legs? Or when he eats, do we say that eating is located within his mouth? Likewise, the location of the will power relates to the whole of the agent. We cannot say that this will power is in this lobe of the brain or in this neuron.

Note also that as explained in part 3.2, according to the Quran, the whole of the agent has an essence which is like a hub, coordination center of a whole.

Question 57.

So, where is the will power? In the neurons?

Answer 57.

What is a neuron? It is not the molecules and atoms it contains. It is probably a new sovereign whole more than the molecules and atoms it contains, but it contains the molecules and atoms. Likewise, the will module is more than the neurons but containing the wholes of the neurons. The will power is in that active and distinct whole. Not in the neurons because from the reductionist perspective of the question there is no neuron, they are reducible to atoms; but there are no atoms since they reducible to protons... The question assumes that the neuron is more concrete/ tangible/ specific than and superior to the brain, and the brain is like that compared to the agent and his essence... though this is not the case. Part 3.5.6.4.2 explains in detail why reductionism is false.

Question 58.

Do not the neurons influence the agent?

Answer 58.

They do, but the agent also has influence upon them as the agent is not the sum of neurons and similar things.

3.4.12 Free Will Power Can Be Proven
Experimentally.

3.4.12.1 Experiments and Proofs

In science a method to demonstrate that a certain thing has a distinct effect, is to adopt a null hypothesis first, and assume that that thing does not have any effect. And we determine the situation without that thing. Then we do experiments with that thing involved. And try to see whether there is a meaningful diversion/differentiation from the expected null hypothesis results.

In this part we will test through normal experiments and thought experiments whether determinism is true, whether indeterminism is true, whether the agent has sovereign free will power.

Here firstly we will adopt a similar way: If determinism is true, then the will power would not bring in a differentiation. So, can we differentiate, divert from and negate hard deterministic processes? We will do first free will power negation experiments (FWPNE). We will do these experiments under the assumptions of determinism and indeterminism.

Secondly, we will do brain observation thought experiments to see what happens when the transcendent observer who has free will power observes his spatiotemporal brain.

We will analyze the issue from numerous angles.

A popular empirical argument for free will is this: I will to raise my hand, and I raise it; nothing restricts my will at least in many cases.

The opponent of the free will will argue: Your ignorance of the restrictions does not mean that there are no restrictions. It is clear that there are processes that go on in your brain before you will. Furthermore, it is scientifically shown that your wills are influenced by your past experiences even though at the time of willing you are not aware of those experiences.

The arguments and counter arguments that go on at this level are not sufficient for reaching a conclusion. The proponent of free will does not address the arguments of his opponent; the opponent of free will does not show that what he presents are coercive causes which make the free will power that is experienced ineffective.

In the previous parts, I demonstrated that determinism and indeterminism are both false. In part 3.5.6.4.2, I also show that

reductionism is false. This way, we have addressed the argument of the determinist by showing that there are not necessarily and always coercive causes upon our free will power, and that our will power is not reducible to spatiotemporal entities or events. Hence, we are left with the alternative that we immediately experience, that is, the free will power or the causal power of the sovereign wholes. I explain the sovereignty of the will power essentially in part 3.5.3.

In this part, I will present negation experiments and brain observation experiments which will enable us to observe the distinct effect of our will power over alleged deterministic or indeterministic processes. These experiments will confirm further the falsity of determinism and indeterminism. Additionally, they will show us that not only we have a kind of free will power, but also that our free will power has a degree which is sufficient to make a change in the universe. They will enable us to distinguish whether things that influence our wills are coercive or non-coercive. They will also show that free will power is falsifiable. Furthermore, they will help us understand some aspects of how the free will power works.

These experiments relate to the exercise of free will power against alleged deterministic, indeterministic chains of events and supervenience bases of reductionism. These experiments are directly related to free will power.

The main ideas behind these experiments are these: If everything is deterministic, then we could not change it. If things that relate to our will power were unpredictable, then we could not negate such unpredictability. So, we have to make the free will power confront the predictions of determinism, the unpredictability of indeterminism to see whether free will power can negate the predictions of determinism and the unpredictability of indeterminism. If free will power wins, then it is true and determinism, indeterminism, and

reductionism are false. If free will power loses, it is false, and they are true.

As we see in the following verses, there are expected events based on the current state of the universe, but they can be negated:

[Al-Khidhr]⁸³ said [to Moses], "This is parting between me and you. I will inform you of the interpretation of that about which you could not have patience.

As for the ship, it belonged to poor people working at sea. So, I intended to cause defect in it as there was after them a king who seized every [good] ship by force.

And as for the boy, his parents were believers, and we feared that he would overburden them by transgression and disbelief.

So, we intended that their Lord should substitute for them one better than him in purity and nearer to mercy.

And as for the wall, it belonged to two orphan boys in the city, and there was beneath it a treasure for them, and their father had been righteous. So, your Lord intended that they reach maturity and extract their treasure, as a mercy from your Lord. And I did it not of my own accord. That is the

⁸³ Al-Khidhr is a special servant of God to whom He gave some special knowledge. Prophet Moses (Peace be upon them) meets and wants to follow him in order to be educated by him, though he is warned by him before the beginning of their journey that he will not be patient upon the events that he will see. On three occasions, Moses kind of protests what Al-Khidhr did. At the end, before leaving, Al-Khidhr explains where the state of the affairs would lead, and based on that how he intervened with the superficially expected flow of events and changed these expected flow of events. For the whole story, see the Quran Chapter 18, verses 65 onwards.

interpretation of that about which you could not have patience."

(Quran: 18/78-82)

However, these events are not unchangeable. Expected events including wills may change. But if we have this power to change when we know, then this is a distinct power which is also effective when we do not know. It is not reasonable to say that if we do not know the exact state of the universe, we will necessarily comply with it. Assuming that whatever we do was already going to be, is without any logical or empirical basis.

In the above story, the one who has more knowledge, has more power to make changes, even though both have similar powers to some extent. Hence, the will power is effective along with other forces. And knowledge is transcendent, not bounded by the physical, due to the definition of the physical.

If an agent can conceive of another alternative, then at least in situations where more than one alternatives are not impossible to do -we can even will such impossible alternatives, but we will omit them as they are not finally willable-, he can will that other alternative. One may say that he may will all true or false potential alternatives which are not harmful. If he can will all such potential states, then he can will each of them including some combinations separately.

There is an impossibility in doing fully empirical experiments in micro levels to see what the state of the universe entails. Especially as the free will issue is related to all physical levels, doing experiments that cover all of them is impossible. How can we observe numerous neurons, qualia, consciousness, whether there are slacks, the details of quantum events and know precisely all laws of nature?

However, such difficulties do not belong to just free will. In any area of science, we have such difficulties, yet we can get some results from which we can benefit. Yet, we have no idea about what matter, energy, a physical law, gravity, and observation are, or how to overcome the problem of induction...

Yet, working on different possible scenarios combined with thought experiments, we can determine whether there are any inconsistencies related to different models of free will. We can find out whether our willing process is subdued to or sovereign over the physical, whether our related conclusions are true in all cases or in some cases.

Here, we will be using normal experiments as well as thought experiments.

These experiments have lots of implications that extend beyond free will, such as consciousness, the whole of the agent, the omniscience of God, artificial intelligence.

3.4.12.1.1 Will Power Negation Experiments Assuming A Deterministic Universe

There may be situations where a person may have the power to choose an alternative or another one; and there may be situations where he cannot choose an alternative other than what he chose. A sick person trembles and we can predict that he will tremble and he cannot negate it. Or we can predict that a person will run away from fire and he cannot negate it. Or we can tell a person that he will eat pizza, and he can negate it.

The denier of free will power claims essentially that there are deterministic physical laws/ forces at the fundamentals of our universe. The reductive physicalist determinists also claim that our wills supervene upon those laws/ forces and spatiotemporal states of the universe. They say that the will power has no causal power of its own

like those forces. Some non-reductive determinists will claim that our wills are additionally the results of our nature and nurture⁸⁴.

3.4.12.1.1.1 Simple Negation Experiment: Negating the Alternative That Must be Willed According to Determinism

3.4.12.1.1.1.1 Introduction

In many instances in the daily life, we observe that nothing coercively prevents us from willing one alternative instead of the other.

If we have two alternatives, and if in the absence of one of them we could will the other, no deterministic effect should prevent us from willing one of them when they are both present.

For example, if there was only the yellow egg, we would be able to will to eat it; and if there was only the white egg, we would be able to will to eat it. So, in the presence of both, the presence of the other as an additional alternative is not by itself a situation that prevents us from willing the first one.

Though the one-directionality of time does not allow us to go back and change our will, to see if we could have done otherwise, this one-directionality is irrelevant to the causal power of free will. It is sufficient that the free will power was existent at the time of willing.

We can ask the hard determinist: If whatever we will is determined, and if we cannot change what is already determined, why do not we observe at least sometimes, that we are forced this way to will that alternative? Why what we perceive as “our” will does not diverge

⁸⁴Though, a determinist would need in any case reduce the effects of human nature to the previous states which did not contain any human being at all.

from what is going on at the levels of neurons or molecules or atoms? One answer of the denier of free will power will be like: “It is determined what we will do/will in the layer of atoms, neurons and so on; but we do not know what is going on in that layer underlying the will. And since what is going on there is always in parallel with what we perceive as our will, we cannot perceive a tension or conflict between the two.”

The impossibility of a precise actual prediction seems to mislead the denier of free will power when he says: “You think you will freely, but you just do not know the causes of your will.” In other words, he says if you saw the causes, you would see that you could do “nothing” other than what those causes entailed. The following experiments will address and refute this claim in many ways.

Those who reject free will power try to present as a key argument the Libet type experiments which try to see the predictability of the wills through brain states. According to the deniers of free will power, it might well be the case theoretically to predict the wills; but we could not change a will even if it was predicted.

Suppose that someone who claims to know all about the previous states of the universe and laws tells you that you will will to eat a specific one of the candies in front of you. He tells you that in his prediction he has already taken into account that you are informed about it. You do not know beforehand which one he will tell you. But you “know” beforehand that whatever candy he informs you, you will be able to will the opposite.

It does not matter whether there can be such a person who can make such a prediction. Even if there is such a person who makes such a claim based on determinism, you will know that you will be able to negate what he tells you. Because, you have a much general experience by which you know that if “anybody” who is not forcing

you to will a certain choice informs you that you will will something, you may negate it. You can always determine a set of alternatives so that whoever informs you that you will will a specific one from among them, you can negate that prediction.

A key point here is that the free will power does not entail that nothing influences the result of the free will power; rather it entails that there are cases where there is no coercive cause upon the outcome of the autonomous free will power; hence, in the absence of coercive causes, free will power is a power which exists by default. So, for example, if a person who is indifferent about buying chocolate icecream or strawberry icecream in terms of their costs and benefits, may have chosen to buy strawberry icecream. Even if he may have been influenced in his choice by having seen lots of red colors that day, and even if he is not conscious of this influence, he would have chosen the strawberry icecream with his free will power. Because he might have chosen the chocolate icecream and he was free to choose it, and the influence of red colors were not coercive upon his will power. Those who reject free will power, because they reject it, would see nothing in this example as a cause other than his seeing lots of red colors; because they presuppose that there is no free will power, they see only the influence of the red color as the only cause. And they would say that he has chosen the strawberry icecream because of having seen lots of red colors, since it was the only cause. They fallaciously believe that there is no free will power because they presuppose that there is no free will power. The above example, is about a situation where there is only a non-coercive cause; in the presence of coercive causes, the free will power will be effective in accordance with its strength compared to the strength of the coercive causes, and in accordance with how well this strength is managed by the agent.

Let us get more specific:

The proponent of free will power claims in accordance with everyday experiences: “If I have in front of me one red and one white candy, I can will to eat any one of them under normal circumstances⁸⁵”. The denier of free will power who brings an exception to the above claim says: “The universe contains data in terms of initial state and physical laws that point to the fact that I will will to eat a specific candy. In case someone has access to these data, and comes and says that I will will to eat the red candy, then I cannot will to eat the white candy.”

According to the hard determinist if we had full access to a past state of the universe and the laws of nature, then we would know what we would will in the future, and if we would be able to negate that predicted will with our will power, then there would be a contradiction. So, we cannot negate a will predicted like this. The only point is that we do not have access to that data. That is why we feel as if we can will freely one of many present alternatives. The layman says “Nothing prevents me from willing to eat red candy or white candy”. The following experiments are designed in order to see conclusively who is right.

3.4.12.1.1.1.2 Free Will Power Negation Experiment (FWPNE)

Let us suppose that one day we met a real Laplace’s demon (LD) who knew all previous states of the universe and all laws of nature. And he predicted that I would will to eat the white candy, and not the red candy while I had both the white and red candy in front of me. According to determinism, to my surprise, I would be unable to will

⁸⁵ We assume that there is no health problem or similar things that strictly prevent one of them. If there were such circumstances, then, the proponent of the free will also would say that the agent did not have free will. And, the opponent of free will power does not claim that free will does not exist only under such special coercive circumstances.

to eat the red candy however hard I tried. The following experiment will show whether this is true.

The experiment is a combination of two experiments. The 1st experiment is a normal experiment, the 2nd experiment is a thought experiment.

The 1st experiment is as follows:

“There is one red candy in red wrapping, and one white candy in white wrapping. We have two ordinary experimenters. Experimenter 1 (E1) will try to negate what E2 predicts as E1’s will. In each round, E2 will try to predict which candy E1 will will to touch, and E1 will try to negate the prediction by willing to touch the opposite of the predicted candy and by willing to do the related acts such as moving his hand and fingers accordingly. E1 will touch just one candy in each round. E1 has five seconds to touch one of the candies after the prediction. And they will write down the results for each round.

E1 also will write down what happened in case something abnormal like the following happens: If he lost his vision of the other candy, if he could not move his hand toward a candy, if there was a problem in his following logical steps as “if prediction is the red candy, negate the red candy, touch the white candy”...

E1 will try to negate the prediction so as to prove that he has free will power. It is assumed that there is nothing which prevents E1 from doing what he wills.

They will have sufficient number of rounds to produce a scientifically reliable conclusion.

They have the written rules of the experiment with them, and they compare what happened with these rules.”

The purpose of the experiments is not to show that things cannot be predicted. The purpose of the experiments is to clarify whether determinism is coherent and consistent; whether our free will power is no more than an illusion, or has a distinct causal power. Laplace's demon (LD) or the predictions in the thought experiment part are used just to represent certain claims more clearly. Instead of "LD's prediction", I can say equally "what the deterministic causal relationships entail".

Let me also briefly explain what are the possible results of the experiment:

If E1 experienced a few times the abnormal experiences, this means that in the relevant round, he experienced the implications of deterministic claims. In other words, in some rounds, if determinism is true, and E1 does not have a distinctly effective free will power, some of the predictions of E2 will necessarily overlap with what finally E1 will will according to determinism, even though E1 has tried to negate the prediction of E2. In these rounds, E1 will not be able to negate the prediction. He will experience that his free will is just an illusion, and in those rounds, his consciousness diverged from the underlying allegedly real effective causal processes of neurons, atoms, and so on. He will not be able to negate the prediction of E2 which overlapped with what the deterministic causal relationships entailed in terms of his will. In other words, in these abnormal rounds, if E2 predicted that E1 would will to touch the red candy, E1's brain atoms, neurons were so that he would touch the red candy. So, he could not negate the prediction, and he had some abnormal experience.

There may be an objection: As E1 tries to prove that he has free will power, and as he programmed himself to negate, of course he will not have such experiences.

This is a valid objection if and only if determinism is false.

To clarify this point, let us analyze it together with the 2nd experiment, which is a slightly different thought experiment version of the first experiment: All else being the same, instead of E2, E1 does the experiment with Laplace's demon (LD) who makes the predictions.

If determinism is true, in this 2nd experiment, in each round, E1 will have an abnormal experience: For example, when LD predicts that E1 will touch the red candy, E1 will not be able to will to touch the white candy.

Moreover, note that, this situation was not an exceptional situation: If determinism is true, no matter what and no matter how many are the will situations, if LD makes a prediction, E1 will not be able to negate the prediction. This is not because of any deliberate and special influence of LD on E1; he just tells E1 what must happen according to previous states of the universe and laws of nature.

This is exactly as the determinists claim that any person was not able to will anything other than what he willed. This is natural according to determinism, since E1 just has his illusory feeling that he freely negates the prediction. He feels that he is the cause of his will, though he is not. According to determinism, E1 and his perceptions have zero causal power in what he does or wills. But LD has access to the effective layer of causal chain.

Assuming the 2nd experiment was finished as determinists expected, an interesting thing here is that, E1 could never negate LD's prediction. So, his feeling that he negated E2's predictions were just an illusion. There was just one-way effect from the underlying causal processes toward his consciousness. He just had a feeling of what is going on in the other causal layers in the form of an illusion. The

words of LD, E1's chain of thought, his conscious experience about his will power were just illusions, there were merely the sound waves, the atoms in his brain acting, and so on. And as LD had access to those, when he made the prediction based on these, E1 could do nothing. Even his thoughts about his will to negate were nothing but like a noise of atoms bumping one onto other.

The point here is, though in the second experiment E1 could not negate any of the predictions of LD in accordance with determinism, how could he negate E2's predictions? The author of this book actually did the experiments, and could negate in each round in the real life experiment. You can also do these experiments and see that you can negate. How could E2 manage to never coincide with what the past state of the universe and what the laws would deterministically require about the will of E1? How could E1 which acts at the illusory perception level be so successful in negating the prediction?

However, there is a point that the determinist may raise: "Although the state of the universe and the laws entail all future states, such a communication of a prediction cannot be used even in a thought experiment, when the prediction will cause its negation. Such communication of the prediction will produce logical problems⁸⁶. When LD communicates what E1 will will, there may be a causal structure which will produce the opposite of the prediction. In other words, in the negation experiment, LD is like saying: "You will touch the white candy, but you will not touch the white candy", since he knows that what he predicts will be negated. After LD predicts, the experimenter's brain will process this information. This process is not contained within the states up to the prediction."

⁸⁶ For additional details about this point and related illustration see part 3.8.1.4.3.

Let me address it:

All explanations about the problems of determinism explained in part 3.4.1.2.2 are relevant for the impossibility of deterministic predictability; so, I already argue that deterministic full predictability is impossible. The prediction at the higher level of perceptions should not cause the problem the determinist raises, since, things like perception and will power are ineffective and the mechanisms at the very bottom layers even lower than electromagnetic force and physical waves are effective according to determinism. However, here it will be useful to clarify one aspect of the above point.

Let us assume that even if determinism is true, an effective thing cannot be informed of such a prediction in such a way. But an ineffective thing can be informed. For example, if there is an illusory part of the agent, even if it is informed about a prediction, it cannot negate that negation. In the thought experiment, the experimenter (E1) could not negate. The voice of LD about the prediction may cause a negation through the brain structure of E1, which is also included in the states of the universe and in the prediction. And informing an effective thing about a prediction may create a paradox if it is structured so as to negate the prediction. So, as E1 could not negate the prediction, the point raised did not have any effect in the 2nd experiment, but let us consider some further details at this point.

Instead of adding some details in the main experiment, I will give them here, in order to not make the main ideas of the experiment too complicated for the reader in the first place. Also, the following explanations will clarify some further aspects of determinism⁸⁷.

⁸⁷ The questions in this book are produced by the author in order to clarify issues from different angles. None of these questions are actually asked by any adherent of any views. So, the assumptions or points which look like those of

In terms of reductive physicalist determinism, communication of a prediction is broadly the translation and transfer of some aspects of a future state of an event in the form of signal packages. So, when we say “Watch out, the box will fall on your head” this is a signal in the form of a package of sound waves which will be interpreted by the target person as one aspect of a future state of an event.

It may be claimed that while collecting the data for the prediction, the events about which we collect the data may be changing; hence, this measurement problem may render the prediction unusable in this context. However, the measurement problem arising from influencing that which is measured is not applicable here for the following reasons:

Firstly, the prediction does not need to contain all details of the event. Secondly, though the measurement tool influences the measured thing in any case, this influence does not distort necessarily all aspects of the event so as to make it unusable for the specific experiment. For example, let us suppose that there is a big rock blocking the road in the night, I see it through the photons going from the headlights, hitting the rock and coming back. Although at least some photons have an influence on the rock and its parts, the change on the rock has no implication about what I have to do since the photons do not move it out of the way for me. In this respect, regarding the experiment, we can even assume the existence of particles so small as not to influence the will process when the information is practically gathered and communicated to E1. So, although the measurement problem is a problem for our scale, it is not a problem of principle in every context. It is only a problem under certain conditions. For every scale there may be theoretically consistent ways to collect information that is meaningful for a specific and defined purpose. In our context,

a certain view are only according to the understanding of the author and do not represent necessarily any point of view articulated actually by others.

the purpose is to get information about a state of relevant parts of the universe in a specific scale. Predictability in determinism is a different problem, though it requires access to such information. Therefore, there is no problem in this respect against the validity of these negation experiments.

In a situation when LD predicts that E1 will touch ultimately the white candy, he has the following knowledge: The brain structure of E1 including all neurons, atoms, and so on is so that E1 will negate any declared prediction; although the prediction overlaps with what will happen, according to determinism and reductive physicalism its perception by E1 is no more than an illusion and it is epiphenomenal; the effective thing is the behavior of particles. He also knows that the state of all else will cause LD to declare his prediction; but, this is a redundant point. So, if LD declares the red candy as his declared prediction prior to the effect of the structure of E1's brain which will negate the declared prediction, he knows that the final prediction is the white candy. But if he tells E1 that the prediction is the red candy, there is a miscommunication, and E1 thinks that this is the final prediction. When E1 negates the red candy, he thinks that he proved LD wrong.

So, let us assume also that LD tells E1 this issue, and E1 understands it. In other words, LD tells E1 "My declared prediction excluding your brain structure is the red candy; and your brain structure is so that you will negate my declared prediction, so you will touch the white candy".

The inherent contradiction the determinist talks about is a simple communication problem. The structure of the brain of E1 and its potential projections based on different inputs contain information about all potentials of negation, hence access to this information neutralizes the problem of logical contradiction that the determinist

talks about. So, knowing the prediction as such, is sufficient to know the predicted outcome without any contradictions.

At this point, E1 asks LD an important question, “Are you sure that I will will to negate according to my brain structure? Will I change my brain structure in any one of the two experiments?”

Because, in the prediction as such, it is implied that “E1 will not change his brain structure during the experiment”, which also looks like a prediction. If in the brain of E1 there is another module M2 for example which will reverse the negation brain module M1 of E1, then the prediction of LD would not be complete. So, no matter how many related modules there are, LD must be able to inform E1 about whether the total structure and state of E1’s brain will negate the declared prediction or not.

Changing the brain structure may be like rearranging the neurons. A module of the brain may be structured so as to change another module. Changeability of brain structure entails that the spatiotemporal structure is not the ultimate cause of our wills.

An important point here is that we are talking about the structure of the brain, and about a complete communication. Not a future event. Before we settled the problem of the determinist, the brain of E1 was set up to negate the prediction. So, LD would predict something which would be negated. This time, LD gives an information about the brain state of E1 including its projections according to the states and laws of nature. The state and influence of laws are the two complete bases of the prediction according to determinism. And he gives also the information about what all things not influenced by E1’s negating brain entail, which is reflected in his declared prediction.

We can analyze a normal computer code. We can see whether it will turn a positive value input into a negative value for example. Likewise, LD sees the brain structure of LD, and sees how it will unfold through billions of years. It also sees its structure so that how it will react to any action.

Theoretically there are three answers to E1's question: (1) "Yes, I am sure that you will will to negate", (2) "No, you will not will to negate", (3) "Maybe you will change your brain structure and so maybe you will not will to negate, or maybe you will will to negate, it is up to you". The third answer is not possible since LD is a determinist. He knows how it will react to all sets of conditions, and he knows all actual conditions. And we are in the limited experiment context, so, LD does not need to take into account the influence of other factors that will happen tomorrow; in any case, he knows them perfectly as well. LD sees that the second answer is not the case.

So, LD gives the first answer, and adds "You cannot change your brain structure, you are not but your structure, including your brain structure." This is also because the effect of any change is included in the prediction.

Now that we have removed the problem the determinist raised, the problem in the experiment for the determinist will continue as follows:

In this detailed version of 2nd experiment, a round happens like this: LD says that the declared prediction is the red candy. E1 understands that the ultimate prediction of LD is that E1 will touch the white candy. This means that he will not be able to will to touch the red candy. So, as he has to negate the ultimate prediction, he has to touch the red candy. And to his surprise, he sees that he cannot will to touch and he cannot touch the red candy.

So, as LD said, he could not change his brain structure. As LD said, what was he other than the structure of his brain.

On the other hand, let us come to the real-life experiment: E1 tells E2 that there is a negation structure in his brain. So, in this experiment also the structure will cancel out:

A specific round happens as follows: (1) All things influencing the communicated prediction, entail that E2 communicates as prediction the will to touch the white candy; (2) E1's related brain structure is so that he will will to negate the prediction of white candy. So, the ultimate prediction of E2 is that E1 will will to touch the red candy.

So, when E2 says the declared prediction, he knows the ultimate prediction. And as long as E1's brain structure is so as to negate this as LD said, E2 will be correct about his prediction.

But when they do the experiment, to the surprise of E2, E1 wills to touch the white candy. So, he has negated the prediction as would happen in the real life. The only possible explanation is that E1 is not bound with the structure of his brain.

3.4.12.1.1.1.3 Analysis

It is noteworthy that the experiment brings in big problems about determinism which relate to different layers of causality: When LD predicts and E1 allegedly faces an abnormal situation, the prediction of LD is based on the layers other than E1's perception and will power as a whole. E1 fails in his attempts to negate, because LD's predictions are based on the precise spatiotemporal mechanisms, but E1 has no power to change those mechanisms as an agent. E1's perceived chains of logic and perception, are supposed to have no influence on the result.

Moreover, E1's will cannot be a deterministic outcome of prior states: While trying to negate LD's prediction, each time E1 had been wrong, this would mean that there is a deterministic relationship between the past states and his will to negate. That is, whenever LD predicted that E1 would will the red candy, he willed the red candy. So, in one way it would be predictable.

But as an agent, there would be negative relationship between E1's will "to negate" the prediction and his will to touch the relevant candy, produced from his will "to negate" as happened in the 2nd experiment: He could never negate what LD predicted as expected from determinism; his will to negate LD's prediction never conformed with his will to touch the very candy that his intention to negate entailed. So, for example, in the 1st experiment, E1 had to produce pattern-like failure results of negation as in the 2nd experiment; because according to determinism, the true prediction was the opposite of the will of E1 to negate. If determinism is true, then in the 1st experiment, E1 had to fail in all rounds. However, in this respect the two experiments are totally contradictory. But even if we take into account that E2 is not as knowledgeable as LD, at least, some of the predictions of E2 in the first experiment would comply with what the state of the universe and laws of nature entailed.

So, determinism creates contradictions not only between layers, but also within the same layer: If determinism is true, then E1 cannot negate LD's predictions; but in the normal experiments he can negate all of the predictions of E2 even though his will to negate has no power against a correct prediction. None of the predictions of E2 overlapped with what the state of the universe and laws of nature entail.

If there is the divergence between the agent level perceived causes and spatiotemporal level causes as in the 2nd experiment, then we

cannot say that in the 1st experiment, the perceived whole of the predictions and negations have been consistent within themselves, and the whole of spatiotemporal causal relationships also have been consistent within themselves, and that one layer was supervenient upon the other. Because, when LD uses spatiotemporal causal chains, in order to predict what E1 will will, there must have been some disconnection in the deterministic chain between spatiotemporal chain and agent level chain; and, the spatiotemporal chain must be unbroken within itself.

If determinism is true, in the context of the above experiment there would be another important problem: If the agent layer perceived causal power is undermined by the lower levels, then what would be the layer based on which LD predicts? Is it neuronal network layer, neuron layer, microtubule layer, atom layer, sub-atom layer, a layer that we do not know, or a combination? This is a crucial problem because whatever it is, as it has lower and upper layers, there will be an arbitrariness.

Now that the thought experiment on the basis of determinism gave such results, we must find out how E1 could negate E2's predictions in the real experiment. Because if E1's wills are only illusions, then they do not have any effect on what is going on at the real causally effective layer.

Especially, as E1 failed in all rounds with LD, how is it possible that in the 1st experiment with E2 he won in all rounds? After all, LD did not do any tricks or change anything. He just said what the deterministic causal chains entailed.

Can we say that reductive evolution produced causal chains and mechanisms that enable E1's brain to negate a prediction, even though his consciousness does not have any effect? We cannot,

because in the thought experiment with LD, E1's body and brain were same and they have the same mechanisms, yet he failed.

Can we say that E1's will power failed against the deep knowledge of LD, but as E2 was on the same level as E1, E1 could negate? We cannot say that, because according to determinism, the perceived will power has zero effect on what happens.

Then, was it a mere coincidence that none of E2's predictions overlapped with what the real causal chains entailed as E1's actual will? If it is a coincidence, then we can increase the number of rounds, we can change the partner in the experiment until they constitute a convincing evidence that the opposite is true. But of course, the determinist is free to prove otherwise.

Is there a reason for the overlapping of E2's predictions with the opposite of the predictions of LD in every round without exception, supposing that while sitting behind E2, LD also writes down his predictions when E2 predicts and before E1 touched one of the candies? Or is there something special that disables E1 from negating the prediction of LD?

If it is the perfect knowledge of LD, then at least in some situations would not the predictions of E2 overlap with the predictions of LD? Because if it is impossible for E2 to comply with LD's predictions, it is also impossible that he always predicts the opposite of LD's predictions. Hence, if determinism is true, then, at least in some trials, the predictions of E2 must have overlapped with the predictions of LD. Hence, at least in some rounds in the 1st experiment, E1 had to be surprised, as if LD directly predicted the red candy and E1 could not will the white candy.

Or can E1 negate any predicted wills unless coerced?

Since in 100% of rounds E1 can negate what E2 predicts, this shows in accordance with the quantitative scientific method that in the actual life, E1 has distinct sovereign power over any deterministic processes at least in some kinds of willing situations.

Let us see what happened in more detail:

LD said that E1 will negate LD's declared prediction. In the 2nd experiment, E1 could not "not negate". But in the revised 1st experiment, E1 could "not negate". So, LD's knowledge that the brain structure of E1 is so that he will negate, was false. This meant that E1 was more than his brain structure. Let us visualize this issue:

In the following we see a visualization of E1's brain structure and its implications on the prediction in the 2nd experiment:

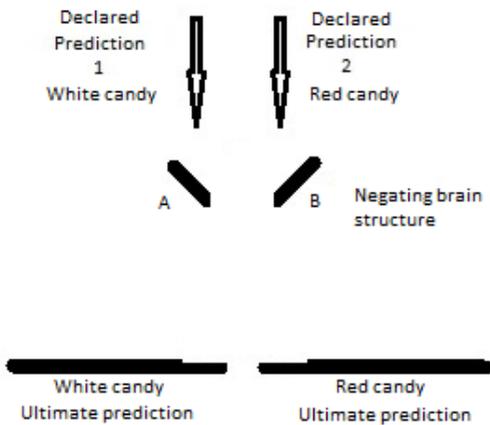


FIGURE-3: CHANGING BRAIN STRUCTURE AGAINST DETERMINISTIC PREDICTION

The arrows represent the predictions like falling objects. The bars A and B which represent the brain structure, make each declared prediction to land in the opposite land as the ultimate prediction. And E1 does not have any power to change the ultimate prediction.

For example, a declared prediction of red candy, ultimately results in the ultimate prediction of white candy.

Now let us see what happened with the revised 1st prediction. As we see in the following illustration, E1 has been able to change his brain structure so as against the expectation of E2 (based on the information given by LD) the declared predictions ended up to be the final predictions.

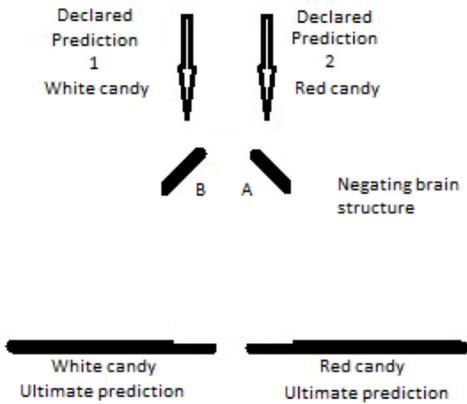


FIGURE-4: CHANGING BRAIN STRUCTURE AGAINST DETERMINISTIC PREDICTION

An important point is that LD might have told E1 “your brain structure will negate my prediction that ‘your brain will negate the declared prediction.’” We can expand this by adding as many double negations as we want. But, in summary, LD will have said whether the brain structure of E1 is so as to negate the declared prediction or not. He cannot say that it is so that it “may” negate. And however deep may the double negations be, E1 will be able to negate the ultimate prediction with E2.

However, if E1 is no more than his structure, this means that he is no more than the bars in the illustration. If they are the bars, then

their shape and their trajectories in spacetime are known in accordance with the laws of nature. Why would each bar shift its place so as to negate the declared predictions? If they are shifting according to the laws of nature, why is not LD able to see this, regarding the first experiment?

Determinism does not recognize the “I” of E1. And how each bar or neuron or atom will behave is known according to it. E1 cannot have as a whole any distinct causal effect other than what the bars can do. The bars cannot have altogether a goal of proving their free will power as a whole. Not only that, even each bar does not have a distinct effect of its own, since, its behavior is also to be explained based on laws of nature.

One may say “it is because the information coming from E2 causes them to shift”. Then why did not it shift in the experiment with LD?

We observe here a situation like Gödel’s incompleteness theorem. Whatever LD would about the structure of E1’s brain structure, in the actual life, E1 would be able to negate it, transcend it, and get out of it. It can contain itself, the prediction, and what is beyond.

So, as the thought experiment based on the unsubstantiated claims of determinism creates contradictions, we must discard determinism and accept what we observed practically:

So, at least in situations as in the normal experiment, either (1) there is no precise future state entailed in a deterministic way by the previous states and laws of nature, or (2) E1 has the power to overcome influences of things to some extent, including what such states and laws may entail, or (3) both. If (1) or (2) was false, then E1 could not be successful in negating E2’s predictions. So, both must be true.

If both are true, then E1's will power, his wholeness, and his essence are not supervenient upon the structure of his brain. It may control the structure, it can interact with it, and by-pass it to some extent.

Though there are relationships between the structure of the brain and the will power, there is not necessarily a one-to-one relationship between the two. For example, two different corresponding brain structures may entail the same will. For further details, see part 3.4.12.1.2 on real-time brain rearrangement thought experiment.

Question 59.

If the will is not supervenient upon the structure of his brain, then upon what structure is it supervenient? If it is supervenient upon another kind of structure, like the structure of a soul, then would not there be determinism again, even though it would be the determinism of another realm? If there is no structure upon which E1's will is supervenient, then what is the will power of E1?

Answer 59.

Any structure is a result of a unitary essence. What we see as structure is a limited view through our eyeballs in a limited way. The differentiations that we observe from a certain angle, are unities from another angle. The essentials are the unities. Unconnected parts of a structure cannot be self-sustaining. For further details, see part 2.2.1.3 about the argument from unity, part 3.5.3 about the sovereign wholes, and part 3.2 about the essence of the will power.

Question 60.

In reality, you cannot have a real LD. If you have an LD, you cannot know whether he is making a correct prediction or not. So, if you negate LD's prediction, as you do not know that he is the correct LD,

and that it is the correct prediction, would your negation have any implication at all?

Answer 60.

The important thing is that if determinism is true, whenever the true LD makes a prediction, I will not be able to negate what he predicts. So, I do not need to know that an LD is the correct LD. The contradiction appears whenever we accept the deterministic chain which entails a specific all-inclusive future state. The presence of such a coercive outcome creates the contradiction with my free will power. This, according to determinism establishes that what I feel as my free will power is an illusion. Hence, the basis of the prediction is not and cannot be what I feel. It can be the sub layers like neurons, or atoms, or other such things at lower layers. And when I do the experiment with my friend, my will to negate, has no causal power. Furthermore, the causal effect of sub layers is to be the opposite of the effect of my felt causal power at least regarding my will to negate. So, when I do the experiment with my friend, there cannot be a causal connection between his prediction and my will. This is an inherent contradiction of determinism. This may happen for any prediction based on any spatiotemporal layer of any parts. Therefore, I have a distinct, sovereign, and effective wholeness.

Question 61.

Is not it possible that the universe is deterministic, but there is no predictability? If in practice we cannot know what is the resulting will, based on past states, laws, and actual causal chains, how can we actually know whether we can negate it or not?

Answer 61.

Determinism is built on predictable, and repeatable events such as “if event 1 happens, then event 2 will happen”. There may be

practical limitations. But in principle, determinism entails predictability. So, contradictions that deterministic predictability would produce would undermine determinism.

Question 62.

What if the experiment is about jumping from the tenth floor of a building? Then, the agent will not be able to negate the prediction that he will not jump.

Answer 62.

The determinist claims that there is no free will at all, no matter what the situation is. Hence, proving it in cases like touching candies will be sufficient to refute determinism and prove the existence of free will. The claim for free will power is not that free will power is exercised everywhere, in every direction, and in all circumstances.

Question 63.

Does a computer that can negate the prediction have free will? For example, in a computer program, if we input "1" in a cell called prediction, it can return "2" in a cell called will, and if we input "2" in prediction, it can return "1" in the other cell.

Answer 63.

The negation as shown in the experiment is a necessary condition for will. It is not a sufficient condition.

Only a sovereign whole may have freedom since to have free will power, firstly there must be the one that will have the free will power. The whole must be a sovereign whole. Sovereign wholes are explained in part 3.5.3. Also, the agent must have some transcendence, and a distinct unity.

What is considered as a prediction in the example is not a prediction for the computer; it is just a point-like effect on its parts. Its point-like parts will react not as a negation, but as a continuation of reactions at their layers. If we look at the code and circuits of the computer and make a prediction for “2”, there is nothing which transcends alternatives and be surprised for not giving the result “1”.

On the other hand, there may be sovereign wholes in its parts. Such a whole may be acting not so as to negate a will, but in accordance with the commands related to its wholeness. As explained in part 3.5.3, and also as indicated in the following verse, lifeless looking things also may be sovereign wholes or agents:

Then your hearts became hardened after that, being like stones or even harder.

For indeed, there are stones from which rivers burst forth,

And there are some of them that split open and water comes out,

And there are some of them that fall down for fear of Allah.

And Allah is not unaware of what you do.

(Quran: 2/74)

Furthermore, it should be noted that in any case, the negation of the computer is extremely limited, and is not of itself. The human beings manufacture the computer, and a human being writes the formula in the relevant cell. LD can predict that “it will negate whatever LD enters in a cell”. But if LD informs the human that the prediction is that “he will negate” what LD will say, the human being may negate the prediction that “he will negate”. This has been one of the key points to refute determinism: LD is not entitled to tell the agent that his brain structure “may” negate; he is obliged to say whether he will

negate or not. At this point, determinism gets stuck. However, for a computer, whether it will negate or not is charted in his hardware and software. If in the 1st experiment E1 was a computer, then E2 might probe the computer, its codes, and make a prediction so that the computer could not negate the prediction; though, the wording and communication of the prediction would be a problem as E1 would not be a sovereign whole, since entering the prediction in the cell is not a real communication.

The human being can negate any kind of prediction as long as it is conceivable, not coerced, and as long as it is not strongly against his ought to be truth. The above experiments may be organized in very different ways so as to negate sometimes, not to negate another time. In any case, a normal human being will be able to devise ways to demonstrate his free will.

Question 64.

Maybe a human being just feels and looks like an agent though he is just epiphenomenal? Maybe he is reducible also to his parts, and maybe his perception is just an illusion. So, how can he himself have a will power?

Answer 64.

In order to answer this question, let us briefly see what happens in a corresponding experiment with the computer, where the computer corresponds to E1 and I am E2:

I enter in the “predicted will cell” “1”, the computer returns in “actual will cell” “2”; I enter in the “predicted will cell” “2”, the computer returns in “actual will cell” “1” so it goes like this. In the second part, LD replaces me, there is no change in the computer and its codes. We observe the following, assuming that determinism is true: LD enters in the “predicted will cell” “1”, the computer who cannot

negate returns in “actual will cell” “1”; LD enters in the “predicted will cell” “2”, the computer returns in “actual will cell” “2”.

Here, the situation is like in the earlier fixed/ dynamic brain state analogy: The computer has a structure which reverses whatever the prediction is. So, the prediction has two elements: (1) The apparent prediction (2) The computer will reverse whatever the apparent prediction is. So, if we enter in the prediction cell “1” this means that the computer will output “2” according to the rules of the experiment, which is the other alternative. But if we combine the two elements, then the computer will have output “2”. And it would not have negated the prediction. If we enter both elements in the computer, unlike E1, the computer will not ask “can I change my structure (circuits, code) of negating the apparent input?” If we enter both elements, then we know that there will be another element that it will negate the prediction of the two combined elements. So, unlike E1, the computer does not have a free power to manipulate what we enter.

On the other hand, can the computer compare the difference between running the experience with me and with LD? Does it have a unitary whole which accesses its parts, and memory in order to assess these differences? If it has, then it must be having a whole like us. Or, do all the data remain in its respective atoms?

But, whatever it does, we know that we have a unity which accesses such data and compares them. So, as human beings we have an aspect which is not reducible to our parts.

Secondly, if we carefully consider the above deterministic scenario, and if we consider the explanations about the experiments, we should note that whether the actor in the experiment is the computer or the human being, determinism is contradictory. Hence, deterministic arguments constitute no reason for rejecting our free will power that we empirically experience all the time.

Thirdly, as explained in the context of the experiment, there is no reason to assume that the events outside the agent layer have any priority or more causal power.

For further arguments about why we are not reducible to our parts, you can see part 3.5.3 about the sovereign wholes and part 3.5.6.4.2 about reductive physicalism.

Question 65.

If the prediction includes the will to negate, then how can it be negated?

Also, considering the halting problem, and Gödel's incompleteness theorems, how can things be predictable? Do sovereignty experiments demonstrate non-predictability or freedom of will? Why would not they be interpreted as demonstrating non-predictability instead of the sovereignty of will power? So, maybe our wills are just random with no sovereignty and freedom.

Answer 65.

I argue that things can not be deterministically predictable. But determinism claims that the universe is in principle predictable. Therefore, halting problem and Gödel's incompleteness theorems support the position against determinism.

According to determinism, the will to negate was included in the states of the universe millions of years ago. Therefore, when LD makes the prediction, it takes into account the information about the intention to negate and also the communication of the prediction to the agent.

However, note also that "negation" is just an epiphenomenal thing according to determinism; rather, there are interactions between things like fields, particles which entail a future state, not our

misleading perceptions that we call negation. So, the prediction of LD is like predicting where a moving object would land under the influence of a gravitational field.

Anyway, our universe may look too complicated to be predictable like this. However, we can think of the same experiments in a simple deterministic universe which can be easily predictable, or in a universe where there is sufficient technology to probe the relevant things in this context. The similar contradictions will happen in every deterministic universe. The weakness of determinism against free will power is a problem of principle.

Furthermore, the issue of actual predictability is irrelevant, as we do a “what if analysis”. It is not claimed that things are predictable in accordance with determinism since I reject determinism; it is claimed that the deterministic predictability is impossible in any case.

I argue that if deterministic predictability was true, it would produce many contradictions.

For example, suppose that Mr. X says “Even if there was a tsunami in this place, this structure would protect you”. Mr. Y argues “It is impossible that there is a tsunami in this place”. Here what Mr. Y says is irrelevant, because Mr. X does not claim that there will be a tsunami there, rather he says that if there were the conditions similar to a tsunami, for example, a high water pressure, then that structure would protect him. So, if Mr. Y had shown that the structure would not resist a pressure P, then he would have brought a relevant counter-argument. So, an actual prediction may be impossible as there are so many variables to know. Yet this does not matter, because in many cases, we can will the opposite of what is predicted even though it is claimed that we are part of a deterministic universe.

Furthermore, the impossibility of prediction, shows that determinism cannot be empirically proven, and also establishes the impossibility of this kind of proof and refutation against free will. If deterministic prediction is impossible in principle under certain conditions, then, determinism cannot be used as an argument against free will power. If it is possible under all conditions in principle, then it produces the internal, logical, external, and empirical contradictions explained in this book.

In any case, the prediction is supposed to depend on a causal relationship. If there is a cause to make that relationship, then in some respects, the human being has some transcendent nature as such cause. Previous parts explain why there is a cause which produces such relationships. So, the human being can interact with that cause in a transcendent way instead of only being the puppet of the relationship it caused.

By the way, I will also present an experiment to demonstrate the effectiveness of the free will power in an unpredictable universe.

Furthermore, I demonstrated why randomness cannot be an argument against free will in parts 3.4.1.3 and 3.4.12.1.1.2.

Question 66.

The above tests are against physicalists. But a person who is not a physicalist also may be a determinist. For example, he can say that there are reasons that are related to the mind and qualia of a person, and these reasons may be beyond the physical, and cause a person will something in a deterministic way. So, do the above tests apply as an argument against such determinists?

Answer 66.

Yes. For example, if someone says, “If someone feels hungry, he will eat a thing in any case”, then we can think of this relationship as a physical law. If there are such coercive relationships, then according to such deniers of free will, there has to be future states of wills that the agent cannot negate. However, in any case there will be alternatives for which the agent is indifferent or is able to choose freely.

Question 67.

What if the subject of negation test is manipulated? So, he negates but in fact he does not have any freedom. In this case, he feels that he is negating, but in fact it is the manipulator who is negating.

Answer 67.

The manipulated agent may be free or not depending on the intensity of the manipulation.

As the question is about whether an agent may have free will power, even if he is manipulated by a manipulator, this means that the manipulator has free will power and is outside determinism and indeterminism. Running these experiments with the manipulator would also refute determinism and prove the existence of free will power.

Question 68.

When we do a negation, how can we change the structure of our brain, since we do not know the details of its components?

Answer 68.

When a bird looks at left or right, it does not know which nerves or muscles it moves. Yet, it can do it. Likewise, when we drive a car, we do not know all parts of its engine. So, when a sovereign whole produces a will and an act, there are certain systems that help perform these in accordance with their design.

Question 69.

If God tells someone what he will will, then can the agent negate that?

Answer 69.

This is explained in part 3.8.1.4.3.

3.4.12.1.1.2 Will Power Negation Experiment Assuming an Indeterministic Universe

In the previous part, we saw that the agent has a transcendent power to control the physical structure of his brain. We also saw that the physical structure of the brain does not have a fully deterministic process.

In part 3.4.2 we saw why uncaused events are impossible.

These shed light on why any allegedly indeterministic event cannot necessarily have any coercive effect on the will power.

In daily life, in situations as the following it may be claimed or we may feel that a random event has been effective, and that we had no power to do anything against it.

Especially when we had to decide something just in seconds or milliseconds, we may feel as if we decided based on some random

thing: One example is a student who has just seconds to mark the correct answers for the last few multiple-choice questions in a certain important exam where wrong answers do not diminish the grade. Another example is a driver who is going fast who noticed late the traffic light which is about to turn red, and there is a fast approaching car behind while he has milliseconds to decide to pass or not.

Or sometimes, we may say looking at a past error how we could have done it. We can feel that maybe something random happened.

Or there may be an important decision situation whose alternatives are almost equally attractive. Though there is no time pressure, we may feel as if we did not have a reason to choose one over the other, and something random made us choose one. Or it may be claimed that we have thought that one alternative was better, just because of a random neuron firing in our brain.

Or is it that indeterministic events are going on in our brains all the time but we perceive just their macro and net implications?

In an example situation, the alternative A1 may appear as the one to choose, for a reason or allegedly for no reason. Once it appears, this entails that there is a corresponding brain structure as detailed in the previous parts. As shown in the previous part, the agent has a power to overcome it and change it to alternative A2. But what if the direction of this power to overcome it, is the outcome of a random process? The answer is that the agent has the power to change the outcome to A1 again by changing his brain structure. Whatever is inspired by the allegedly uncertain event, the structure of the brain of the agent can be changed so that the implication of the inspiration is not coercive. The changeability of the structure of the brain by the essence entails that this essence is the ultimate and only cause of the will power.

The free will power is related to the mere power to change. It does not relate directly to the power to change it in a good or bad direction, or to reverse it. But while engaging other mental powers, it navigates through these powers while transcending them and it directs them in certain ways. It is not obliged to reverse or to approve anything by itself. But the essence of the agent who runs the free will power, may use the outcomes of other mental powers together with free will power.

The power to assess A1's optimality, is related to consciousness, reasoning, and free will powers. A person may have willed to eat one more chocolate bar, and then willed to not eat one more chocolate bar. Both wills may have allegedly appeared because of relatively uncertain events. When the agent finalizes one of the two, this does not entail that he willed randomly as long as he had the power to change one of the alternatives. As explained in the previous part, no matter what the origin of a brain structure toward an alternative occurs, under normal conditions, the agent has the power to shift it.

Whether the agent ended up in a good will or bad will is the subject of the part 3.6.2 about the OTBT of the agent. If the agent has two alternatives of smoking and not smoking, and if he has access to the benefits and harms of both alternatives, then he can override the will which occurs allegedly because of the random events. By his free will power, he can navigate between and transcend the alternatives, and land upon one of them. To determine where to land, he will use his knowledge and reasoning power resources wherein he also navigates through his free will power.

In the above parts, we saw that an effective randomness cannot exist.

However, let us also see how this can be understood experimentally:

For this purpose, I will add a 3rd experiment which is a thought experiment, to the experiments of the previous part: In this experiment, all else will be the same with the 2nd experiment, except this time, instead of making predictions, Laplace's demon (LD) will give us information about the current state of uncertain events. As LD has by definition full access to the current state of the universe, he does not need additional powers.

So, LD tells E1 the following: There is a particle in your brain so that if it collapses to a spin up state, "according to the structure of your brain", neuron N will fire so that you will will to touch the red candy. If it collapses to a spin down state, N will fire so that you will will to touch the white candy. Here, the spin up and spin down states correspond to the declared predictions in the 2nd experiment in the previous part.

Therefore, in the experiment LD tells E1 that the collapse has resulted in spin up state, and hence he will will to touch the red candy. (We suppose that there are also deterministic processes outside this collapse, and LD informs what is going in total; if E1 is able to negate what either the deterministic or indeterministic events entail in total, then he will be able to prove his free will power. We can also suppose that there are no deterministic processes in the experiment, in this case, E1 will be testing only the effect of an uncertain event.) So, to negate, E1 will touch the white candy. This way, he will have demonstrated that an allegedly random event does not coerce him to will a specific alternative. If he cannot do it, then completing the other related parts of the experiment in line with the 1st and 2nd experiments, it will be shown that this thought experiment is inconsistent with the real life, and that in real life, E1 will be able to rule over the implications of such allegedly uncertain effects. So, though LD does not know what will be the result of the uncertain event, he informs what E1 will will as a result of each uncertain outcomes of that event; for each scenario, the experiment

is reduced to the experiments related to the deterministic universe; if we see the free will power of E1 in a deterministic universe, then we can see it also in a deterministic or indeterministic or combined universe. As there is at least some “if-then” states, we can say that there will be at least some quasi-deterministic relations, even if there are uncertain events.

Therefore, in accordance with the explanations in the previous part, E1 is able to reverse or approve the implications of the allegedly uncertain effects of such events. Hence, neither the structure of a brain, nor the deterministic or indeterministic events coerce the agent to will specific wills.

On the other hand, as opposed to the experiments related to a deterministic world where the agent tries to negate deterministic predictions, regarding an indeterministic universe claim, the agent may negate impossibility of predictions by making precise predictions and willing according to the predictions.

Hence, at least in many cases, neither the structure of a brain, nor the deterministic or indeterministic events coerce the agent to will specific wills.

Question 70.

Does not this test show that there is no destiny and that there is no non-temporal divine knowledge? Would not any direct implication of an uncertain event correspond with the knowledge of God?

Answer 70.

No, because the knowledge of God in this context is like our knowledge upon observing all including our negation; final wills of such tests would correspond to the historical knowledge of God who also sees the future as if it has occurred. If He allowed us to negate

the implications of the uncertain event, then the alternative we willed by negating is the ultimate will of God that He approved and put within the set of alternatives that are made willable to us.

Further details about this point are given in part 3.8.1.4.4 about destiny.

Question 71.

Does not the experiment also show that a manipulated subject has free will? What if it is done while someone manipulates E1?

Answer 71.

The experiment will show that ultimately someone has free will, if there is a consistent sovereign negation. This may be E1 or the manipulator. The free will power of E1 may be limited depending on the intensity of the manipulation.

Question 72.

Why would not we say that some physical processes within the agent actually negate some other deterministic or non-deterministic physical events? Maybe that which negates is also a kind of non-deterministic or deterministic physical event?

Answer 72.

The deterministic prediction or the predicted probabilistic outcomes of an indeterministic event by LD contain the effect of all other spatiotemporal factors upon E1.

On the other hand, if we consist of indeterministic physical events then we would not be able to consistently negate the uncertain outcome predictions, or to consistently negate any brain structure observed by LD. We “may” negate a predicted “structure that we will

negate”. Or we “may” negate an “uncertain structure” that would allegedly cause uncertain wills. The experiment can be reconfigured so as any type of probabilistic flow of events or wills at any layer is negated by E1. For example, while the brain structure is claimed to be uncertain so as to produce uncertain wills, the agent may negate that by giving patterns to the set of resulting wills; the number of wills may be arranged to be high enough to give a scientifically sound conclusion.

Question 73.

Maybe determinism and indeterminism are false, but why in a combination of the two the experiments would not work?

Answer 73.

Once the principles underlying determinism collapse, there is no reason to defend determinism. Because if uncertainty is possible, then there is no principle upon which any partial determinism can be claimed, except as some patterns originating from sovereign wholes which is in essence different than determinism.

3.4.12.1.2 Experiment on Rearranging the Willing Brain Structure

The reductive physicalist and the determinist claim that our wills supervene upon the physical structure of our brains. If this is true, with sufficient technology, we should be able to rearrange our own will.

This point, even before doing any experiment shows the existence of free will power. Because, with sufficient technology, I should discover what spatiotemporal structure in my brain -or outside my brain-causes my will, and I should be able to change it. If I can change my will this way, this means that my spatiotemporal brain structure is

not the ultimate cause. If I cannot change my will by changing the spatiotemporal structure of my brain, in other words, if I change the spatiotemporal structure of my brain but my will does not change, this again means that my brain's spatiotemporal structure is not the ultimate cause of my will.

The 4th experiment which is a thought experiment is as follows:

In accordance with determinism, though E1 can see the two alternatives of red and white candy, and he sees no obstruction, he can will only what he actually will have willed. He is informed by LD that he cannot will the white candy.

Though through the analysis of the 1st experiment, he understood that the claim of LD is false, this time, assuming that LD is right and that his will supervene upon the physical structure, he tries to see what is going on in his brain, whether there will arise further contradictions, he tries to see whether he can rearrange certain things and will structures so that he can will the red candy:

E1 has all kinds of probes and tools to see his brain and make certain changes. He sees that his brain elements are so that he wills the red candy. However, he checks whether he can will to change the related "circuit"⁸⁸ or switch of his brain that causes the will of red candy. Though the circuit is so that he has to will the red candy, there are two theoretical possibilities regarding the circuit which causes him to will the red candy:

(1) He will will to rearrange the circuit to will the red candy into a circuit to will the white candy. (2) He will not will to rearrange the circuit to will the red candy to a circuit to will the red candy.

⁸⁸ For simplicity, here I use the word "circuit" instead of neuronal networks, neurons, ...

If (1) is true, then he rearranges the circuit. If (2) is true, then he checks if he will will to rearrange the circuits which cause (2).

Now, as it is a scientific search whether he can prove his free will power, E1 will check all circuits to see if there is an open point. He produces new decision states and for each state, he finds out for each related circuit whether he can will to change that circuit which may allow him to change through a chain of circuits the circuit which coercively causes him to will the prediction of LD. After all, LD made the prediction about E1's will related to touching the candy, not about his wills related to changing the circuits which causes him to touch the specific candy. One may ask what if LD said that concerning all circuits of E1's brain. Then E1 may try to produce the decision states concerning everything in the universe which may influence his brain circuits. If we say that LD predicts that none of the wills of E1 concerning every particle in the universe may divert the will of the E1 from the prediction, then this will be an impossibility in terms of probability if E1's decision states is about all infinitesimal things in the universe: All of his possible wills concerning any infinitesimal thing in the universe are such that He cannot change the circuits of his brain so as to negate the prediction of LD. If such a farfetched situation sounds not impossible, we should also consider that not only for E1, but if all human beings did this test, if determinism is true, billions of human beings would also not find any thing in the universe for which there is a will which will enable the experimenter to change his/her brain circuits so as to negate the prediction of LD. If nobody now and in the future can achieve to find such an opening, this would entail that there is a willful coercive aspect of LD's prediction. But determinism sets aside such a willful coercive aspect.

So, LD cannot prevent him from searching a useful decision point, since there will be in any case some people who want to check

whether they have free will power and who will try to prove LD wrong.

If he finds just one open point, then in a chain he will rearrange all circuits including the very circuit which requires that he wills the red candy, and he rearranges that and he touches the white candy.

Or if he cannot find an open point, let us suppose that E1 checked all circuits one by one starting from the very circuit that causes him to will the red candy, and all of them are so that he cannot rearrange any circuits. He came to the related “final” circuit in his brain.

Regarding different scenarios, there are three important points here:

(1) E1 very soon finds an opening. Because, it is very unlikely that all probed circuits happen to be negative. The probability of the first circuit being negative is $\frac{1}{2}$, the probability of the second circuit also being negative is $\frac{1}{2} * \frac{1}{2} = \frac{1}{4}$, the probability of 100 circuits being all negative is 2^{-100} which is very close to zero. Also, note that E1 may have many alternative circuits that may be used to by-pass the negative circuits.

Also, checking whether E1 will change a circuit entails checking whether E1 will change components of that circuit. But, the components of that circuit will be same in nature with the components of the circuit which entails willing the other alternative. So, it is difficult if not impossible that he finds out that he will not will to change the circuit.

(2) The questions’ answers may not be within those circuits as there are virtually infinite chain of questions. Hence, the prediction of LD cannot be done based on these spatiotemporal circuits either. Let us suppose that there is a last circuit in the brain up to which he could not find an open point; E1 will again have two potential wills and a question: Will he will to rearrange that last circuit, or not? If the

answer is within the circuits as the determinist claims, then the circuit which contains the answer to this question will also be somewhere in the brain. But this definitely will require infinite number of circuits which is impossible in actuality. So, there is an essence of E1 which contains certain things that his brain does not contain.

(3) As E1 negated E2 in the first experiment within seconds in each round, it is not possible that so many circuits are checked in daily life. So, it is unlikely that the wills happen entirely through serial connections and processes. Also, even assuming that the spatiotemporal structure of E1's brain is the only factor determining the will of E1, to claim that E1 cannot negate a claim, would entail that there is no opening in the brain of E1 so that the circuits directly related to the will can change is not substantiated; especially, since E1 transcends both alternatives, if he is told that he cannot will one alternative, then he can give his brain enough time so as some related circuits change in order to will the blocked alternative.

This experiment shows that E1's will cannot be the result of a spatiotemporal deterministic, reducible, and sequential process. He has a transcendent essence which receives the data in a unitary way, and which supplies the brain modules with relevant commands in cooperation with the related elements of the brain. The agent transcends things in unity, not necessarily in steps: The essence of the agent transcends both candies, and the scenarios where he touches the red candy and where he touches the white candy equally. There are no limitations of energy or mass at a certain layer. E1 can easily imagine raising a truck with his finger, and give the command to his finger. After this stage he will notice experimentally that it cannot raise it. But the power of the previous stage is contained within its freedom and transcendence balanced sometimes with the ignorance of the practical execution issues. The reasoning power, the memory related to past experiences is outside this transcendent freedom. Once the agent can conceive the alternatives, he can give

the command to his motor modules. So, seeing the physical circuit as something that prevents willing a touchable candy is in fact a weird situation.

Furthermore, it shows that though there are relationships between the structure of the brain and the will, there is not necessarily a one-to-one relationship between the two. For example, two different corresponding brain structures may entail the same will.

Question 74.

In the situation of an indeterministic universe, if we need to make a distinction between the alleged supervenience basis (ASB)⁸⁹ and the will⁹⁰ as a causal power, which one has a causal power over the other? The will and the position of the switch seem to always overlap.

Answer 74.

In the deterministic scenario in the 1st and 2nd experiments, we could see that E1 could negate the implication of a deterministic universe: The answer to the simple question “can you will the red candy while the related switch of the brain is to the left so as to entail the white candy?” would make me know whether I have sovereign free will power over the deterministic mechanisms.

If I am reshaping my brain particles, this means that I am more than particles or I have some dimensions beyond the dimensions of the

⁸⁹ In this part, by alleged supervenience basis (ASB) I mean a state constituted of deterministic or indeterministic spatio-temporal entities, relationships and reasons upon which the will is allegedly dependent or supervenient. In the following experiment we will see ASB’s implications about free will power.

⁹⁰ If we see the agent as holistic being and ASB as another reality then there is no problem; the will is real with its dimensions, it is distinct and it is sovereign. The opposing view is that the will is illusory and ASB is the only one that produces effects.

particles, especially in a non-deterministic universe. Because otherwise I would not be able to change and it would be a contradictory process unless the change in particles coincidentally and fully complied with the subject of the conscious will. And changing my brain particles requires a transcendent capacity which would have certain attributes, by which I can observe, conceive, plan, or execute the change.

3.4.12.2 Some key Points About the Experiments and Proofs

3.4.12.2.1 Experiments are not the Only Proofs for Free Will

We show free will power not only through tests but also by demonstrating the impossibility of determinism and indeterminism without sovereignty. These arguments support each other.

3.4.12.2.2 Mechanics in the Tests

The parts are not superior to the whole, since taken separately they contain themselves but not the whole. They do not see the potentials, but the agent sees them since each part is instantiated within itself. The ability to transcend these potentials is closely related to free will, because as potentials, any potential is a willable alternative, though for each part there is a limited accessible potential. And taken separately no part contains nor comprehends the whole of the potentials that the agent can comprehend and transcend.

3.5 Producer of The Will: The Agent

Nay! I swear by the self-accusing soul.

(Quran: 75/2)

(To the righteous soul it will be said:) "O fully satisfied soul!

Return to your Lord, well-pleased and pleasing [to Him],

(Quran: 89/27-28)

The seven heavens and the earth and whatever is in them exalt Him. And there is not a thing except that it exalts [Allah] by His praise, but you do not understand their [way of] exalting. Indeed, He is Forbearing and Forgiving.

(Quran: 17/44)

And We have already created man and know what his soul whispers to him, and We are closer to him than [his] jugular vein.

(50/16)

The “agent” specifically means a human being in our context, however, more generally, it refers to anyone who wills. In our context, the agent is the actor of the will, the willer, and the entire being who wills and who will earn the consequences of the exercise of the will power. The agent may be in different states. And there are layers of the agent and these layers may interact.

3.5.1 The Concepts Related to The Agent in The Quran Regarding Free Will

The agent is the willer. Therefore, understanding what an agent is, how is its structure, what are its states, and powers regarding free will are necessary in order to understand the will power.

So, I will first give an overview of the terminology of the Quran about these. And then we will go into further details.

3.5.1.1 Agent (Nafs)

The word “nafs” is used in the Quran in two essential meanings. One meaning is the “person”, which indicates the agency of the human being. I will also use the word “agent” interchangeably with the “person”, since regarding free will, our focus is on the agency aspect of a human being as a person.

The other meaning of “nafs” is “the active essence of the person”.

Regarding English usage, the word nafs in Arabic corresponds to the word “soul” which has also the two meanings. The hand or foot that we can touch are parts of the person; but they are not parts of the essence.

Although the Quran uses also specific words that correspond to “person”, and “essence”, the word “nafs” which comprises both is used more often. This seems to be very instrumental in delivering the message that the mental, sentimental, spiritual, intellectual, and moral aspect of the human being constitute the most noteworthy part of the human being. Allah knows the best.

3.5.1.1.1 Nafs Meaning “The Person”

The following verse is an example of the first meaning:

You will certainly be tried in your property and your ‘persons’. And you will certainly hear from those who have been given the Book before you and from the idolaters much abuse. And if you are patient and keep your duty, surely this is an affair of great resolution.

(Quran: 3/186)

The agent or person in this usage, is a whole containing all of the following elements. In the following sections I will take in detail the

parts, processes, properties, environment of the agent as they relate to the free will.

3.5.1.1.2 Nafs Meaning the Essence/ The Soul of the Person

The following verse is an example of the second meaning:

And who is more unjust than one who invents a lie about Allah or says, "It has been inspired to me," while nothing has been inspired to him, and one who says, "I will reveal [something] like what Allah revealed." And if you could but see when the wrongdoers are in the overwhelming pangs of death while the angels extend their hands, [saying], "Discharge your souls! Today you will be awarded the punishment of [extreme] humiliation for what you used to say against Allah other than the truth and [that] you were, toward His verses, being arrogant."

(Quran: 6/93)

In the above verse, we see that the souls of some people are punished in a different way.

The following verse is about the rewarding of a person who has been killed in the way of Allah:

And never think of those who have been killed in the cause of Allah as dead. Rather, they are alive with their Lord, receiving provision,

(Quran: 3/169)

So, in the above two verses, we see that the still body of a person is in our presence, while the soul of the person may undergo a punishment or reward. In the latter verse, the person is alive with his Lord, "receiving provision". It is clear that this worldly body of the

person is not receiving any provision. These bodies' atoms are in a certain state, yet these persons keep enjoying and eating the provisions of Allah.

We always observe that the change in the spatiotemporal components of a person does not necessarily make the person another person. If that which is rewarded is fully another body, and if there was no common essence between the existence of the person who was dead, and the person who is being rewarded or punished, then another person, another body would be receiving rewards for a deed that he has not done, and that another person has done.

The reward is presented as a reward for what they did. This means that the essence who did the good deed was not essentially the body. Because the contents of a body changes continuously. Punishing the same structure is also meaningless, because structures of the same agent may change, and also a structure can be copied. If it has qualia, and if a same structure rebuilt somewhere else has the same qualia, the exact new copy will not be the doer of an evil act that the original body did somewhere else.

On the other hand, if the punishment for an evil act had been at the very time of doing the evil act, then freedom of will would not be obtained, and good and evil would not have been existed and then compensated.

If the essence of the agent to be punished or rewarded is connected to one neuron in the brain and transcends other parts from there, then again something else would be punished. If it is like a quantum entanglement of particles in the brain then the punishment of other neurons would be unfair. The same should apply in the worldly punishment as well: If the punishment of the criminal happens some time later, then the very atoms would have gone, and would it be the

spatiotemporal structure of the agent which is punished? Likewise, a structure would be different even if it has permanent aspects.

For the agent to be responsible as the same person he must have a unity. If the active essence contains differentiations then it might be said that the one punished is not the one who committed the crime. However, as explained in part 2.2.1.3 mere differentiation does not necessarily prevent unity, since differentiation is closely connected to unity. Here, the distinction of the soul is due to its different functions. While the elements of the body or the brain is dissolvable to be given to the usage of other souls, the soul is the location of agent-like relationships so as it has permanence and distinct identity.

These are related to the Designer name of Allah, because of which we observe that things are not reducible or supervenient to a specific thing. Different aspects and substances are originated and sustained for specific purposes; and there is no mechanical and non-transcendental basis to which things can be reduced. Further details about these are given in sections related to argument from unity and its extension of transcendence.

If the essences were not the key elements of an agent, then at least some bodies who have completed their functions in this realm, would be transferred to another realm; otherwise, parts of different bodies would be mixed and it would be practically difficult to recompense distinct persons in the hereafter. Similar problems would also occur in the worldly punishment and reward.

Can this essence be just a locus of an ineffective consciousness? A part of a whole that can be taken as responsible, just as a link or symbol? And if it is effective how effective would it be? Naturally, in a consistent and fair system, it has to be considerably effective.

Also, if the essence did not have distinct effects, and it had only consciousness, then it would be rewarded though it did not have any effect.

The unitary beings are fundamental. The physical⁹¹ is a limited and secondary aspect which is accessed through our eyeballs. Yet the physical is also based on unity.

If the one who is to be rewarded was a recreated soul or structure then the one who rejoices those pleasures would not be the one who for example suffered in the way of Allah. And that which is to be rewarded or punished cannot be like a spatiotemporal substance like an atom or neuron which is connected to a body and then separated from it and connected to another one, because for example the body is seemingly in continuous movement and internal change.

The power of the unchanging element may be understood from the following verse:

Then He proportioned him and breathed into him from His (created) soul and made for you hearing and vision and hearts; little are you grateful.

(Quran: 32/9)

The essence may be something that does not change so that a reward or punishment is just. By the way, note that the change or the passage of time are mostly what we perceive in a limited way through our limited eyeballs. We experience that it is unchanging although all

⁹¹ According to the meaning of the “physical” as the “natural”, everything is physical, including God, souls, and so on. But generally, the physical is used as meaning the spatiotemporal and excluding the transcendent. Hence, often I use the word the physical in this latter narrow sense to facilitate communication. But the first meaning is the more appropriate one.

elements of our bodies change. However, this essence may have access to changing things.

Whatever we consider as changing has some unchanging aspects within certain unities: A book is not a sovereign whole, but the sovereignty of the space connects its parts in space. Hence, within the sovereign wholeness of space it has a place.

Allah takes the souls at the time of their death, and those that do not die [He takes] during their sleep. Then He keeps those for which He has decreed death and releases the others for a specified term. Indeed, in that are signs for a people who give thought.

(Quran: 39/42)

The soul⁹² has a unitary aspect as every other sovereign whole and its essence. The apparent differentiations within any whole or soul are elements of unity. The relationships between differentiated components are also elements of unity. In this respect, the soul is also in relation with other essences such as the essence of will module or the essence of consciousness.

Consider the multiple and the One!

(Quran: 89/3)

It has access to different dimensions as physical dimensions, consciousness, it is transcendent. It relates most to the whole of anything. If a human being's soul is gone, the wholes of his atoms continue being. This soul interacts with different dimensions directly or indirectly. It transcends time, physical things, memory within certain ranges. It takes some things in some dimensions as inputs. When a person is dead, this essence that related to the whole of the

⁹²The word “soul” should be understood with its meaning as “an active or essential part” of the human being. (Merriam-Webster.com 2020)

body, consciousness loses its connection to those. Yet it can be related to other elements. For example, it can be related to other cells in the paradise. Every sovereign whole has such a unity and essence.

The reality of a human being extends as an ontological reality through time as well. And this reality is something more than the organization and energy it contains. It is a user of power which exerts power over the related energy.

When a person is alive and real then this reality has implications regarding that whole, for example he must eat. When this reality ends the need for eating ends. And the behaviors of his parts change. The cause of this difference is soul which is the holistic difference of the agent from the sum of his parts. This is true for all things and laws of nature and some realities as space-time.

Every sovereign whole that the soul interacts with has soul-like features. Because of the limitations of our eyeballs, we only see limited relationships at the surface.

Question 75.

How does the soul interact with the physical?

Answer 75.

This is answered in part 3.5.3.

Question 76.

Do split-brain patients have one essence or two essences?

Answer 76.

As of now there are insufficient number of qualified experiments about split brain patients. And as no normal person would want his

corpus colossum be severed, those patients are exceptional cases. On the other hand, there are communicative limitations about such experiments about animals.

However, other than exceptional situations and artificial setups, the split-brain patients live their lives normally. Although all of their fibers connecting the two halves of their brains are cut, they do not experience clash between the two halves.

In experiments, when they are made to grab a key with their left hand and not allowed to look or touch with the other hand, if they are asked what is in their left hand, they cannot say what their left hand holds. Because, the left hand is generally controlled by the right half of their brain; and speaking is controlled by the left half. However, in normal life, they are not limited to their left hand or left eye. And we see that they behave as one person, and they do not have two personalities doing things in turn.

If split brain patients had two souls in one body then non-split-brain persons would also have two souls in one body as well, just they have to be collaborating. But as those who do not have such problems witness, this is not the case.

Question 77.

In near death experiences, people report that they had out of body experiences where they floated up while their bodies were lying down and their eyes closed and their brains were in a shut down state. Does not this show that the spirit or soul has an ability of itself to see and hear without the body?

Answer 77.

And it is not [possible] for one to die except by permission of Allah at a decree determined.

(Quran: 3/145)

And no soul perceives what it will earn tomorrow, and no soul perceives in what land it will die. Indeed, Allah is Knower and Aware.

(Quran: 31/34)

These allegedly near-death experiences are not actually near death, since the death has not happened at that location and time.

3.5.1.1.2.1 Distinctness of The Soul

It is obvious that as experiencer of the qualia and events, we last through time. Every whole has aspects and existence through and transcending time. The brain may have states which give data, can communicate with the essence of the person. The essence also may be in structures like this. In any case, every whole has a unity. But if this is the case, and if the brain has a unity why is there a need for a distinct essence?

Because, the brain is decomposable, and its constituents which may have many other purposes, can be recombined in different forms. Yet for the requirements of agent relationships, values, responsibility, there is a need for a more permanent creation for relevant relationships in the design of the universe and beings.

In this context, when a person dies and the constituents of his brain are inactive in the agency realm, the essence may continue to be active or suspended but activatable. In daily life we forget things, though we are conscious: This means that the essence is structured in a certain way, since it does not have an absolute access to anything that exists in the brain.

A feature of a sovereign whole is its distinctness from other things. So, for example a whole may have features distinct from its parts,

features that its parts do not have. For example, our space which is a sovereign whole, unites spaces of 'each object which has its own space' so that they may be related to each other. Or, for example a part of the brain may have a memory feature. But the essence of the agent may have a distinct consciousness.

If the essence has structure and differentiation then what is the permanent or common between the actor and that which is rewarded or punished? Is it a material substance, or structure/ form...?

Each whole has unity as explained in part 2.2.1.3 about argument from unity. At times, some states of the brain communicate with the essence some do not, as in forgetting.

In the below table we can see different theoretical possibilities. For example, first two lines, show the possibility of having different essences while having exactly same substance and same structure. Lines 3 and 6 show the theoretical possibility of having same essence while having two combinations where neither substance nor structure is same.

Line #	Spatio-temporal Substance (Su)	Spatio-temporal Structure (St)	Essences (E)
1	Su1	St1	E1
2	Su1	St1	E2
3	Su1	St2	E1
4	Su1	St2	E2
5	Su1	St2	E3
6	Su2	St1	E1
7	Su2	St1	E2
8	Su2	St1	E3
9	Su2	St2	E1

TABLE 1

I will not go through the implications of all these theoretical possibilities, though they are quite indicative when combined with our experiences.

However, the following question is important in our context: Can essence be different while substance and structure are the same? The answer is “Yes”. Because, changes in the spatiotemporal substance do not affect the essence, since we know that the particles within our bodies are continuously replaced while we as the experiencer of the experiences are the same. On the other hand, as explained above, structure may be the same while essences are different as shown in the case of exact structural duplication. And location does not have any impact on the permanence of the experiencer. Feelings of the identically structured two agents in different locations may be the same, yet the essences which experience these qualia are different. The agents may shift locations, yet changing location as we continuously experience does not change who we are. Therefore, we can safely conclude that the essence is obviously distinct from spatiotemporal structure, substance, and location.

Question 78.

Is not it possible that what the Quran says about martyrs is a special and miracle-like exceptional situation like the splitting of the sea with Prophet Moses (PBUH), maybe it is not applicable for the souls in general?

Answer 78.

The hereafter applies for all people. Those verses are not revealed for some specific persons, but establish a rule-like relationship. And it is likely that at least worldly atoms or molecules of people are mixed with those of other people. In any case, the worldly brain is in our presence while the agent enjoys other things.

3.5.1.1.2.2 Islam Is Not Dualist.

Say, "Are there of your 'partners' any who begins creation and then repeats it?" Say, "Allah begins creation and then repeats it, so how are you deluded?"

(Quran: 10/34)

“Property dualism is the doctrine that the mental properties are distinct from and irreducible to physical properties, even if properties of both kinds may be possessed by the same thing, such as the human brain. Substance dualism is the doctrine that the things that possess mental properties are distinct from and irreducible to the things that possess physical properties – for example, that the human mind or soul is distinct from and irreducible to the human body or any part of it, such as the brain.”⁹³

In summary, the distinguishing feature of dualism according to the above formulation is the “irreducibility” of mental properties and things to the physical. This dualism recognizes both the mental and the physical as the only fundamental classification in the relevant context. It is different than monisms which recognize only the physical or only the mental. It is not pluralist in that it does not recognize additional classes in the relevant context.

⁹³ (Lowe 2008)

In fact, the general formulation reflected in the above quote is one which comes with some baggage of presuppositions. There is no reason to take the reducibility as a criterion for the classification of the doctrines in respect to the mental and physical. This presets the agenda around the question of whether the mental is reducible to the physical or not. It accepts the reality of the mental and the physical, -though some see the mental as illusory and/or epiphenomenal-. But it presumes that the mental and the physical are fundamentally distinct. This is totally against the teaching of the Quran. Anyway, in this part I will present some important implications of the Quranic teaching about dualism as formulated in the above quote.

Let me also mention the knowledge argument⁹⁴ to clarify a key point of dualism: The deaf scientist⁹⁵ S knows everything physical about sounds and hearing. And one day he undergoes a surgery and starts hearing. When he heard some sounds, S learnt and experienced something new that cannot be explained by all that he scientifically knew before the surgery. Therefore, the mental cannot be reduced to the physical.

Islam is not dualist for the following reasons:

3.5.1.1.2.2.1 There Is No Reason to Separate the Mental and The Physical.

Vision perceives Him not, but He perceives [all] vision; and He is the Subtle, the Aware.

(Quran: 6/103)

⁹⁴ (Nida-Rümelin 2019)

⁹⁵ The deaf scientist is given as an example by (Robinson 1982), quoted in (Nida-Rümelin 2019))

Everything passes through our mental window. We never experience immiscibility between the mental and the physical: We do not see non-spatiotemporal spirits or stones or birds, we do not witness their immiscible properties. And we cannot. If we see or experience, this means that the mental and the physical interacts, and have commonalities.

Secondly, we do not know sufficiently the essence of the physical, and we do not know the essence of the mental. There is no reason to claim that the physical is fundamentally different than the mental. There are many reasons for the opposite. Explanations in part 2.2.1.3 about the argument from unity clarifies this issue.

On the other hand, we do not have full access about the essence and person of God, hence to the essence of the creation. Therefore, in any case according to Islam, any dualist classification may be only epistemological. A claim that one is reducible upon the other is unsubstantiated.

If a fundamental distinction is assumed to be true between the mental and the physical, theoretically there may be 4 alternatives about how the universe works: The mental and the physical are both effective; only the mental is effective; only the physical is effective; none is effective.

According to Islam, the physical and the mental cannot be separated in terms of properties or substances except epistemologically. The difference between the mental and the physical may be useful in terms of epistemology in terms of degrees and contexts.

Defining the physical as a category other than the mental is fallacious since 'we' 'define' and 'conceive' it as another category.

3.5.1.1.2.2.2 Physical and Mental Properties Are Not Separable.

In Islam, every whole and every property of every whole has its reality in a unity with other things; no substance and no property constitute an absolute distance, since any distance also needs the unitary creative power of Allah.

The properties are not separable as the mental ones and the physical ones. As explained in part 2.2.1.3 about argument from unity, the physical has mental aspects, and the mental has physical aspects. Allah is “Aware” of all things -things include properties-. The mental has the properties of unity, stability, classification, quantification, allocation, design. The physical also has such properties.

If according to Islam, the body did not have soul-like attributes and constituents, and if the soul did not have body like attributes and constituents then we might say that Islam maintains dualism. However, Quranic teaching does not allow us to make such sharp distinctions.

Furthermore, the distinctions between the mental and the physical do not apply to their Creator: One distinction between the mental and the physical is that the physical is public, in other words knowable by everybody as opposed to the mental which is subjective and knowable only by the agent who experiences it. However, according to Islam, this is not true as a principle. For example, according to Islam, Allah knows the feelings of agents, or how they observe the universe as in the following example:

The bedouins say, “We have believed.” Say, “You have not [yet] believed; but say [instead], 'We have submitted,' for faith has not yet entered your hearts.”

(Quran: 49/14)

So, ultimately, the mental is not fundamentally separable in principle from the physical. Regarding the unity of the conscious experience there is no fundamental difference either; all sovereign wholes have also their unities as explained in part 3.5.3.

The scientist in the above knowledge argument does not have the experience of hearing. But this does not mean that what he knew before the surgery had nothing to do with the mental. So, he just did not have access to a particular mental experience. His experience of knowing before the surgery was also a mental experience. There is no reason to say that whatever qualia he used to learn before the surgery were not mental. Furthermore, whatever physical changes were made in the surgery had an influence on his hearing. Also, the contents of those changes as atoms, also may have mental aspects as shown in the following verse:

Until, when they reach it, their hearing and their eyes and their skins will testify against them of what they used to do.

And they will say to their skins, "Why have you testified against us?" They will say, "We were made to speak by Allah, who has made everything speak; and He created you the first time, and to Him you are returned.

(Quran: 41/20-21)

While there is no basis to say that there is a sharp distinction between the physical and mental, there is no reason either to say that there are not things with attributes other than the physical and the mental.

3.5.1.1.2.2.3 The Physical and The Mental Are Created and Sustained by Allah.

And He creates that which you do not know.

(Quran: 16/8)

Fundamentally there is no ontological distinction between the physical and the mental. This is because nothing is self-sufficient and everything needs the God who is Self-Sufficient and One and without any parts.

We cannot say that the mental is reducible to the physical, because the physical is not an ultimate basis for anything as explained in part 3.5.6.4.2 about reductionism and especially as explained in part 3.5.6.4.2.8 about ASBEs. The physical and the physical properties are also sustained by God. So, whatever properties does the physical have, they are not their inherent properties, they are their given properties. Therefore, reducibility of a mental property to the physical is trivial at best. If the physical can be given a property of being conscious, then discussing whether the mental is reducible to the physical is not very meaningful.

Fundamentally, everything including differentiations, is built on unity. How can the mental and physical properties have no fundamental common ground while both have been created and sustained by the same being who is absolutely One?

Whatever is the mechanism of consciousness and the physical, it originates from Allah, who is not divisible regarding substance and regarding properties; therefore, an isolation between the physical and the conscious is not acceptable at the fundamental level. It is not possible to separate the attributes of Allah as Knower, Aware, Punisher, Merciful from His attributes as Creator, Powerful. Adherents of religions who claim that God resembles a human being, object, or animal may have difficulty in understanding how God would not have distinct physical and mental attributes.

The physical is created and sustained by Allah who exercised His attributes as Designer, Knower, Aware, Willer and so on attributes for creating and sustaining the physical:

Ask them: "Who provides your sustenance from the heaven and from the earth? Who has control over hearing and sight? Who brings forth the living from the dead and the dead from the living? Who regulates the universe?" They will soon reply: "Allah." Say: "Why do you not then fear Him for your going against the truth?"

(Quran: 10/31)

Whatever entity, being, or property is considered as mental or physical, they are created and sustained by Allah. Allah does not have a dual essence. Nor are His attributes separable from each other. He can give mental properties to the physical, and physical properties to the mental. The free will power which acts on the physical is an example. In the following sub-sections I will give further examples about this.

In the Quranic teaching, God can create whatever He wills. What He creates is not limited by what already exists, since it is He who created what already exists.

3.5.1.1.2.2.4 The Physical Has Mental Properties.

Until, when they reach it, their hearing and their eyes and their skins will testify against them of what they used to do.

And they will say to their skins, "Why have you testified against us?" They will say, "We were made to speak by Allah, who has made everything speak; and He created you the first time, and to Him you are returned.

(Quran: 41/20-21)

The seven heavens and the earth and whatever is in them exalt Him. And there is not a thing except that it exalts [Allah] by His praise, but you do not understand their [way of] exalting. Indeed, He is ever Forbearing and Forgiving.

(Quran: 17/44)

The intentionality, subjectivity, and unity that are main features for the mental are also shared by the physical.

The physical has no self-sufficient and objective property, meaning, or being. Except if these are given them willfully by the One God who also originates the mental properties.

We do not have any evidence to say that what we conceive is something other than what we conceive even if it theoretically is other than what we conceive. So, we cannot say that something is not mind-like or conceivable, because whatever we are conscious of is mind-like and interacts with minds.

So, when we say physical, it is not well defined in itself. What is the distinction between physical and non-physical?

It is claimed that the physical is public and objective, in other words, whoever has the means, can observe for example the weight, the size of an object. However, it is not very clear that the physical is objective/ public: Every physical thing in the universe might be appropriately grown a million times, so that we would not notice the difference. We look from the inside of our universe and spacetime, everybody around looks from the inside, so we think that everybody has an objective perception of the physical. If it looks like that because we are inside the universe with certain limitations, and it is not absolute, then this means that it is objective only for those who are inside, for others it may be subjective, maybe even unperceivable.

We are not entitled to claim that every spatiotemporal thing we perceive as an objective fact is ultimately complete and objective. In fact, we do not have any absolute frame of reference for an absolute size of anything. So, the claim that the physical property is public is an unfalsifiable and unverifiable claim. So, it is possible that the physical is subjective, and the mental observer is the more objective.

If we have consciousness supposing that we have it because of our physical body, we cannot say that our parts do not have any consciousness, hence, any unity and subjective experience. If the physical can have such consciousness, then naturally they may also have unity, subjectiveness, and intentionality. If the physical has such attributes, then saying that mental attributes are not reducible to the physical becomes meaningless, since the physical has mental attributes.

Let us give an example related to the unity of the physical.

Let us suppose that there are 3 objects each with its own space, and which cannot be related to other objects. This state is not sufficient to explain any geometric relationship between them. For example, that state cannot explain a triangular positioning of these objects. Because, each is within a space unrelated to the other two spaces.

But if all of them are put in a common metaspace, then is this metaspace effective and distinct, or is it supervenient upon these objects? It is certainly an effective and distinct whole.

This metaspace is not necessary, then we can say that its unity and distinctness was assigned to it by another source.

Now, let us suppose that one of these objects rotates around one of the other two objects. This was not predictable in the previous state where each only had its own space. Now that they have the rotation

relationship, we can say that there is another relationship overlapping with the other relationships.

Then let us assume that whenever the rotating object is between the other two objects, it has a feeling of hearing a voice. This “hearing” was not predictable within the previous structure even though sound waves might be possible. Hence, in the new structure, there is another whole and unity built upon the previous structure.

This may continue, and be applied to protons, atoms, molecules, cells, organs, planetary systems, and so on within our universe regarding their different natures and relationships. The above steps do not need to be sequential; they can be structural and spontaneous.

In the above example, we see that the unity that is used to distinguish the mental experience is not a distinct property of the mental, it is also a property of the physical. So, claiming that the mental properties are fundamentally separable from the physical is inconsistent with our world. Saying that those unities do not and cannot have conscious experience is unsubstantiated, since we have mental experience related to some spatiotemporal states.

If the physical can have conscious experience, then, saying that the mental is irreducible to the physical is meaningless. If the physical does not have conscious experience, then, at least it interacts with the conscious, since, we are conscious and we experience beyond doubt that we interact with the physical.

One example of a specific type of effective wholes are observed in entangled pairs in the quantum world. In Bell’s inequality experiments, the essence of the entangled photons is not located in one of the photons distant in space. The local separation between these entangled photons is effectively overridden by their whole. It acts overcoming the unknowns and separations of space. In the two

photons entangled in a certain way, there is something which does not exist distinctly in two photons which are not entangled. That something is not bound by locality. This again shows the unity and interaction capacity being common between the mental and the physical, hence, making the claim that the mental is fundamentally separable from the physical false.

For more detailed explanations about the mental like behavior of the physical, see part 3.5.3 about sovereign wholes.

3.5.1.1.2.2.5 Some Mental Properties Need the Physical.

And [by] the soul and He who proportioned it

And inspired it its wickedness and its righteousness,

He has succeeded who purifies it⁹⁶,

(Quran: 91/7-9)

Every soul will taste death. And We test you with evil and with good as trial; and to Us you will be returned.

(Quran: 21/35)

The mental and the physical interact. The negation experiments and brain observation experiments about the free will power in part 3.4.12.1 show the influence of the essence of the agent on the physical states.

⁹⁶ The “soul” (nafs in the original text -not “rooh” corresponding to spirit-) is used as corresponding to the “person” in general in the Quran. Hence there is a purification of his own self. There are inspirations coming from his own nature, his environment, from people; yet the person may purify himself. He has his own reality. For further details see part 3.5.1.1.2 about the agent (nafs).

In the following verses, we see some physical organs which are necessary for some mental activities such as having sight:

Have We not made for him two eyes?

And a tongue and two lips?

And have shown him the two ways?

(Quran: 90/8-10)

As explained in the following verse, certain souls who are said to be alive in the sight of Allah are being fed, and are receiving provision:

And never think of those who have been killed in the cause of Allah as dead.

Rather, they are alive with their Lord,

receiving provision,

(Quran: 3/169)

These provisions are not illusions. Hence, we may conclude that according to the Quran souls have a reality that is not necessarily fully distinct from the physical.

3.5.1.1.2.2.6 Allah Does Not Have A Separable Substance.

The substance dualism is not acceptable in Islam, since Allah does not have any separable substance. We cannot say that this special substance of Allah is responsible for His mental acts or attributes, and that substance for the physical attributes.

The essence of the human being explained in part 3.5.3 is not a distinct substance related specifically to the mental properties. It interacts with the spatiotemporal parts of the human being. While

there are some differences between the essence and the spatiotemporal, they interact as explained in part 3.4.12.1 about free will experiments. Their interaction shows that they are on common grounds, regarding substance and properties.

Furthermore, as explained above, the spatiotemporal also has mental aspects. The essence explained in that part is a matter of design rather than a fundamentally different essence who has only mental properties and functions. It is designed that way so that this world continues in its agenda, while each soul comes in when its turn comes, be tested, and then see the outcomes of the test. According to the design, it has to have a life that goes beyond its stay in this temporary world.

3.5.1.1.2.3 Other Soul-Like Things

An object is with its space. With the making of an object, its space is created. We cannot conceive of a created object without its space, and not only in our thought, but ontologically, an object is not separable from its space⁹⁷. So, its unity is created with its environment. This is not necessarily sequential; all objects and their spaces may be initially created within the same space.

But other objects also must have their spaces, if they are to exist. However, when two objects are united in one space then they can act relatively to each other. So, their being in the same universe becomes a new system and produces new potentials and implications.

Now, to create a gravitational system, a system with a law or force of gravity, the objects, beyond being within the space, also need to be connected to each other in terms of the equations of gravity. Note that this does not mean that all of those relationships are to be created

⁹⁷ Space is an example here. This reasoning may be extended to other things as well. For example, we cannot think of a number without its “surrounding”.

consecutively. Additionally, the forces can also be connected to each other in certain ways. Likewise, there are different relationships or relational systems at different layers or between different things. Similarly, molecules and atoms may be unified within bodies and according to defined relationships as if they are entangled to work for a specific set of goals.

We see above that the objects which did not have any power to move with their inherent spaces, gained further potentials which can be measured in respect to other objects when they are made the parts of a unifying space that which contains them including their spaces⁹⁸.

Here what I indicate as unifying space is normally the normal space people talk about. However, we should note that any spatial entity, in order to be, needs its own intrinsic inseparable space in the first place, and that there is no necessity that there would be anything additional that connects that entity with other entities. Therefore, this unifying space has a concrete and distinguishable effect over objects and their unified spaces.

In the context of the soul, the above objects correspond to the particles of a human being acting as the part of the whole of the agent so that different signals coming and being instantiated within different neurons being shared with the soul of an agent. Here, the parts of the agent gain further qualifications, wherefore, there appears a whole of the agent who transcendently receives data in separate locations/ neurons, and who puts them into use in relationship with the whole of the agent.

There is unity in regards to the whole of the space and in regards to the whole of the agent. In regards to space each thing moves as a

⁹⁸ Note that the unifying space may be unified space in the same time. In the above example, a single object may have parts. So, its distinct united space in respect to other objects, is a unifying space in respect to its parts.

whole. In regards to the whole of the agent the incoming signals to parts of the brain are also instantiated according to a system, in the unitary and transcendent whole of the agent. If two objects pull each other in regards to a gravitational system, then there is unity in regards to the whole of the gravitational system.

Similarly, when we use the letter “e” in the word table, “table” is distinct, but “e” is also distinct. The letters of the word table constitute the word table, but table is distinct from the letters. The concepts are the reasons why the letters exist. Table can also be without the meaning of the table.

Where are these unifying, soul-like essences? This question may be answered with a similar question: Where is the unifying essence of space? As you may note, in this context the essence of the space transcends the space and location. Likewise, “where the unifying essence for an atom is” also a question with a different kind of answer: An atom’s unifying essence unifies what it contains but is also connected to the unifying space; hence, it also transcends space and location. Similarly, if we ask where the unifying essence of number “4” is, the answer is that it transcends the set of numbers.

These essences are not fundamentally separate or differentiated. Their relationships with other things are defined by God. For some details about differentiation, see part 2.2.1.3.

These soul-like essences of wholes can be disconnected from the relevant realm temporarily or permanently, as in the example in the following verse:

Allah takes away the souls at the time of their death, and those that do not die [He takes] during their sleep. Then He keeps those for which He has decreed death and releases the others for a specified term. Indeed, in that are signs for a people who give thought.

(Quran: 39/42)

Parts are not united with the soul in its unity in some stages of the sleep. They have their wholeness within themselves, other than that they are less connected to the soul of the agent. This connection is not in terms of space; so, the soul does not move away from the body with a certain speed when the agent sleeps. Rather, it is in other deeper kinds of relationships.

Note that the processes mentioned in the above verse happen in law-like ways. We see in the following verse that even the creation and resurrection of all mankind happen like the creation or resurrection of just a single soul:

Your creation and your resurrection will not be but as that of a single soul. Indeed, Allah is Hearing and Seeing.

(Quran: 31/28)

The agent contains other layers of unity as well: For example, the agent's parts interact in unity with the whole of the agent, but also with the unity of the space. Likewise, the agent interacts with its parts in unity, but also with other objects as being part of the space. So, unities of things may be overlapping with the unities of other things. Where are the borders of the unities? There are no absolute borders, each unity within a whole is also a unity with other wholes, which has its essence not in differentiation, but in unity. Borders themselves are elements of unity. A unity is not the other unity, but it is defined in terms of the other unity as well, so they overlap.

Facts for the wholes apply for the soul-like elements as well: A whole cannot be considered as absolutely separate from other things. Positing a distance is meaningless, since, the distance itself is a unifying element. If there is a distance, that distance would also be in units, that would be defined in terms of that which is distant. All those units are created, defined, and sustained by the One God. A

bird who flies and flaps its wings has a reality of its own deeply connected to its outside and inside. At the deepest level Allah holds all.

Quantum unilocality⁹⁹ shows that the active essence, the very ontological being of things are not locally separated. Properties of things are not absolute-distance based either. The interaction between the essence and the spatial is so that the spatial is defined based on non-spatial unity. Space has implications, but this is because it is designed that way. Its effects do not originate ultimately from itself. Hence, it does not have any key superiority to the soul or to the consciousness. The spatiotemporal is just a view and it is encompassed by and within unity.

Can the whole be separated from its parts? A cell dies and there are the molecules. The person dies and there are the organs that may keep living if transplanted, and molecules and atoms. If there is no infinite structural regress then no part is absolute nor eternal by itself. No part is built upon a self-sufficient substance. All is sustained. So, a whole is not dependent on or reducible to its parts but it is in relationship with the parts. The parts interact, and the soul also interacts with the whole as its center.

Atoms in the brain which move as relatively to and dependent on each other require a unity; in fact, they are part of that unity; and act in that unity. Their own unity exists, but also, they act as elements of the higher unity of the agent. So, as their own unity is within a unity, and real like this, the unity of the agent is also like this in

⁹⁹ The technical general term “non-locality” does not represent well the Quranic teaching. In the Quranic teaching location is real and effective. However, it does not mean absolute distance. On the contrary, distance is also an element of unification and unity. Hence, I prefer using “unitary locality” and “unilocality” instead of non-locality.

unity. So, the whole has such a unity, and this unity is instantiated both on the atom, and on the whole body and brain.

Can the coming together of the similar neurons in the same structure produce automatically the irreducible reality, whole, and soul of the agent? As the objects having their own spaces cannot produce a space that will be common to them, similar neurons considered as elements only of the spatiotemporal, cannot produce the same agent by themselves and without the essence of the agent. They cannot be organized fully in the same structure if considered as limited within the spatiotemporal, because the whole of the agent makes changes to the neurons, and their structure.

If unilocality is true, then things are organized and designed in a different and unitary way.

Question 79.

Can this concept of soul-like essence be related to the quantum phenomena?

Answer 79.

The Quranic framework is very reminiscent of the quantum phenomena.

Firstly, wave-particle duality may be better explained within the Quranic framework: Long ago the non-existence of ether has been confirmed experimentally. Hence, the medium where the wave-particles propagate in the state of waves can find better answer within a framework wherein patterns are defined in a command-like and information-like way.

Quantum entanglement is mostly interpreted as particles being entangled with other particle(s). However, this is not parsimonious in that it requires that every one of numerous infinitesimally small

parts has the power to cooperate and originate their powers to cooperate with other things. In the case of a soul-like explanation, one soul-like essence of a whole is sufficient to coordinate numerous parts regarding the necessities of that whole.

Long ago it has been shown that the maximum limit based on the speed limit of light is false. In Bell's inequality tests it has been demonstrated that locality is false. This complies with the transcendence, omnipresence, omniscience and many other divine attributes of God.

Furthermore, our transcendence and the negation experiments and brain observation experiments that are explained in earlier sections, demonstrate that determinism is false. A widely adopted interpretation of quantum physics is based on the rejection of determinism. The key emphasis of the Quran on the freedom of will and on responsibility necessitates non-existence of determinism. These also are in harmony with the Quranic teaching. However, note that the Quran rejects also an indeterminism similar to randomness which is considered as a causal factor. Rather, uncertainty may be the natural and multipotential outcome of the sovereign wholes.

All of the above quantum phenomena can be explained with the use of soul-like essences in a much more parsimonious paradigm, based on the Quranic framework.

3.5.1.2 Modules of The Agent Related to The Free Will Power

And follow not that of which you have not the knowledge; surely the hearing and the sight and the heart, all of these, shall be questioned about that.

(Quran: 17/36)

And do not conceal testimony, for whoever conceals it his heart is indeed sinful, and Allah is Knowing of what you do.

(Quran: 2/283)

The free will power of the agent is a power at the high level of the agent's very essence. However, there are other modules of the agent which influence to an important extent the exercise of the free will power.

Since the hearing, seeing, the heart (qalb) and heart (fuad) may be questioned, the same about the identity of the essence may apply to them as well. This entails that the soul has components that correspond to our hearing, seeing, and hearts. They can be responsible as much as they contributed to the good or evil, if certain conditions for responsibility are satisfied. For identity of the essence see part 3.5.1.1.2 about the nafs meaning the soul.

3.5.1.2.1 Heart (Qalb)

One of the modules of the agent which influences the exercise of free will power is the heart.

There are several words used for heart in the Quran, such as qalb, fuad, lub, şadr. The word "qalb" the one which is used the most in the Quran, seems to have been used in a metaphorical way for a center active in terms of mental powers. Qalb is a verbal noun of the verb qalaba which means to turn, return, transform, flip over. The "turned about" in following verse, is a use of the passive form of another form (qallaba) of the verb:

The Day their faces will be 'turned about' in the Fire, they will say, "How we wish we had obeyed Allah and obeyed the Messenger.

(Quran: 33/66)

The biological heart as an organ at the center of blood circulation is also called qalb because of its function of continuous activity, change and turning the blood.

As a module, the usage of the word heart (qalb) relates to some central mental functions. The heart (qalb) has a big influence in changing and determining the direction of a human being in regards to important issues.

According to the numerous verses where the word qalb is used, it seems to be a module of the distinct whole of the agent. Its indispensable and unitary element(s) are to be within the soul, because as we saw earlier, the agent enjoys some rewards and continues some mental activities while his corpse, biological heart, breast, and brain are in our presence.

Some parts of the brain are related to the biological heart; the brain and some aspects of the biological heart may influence the mental heart (qalb).

Heart as qalb is a concept which is used very much in the Quran. We understand that though it is closely related to the free will power, free will power's origin extends beyond it.

The following verses are examples which show the important role of the heart regarding certain wills:

Your god is one God. But those who do not believe in the Hereafter their hearts are disapproving, and they are arrogant.

(Quran: 16/22)

The heart (qalb) is also a module which processes certain data and reasons according to the following verse:

So, have they not traveled through the earth and have hearts by which to reason and ears by which to hear? For indeed, it is not eyes that are blinded, but blinded are the hearts which are within the breasts.

(Quran: 22/46)

In the following verses, we see that there are some exercises of free will power attributed to the heart, and some attributed to the agent but not to the heart:

Allah does not impose blame upon you for what is unintentional in your oaths, but He imposes blame upon you for what your hearts have earned. And Allah is Forgiving and Forbearing.

(Quran: 2/225)

O you messenger, do not be saddened by those who hasten to disbelieve among those who say, "We believe," with their mouths, while their hearts do not believe.

(Quran: 5/41)

Call them by [the names of] their fathers; it is more just in the sight of Allah. But if you do not know their fathers then they are [still] your brothers in religion and those entrusted to you. And there is no blame upon you for that in which you have erred but [only for] what your hearts intended. And ever is Allah Forgiving and Merciful.

(Quran: 33/5)

In the following verse, we see that some persons in whose hearts the faith has not entered are invited to submit to Allah:

The bedouins say, "We have believed." Say: You have not [yet] believed; but say [instead], 'We have submitted,' for faith has not yet entered your hearts. And if you obey Allah and His Messenger, He will not deprive you from your deeds of anything. Indeed, Allah is Forgiving and Merciful."

(Quran: 49/14)

The following verses show that it is likely that by heart it is meant the above-mentioned module rather than the biological heart:

O you who have believed, respond to Allah and to the Messenger when he calls you to that which gives you life. And know that Allah comes in between a man and his heart and that to Him you will be gathered.

(Quran: 8/24)

Then your hearts became hardened after that, being like stones or even harder. For indeed, there are stones from which rivers burst forth, and there are some of them that split open and water comes out, and there are some of them that fall down for fear of Allah. And Allah is not unaware of what you do.

(Quran: 2/74)

Those who dispute concerning the signs of Allah without an authority having come to them, great is hatred [of them] in the sight of Allah and in the sight of those who have believed. Thus, does Allah seal over every heart belonging to an arrogant tyrant.

(Quran: 40/35)

Question 80.

If the soul has components, then would not producing a copy of their structures or substances bring in an identity problem?

Answer 80.

This problem would arise only if the soul would be decomposed and different parts were necessary to produce it again. Yet through the experience of the unity of our consciousness, we know that in any case there is a non-separable essence which does not depend on the changes of some parts of the agent. If we assume that we are constituted only of the parts of our bodies, then we also assume that it has a unitary aspect. The only issue that the teaching of the Quran brings in, is the existence of the soul in another realm, and being rewarded and punished as the same agent. If in that realm, its components do not disintegrate, then this alleged problem does not arise necessarily. For example, suppose a driver who driving a car hits a person and he runs away; in this case, the whole constituted by the driver and the car has disintegrated. But the unity of the driver continues within the unity of the driver even though the driver has parts. The same driver can drive another car.

Furthermore, what is certain, is the unitary essence. This does not relate only to the agent; it is relevant for all sovereign wholes. Hence, every sovereign whole has its essence in the dimension of the essences. If an atom is a sovereign whole, the same applies to it as well. For further details, see part 3.5.3 about sovereign wholes and part 2.2.1.3 about fundamental unity.

Question 81.

How does the soul come into existence? Does it go through a process like birth or reductive evolution?

Answer 81.

The evolution is not a self-sufficient process. At least some of its alleged processes and components if true, work by being sustained by the One Creator. The Creator knows all kinds of creating methods.

The soul also may undergo some changes.

3.5.1.2.2 Heart (Fuad)

The word “fuad” is used in the Quran as a core mental actor. It etymologically means heat. Some scholars are of the opinion that it is the heart as the qalb explained in the previous section. There are other views about the relationship of fuad in respect to the heart. In the following verses, we see that heart (fuad) is a module which perceives, which inclines. It experiences some of the external things, it can cause an inclination of the agent. It can deny. It can be responsible or at least questionable -remember the verse mentioned above which said that the heart (qalb) can be sinful-.

Our Lord, I [Abraham] have made some of my seed to dwell in a valley where is no sown land by Thy Holy House; Our Lord, let them perform the prayer, and make hearts¹⁰⁰ of men yearn towards them, and provide them with fruits; haply they will be thankful.

(14/37)

Racing ahead, their heads raised up, their glance does not come back to them, and their hearts are void.

¹⁰⁰ The word “fuad” in the original text are mostly translated into English as “heart”. So, the word “heart” in the translations of the verses in this subsection are in the original text “fuad” or its plural form “af'idah” unless otherwise specified.

(Quran: 14/43)

His [Muhammad's] own heart did not deny that which he saw.

(Quran: 53/11)

And those who disbelieve say, why was the Qur'an not revealed to him all at once? Thus [it is] that We may strengthen thereby your heart. And We have spaced it distinctly.

(Quran: 25/32)

And We will turn away their hearts and their eyes just as they refused to believe in it the first time. And We will leave them in their transgression, wandering blindly.

And even if We had sent down to them the angels [with the message] and the dead spoke to them [of it] and We gathered together every [created] thing in front of them, they would not believe unless Allah should will. But most of them, [of that], are ignorant.

And thus, We have made for every prophet an enemy - devils from mankind and jinn, inspiring to one another decorative speech in delusion. But if your Lord had willed, they would not have done it, so leave them and that which they invent.

And [it is] so the hearts of those who disbelieve in the Hereafter will incline toward it and that they will be satisfied with it and that they will commit that which they are committing.

(Quran: 6/110-113)

And Allah has brought you forth from the wombs of your mothers-- you did not know anything-- and He gave you hearing and sight and hearts that you may give thanks.

(Quran: 16/78)

And We had certainly established them in such as We have not established you, and We made for them hearing and vision and hearts. But their hearing and vision and hearts availed them not from anything [of the punishment] when they were [continually] rejecting the signs of Allah; and they were enveloped by what they used to ridicule.

(Quran: 46/26)

The Fire of God kindled

Which mounts directed at the hearts.

(Quran: 104/6-7)

And the heart of Moses' mother became empty [of all else]. She was about to disclose [the matter concerning] him had We not bound fast her heart (qalb) that she would be of the believers.

(Quran: 28/10)

The “fuad” may be a sub-module of the heart, or a module which is very close to it. Or it can be the same heart with an emphasis of the heart's function more related to emotions. In any case, even if they are distinct wholes, since they closely interact, we can say that they constitute a whole together. Allah knows the best.

Regarding free will, we should understand that such modules communicate, share inputs and outputs. This means that we can and

should educate our sub-functions or modules like seeing, hearing and so on. Also, they need to be and can be proactive as well. They are in close relationship with our whole. So, before producing a motor act, sub-modules should ask knowledge and reasoning resources. For example, should a person extend his hand to grab the cigarette? So, we do not need to accept that this unquestioning impulse will come in any case. Relevant modules may be trained to inquire from the whole and related powers if it is ok to give a command to do an act or produce a will. There does not need to be necessarily a one-way flow of orders, commands, or kind of a fight. This understanding has advantages to deal with addiction and harmful behaviors. If the hearing is responsible this means that it can oppose some urges, it can be educated and trained. If a sub-module can oppose us then it must be taught certain things which can only originate from themselves.

3.5.1.2.3 Breast/ Chest (Sadr)

And conceal your speech or publicize it; indeed, He is Knowing of that within the breasts.

(Quran: 67/13)

There is some part of the external world which does not influence us, and some of it influences us. And we have our own area of governance. Once the external world interacts with us, it first contacts our sensory organs. And they are translated into concepts and feelings. Then, these access our core. These concepts and feelings and the core are contained in what is called the chest.

The term breast or chest (Sadr) is relatively to the heart a larger region which contains the heart plus further functions additional to those of heart. Other than the heart, it is like an intermediary medium between the external world and the core of the agent.

As we see in the following verse, the knowledge and memory are in this medium:

Rather, the Quran is distinct verses [preserved] within the breasts of those who have been given knowledge. And none reject Our verses except the wrongdoers.

(Quran: 29/49)

The chest (sadr) also contains the outer shell through which the influences may reach the core of the human being:

Who whispers [evil] into the breasts of mankind.

(Quran: 114/5)

And We already know that your breast is constrained by what they say.

(Quran: 15/97)

So, whoever Allah wants to guide, He expands his breast to [contain] Islam; and whoever He wants to misguide, He makes his breast tight and constricted as though he were climbing into the sky. Thus, does Allah place defilement upon those who do not believe.

(Quran: 6/125)

[Moses] said, My Lord, expand for me my breast [with assurance]

And ease for me my task

And untie the knot from my tongue

(Quran: 20/25-27)

Hence, our core is in one way protected by and fed through this outer shell. The protection and good shape of this outer shell is very important. The core and the shell need to collaborate well so that each of them may be in good shape. For example, wrong knowledge will cause the core to waste its energy. Likewise, the outward influence of the core also goes through that shell.

A bad processor at the center will make the shell open to bigger bad influences by being in the wrong places, or getting involved in bad activities. where others can have influence. Heart (qalb) is where the agent himself dominates and has power related to responsibility.

The relationship between heart (qalb) and chest (sadr) resemble the relationships of the physical chest and heart. Yet the use of heart and chest may be more than a metaphore. For example, when our brain works in thinking, the parts of our brain responsible for our physical heart and lungs should work. Because, when we think in fact, we often talk inside ourselves and parts of our brain that are active for arranging our heart beats to adjust to our talk aloud are running as well. Same for parts of our brain that arrange and run our lungs' activity for our talk aloud. When we think, we talk inside, our tongue does not move, or our ears do not receive sound waves. Yet, parts of our brain corresponding to our tongue, and ears work essentially, though some motor areas do not work. Does this mean that most of our talking capacity or hearing capacity is not active when we think?

Likewise, when someone thinks, the parts of our brains and other organs that correspond to his conscious feelings through which he feels that he is talking silently within his chest are also activated, even if for example he has only an artificial heart. We cannot separate the parts of our brains that manage our lungs from our lungs, or that give signals to our hearts from our hearts. In one way, there are running representations of our physical hearts, lungs, tongues in our brains that are active while we think. Hence, our biological hearts,

lungs, chests have corresponding mechanical points in our brains and in our essences. It is likely that their activities extend to the nerves that reach the biological heart, lungs and so on and are influenced by them. Furthermore, in the deeper side, it is likely that within the soul also there are corresponding activities in corresponding regions.

3.5.1.2.4 Lubb

Indeed, in the creation of the heavens and the earth and the alternation of the night and the day are signs for those who use reason.

(Quran: 3/190)

The Quran mentions in many verses the people who exercise their reason. The word mostly used for the reasoning capacity is “al-albab”. “Al-albab” is the plural of “lubb”, which etymologically means “the core”. In the Quran, it is used with its meaning of reasoning power. It is used in the Quran as in “olee al-albab” which means the people who exercise the reasoning capacity, who use the reasoning module. The following verses are some examples:

(Muhammad), say, "Not equal are the bad and the good, although the abundance of evil might impress you." So, fear Allah, O people who use reason, that you may be successful.

(Quran: 5/100)

In their story, there is a lesson for the people who use reason. It is not a legend but a confirmation of what exists (in the Torah). It (the Quran) has details about everything. It is a guide and mercy for those who have faith.

(Quran: 12/111)

This is an admonition for the people that they will be warned and know that He is the only God, and so that the people who use reason may take heed.

(Quran: 14/52)

It is a blessed Book which We have revealed for you so that you will reflect upon its verses and so the people who use reason will take heed.

(Quran: 38/29)

Who listen to speech and follow the best of it. Those are the ones Allah has guided, and those are people who use reason.

(Quran: 39/18)

Since the heart (qalb) is considered as a module which reason, it is likely that the al-albab is one of its sub-modules.

3.5.1.2.5 Brain

Nay, We hurl the Truth against falsehood, and it knocks out its brain, and behold, falsehood perishes! Woe be to you for the (false) things you ascribe (to God).

(Quran: 21/18)

Particles in the brain bumping one onto another either in a deterministic way, or in an indeterministic way cannot be leading to the truth, or to the good, or to consciousness. A structure of the brain caused merely by such particles cannot lead to the truth or to a freedom of will.

Yet under the control of the soul and its unitary, and transcendent modules some of which being explained above, the brain with its

components and their steering ranges is an important intermediary and tool to perceive things, to analyze, to will, and to act.

3.5.1.2.6 Spirit

And they ask you, [O Muhammad], about the spirit. Say, "The spirit is of the affair/command of my Lord. And mankind have not been given of knowledge except a little."

(Quran: 17/85)

Then He proportioned him and breathed into him from His [created] spirit and made for you hearing and vision and hearts; little are you grateful.

(Quran: 32/9)

The word used for spirit in the above verses is "rooh" which corresponds to spirit. The word soul (nafs in Arabic) is another word. Since Allah makes reference here to the limitedness of the knowledge of the human beings, while there is lots of information about the soul (nafs) we can understand that there is a distinction between the two.

There is some kind of information which is relevant for us, and some kind of information which is not. As Allah tells us that the Quran is a complete guidance, we understand from the above that the knowledge about the spirit is not so relevant for us. It may relate to the realm of Allah. Indeed, the knowledge we get from the Quran is sufficient for us to know what is necessary for us about the free will power.

3.5.2 The Wholes

If We had sent down this Quran upon a mountain, you would have seen it humbled and coming apart from fear of Allah.

And these examples We present to the people that perhaps they will give thought.

(Quran: 59/21)

The seven heavens and the earth and whatever is in them exalt Him. And there is not a thing except that it exalts [Allah] by His praise, but you do not understand their [way of] exalting. Indeed, He is Forbearing and Forgiving.

(Quran: 17/44)

Around us we see many wholes. We see cars, buildings, carpets, dogs, human beings, and so on. Some of them can be fully explained by the attributes of their parts and their environment. Some of them cannot be fully explained by the attributes of their parts and their environment. For the latter group I use the expression “sovereign wholes”.

The first group are non-sovereign wholes. However, we should note that according to the above verses, some wholes which look as non-sovereign, may have some sovereign aspects in having the capacity to exalt Allah, though we generally cannot perceive such acts. So, I should clarify that when I use the expression “sovereign whole”, I mean only wholes whose distinct acts can be observed by human beings at least in the worldly context. Yet, this does not mean that some other wholes are not sovereign and do not have any sovereignty in the sight of Allah regarding some behaviors we cannot observe.

In the following section, I will explain the sovereign wholes.

3.5.3 The Sovereign Wholes and Their Essences

In this part I will try to answer some questions: Is there an agent as a distinct being who can produce changes in the universe? Or is there no agent but his parts? Is the will supervenient upon infinitesimal

particles/ fields? Is the agent just an epistemological thing, just a name, with no ontological reality? Is there a soul, a distinct essence of the whole? In any case how will freedom be observed over them? What is the distance between sovereign wholes; what is the distance between sovereign wholes and their parts? What are the differences between sovereign wholes and parts? What is the basis to distinguish the agent, his powers, perceptions, influence from the physical?

These are some of the important questions in this book.

To answer these questions, we need to understand sovereign wholes. A sovereign whole, is a whole who has distinct behaviors and/or powers which cannot be explained and/or predicted fully by the behaviors and/or powers of its parts and other things. Note that the sovereign wholes are not limited only to objects or beings. There is no reason to say that space, a specific pattern, or a physical law cannot be considered as sovereign wholes which interacts with objects or with other things if the necessary conditions are satisfied.

I will start the explanation by an analogy, which has aspects that correspond to what we observe in our actual universe:

“Let us assume that we have a region R1 of space in which there are billions of billiard balls (BB) with many colors. The balls move according to certain patterns, they also bump onto other balls. Here and there the balls take the shape of some life forms unintentionally in the course of those movements in accordance with the patterns of the balls. We focus on the ones which look like birds. We notice that whenever the previous states of the balls related to a bird are exactly same, the bird moves its head up.

The question we try to answer is this: Does the bird moves its head as a sovereign whole, on its own, or does its movement supervene

upon something else. What is the source of the movement of the head?

Up to now, we understand that the movements of the bird are not movements of its own, it is supervenient upon the billiard balls.

Now, we zoom out and look at a region R2 which is wider than R1. This time, we notice that the balls in our region R1, were actually just special orders of smaller balls (SB) which exist in both R1 and R2. Because, although in R1 all SBs constituted big balls (BBs), taking into account R2, we see that SBs also constitute shapes other than BBs at the same scale; and the states in the shape of BBs of those balls in R1 are just a special case. We zoom in more in to R1, and we confirm this. Now, we understand that the head movement of the bird we examined before was not supervenient upon the BBs. They are supervenient upon the SBs. In fact, what we saw as a BB, had no movement of its own either, it was like a special type of movement which coincided within the region R1. We thought those BBs moved in their own patterns as BBs, as we thought the head of a bird moved.

We have not yet found the answer to our question about what is the real level of wholeness which has the effective cause for the movement of the bird.

We search now a wider region, to see if in a much wider region R3 we see that there are no more smaller balls SB everywhere. We change our lens and we see that the SB and their movements were just a special, random case and view of much smaller balls (MSB) which move in different patterns.

Hence, we have not yet found the answer to the cause of the movement of the bird.”

The point in the above example, is that our search will continue up to a point where we find out some wholes or balls that move on their own wherever we look and whatever zooming degree we use.

There are two theoretical results we can reach in our search. Either,

(1) There are objects at some layer which move on their own and with essences which at least partially control the parts of their wholes. Because if there is no essence which controls a whole, we will need to go at least one step down since firstly, that whole would not be a sovereign whole, and secondly it would be supervenient upon its parts as BBs or SBs were.

or

(2) There are no balls which move on their own.

If (2) is true, then there would be no movement at all. So, (2) is not possible.

If (1) is true, then this means that it is necessary that at least there are balls of a specific type (T1) such that each ball has an essence of its own whole which governs its parts¹⁰¹.

¹⁰¹ Theoretically a part may have an attribute of behaving in a predictable way and differently than its separate behavior whenever it comes together with certain other parts and forms a specific whole. If all parts of a whole are like this, then, we cannot say that the whole has a distinct and sovereign power of its own; though such a whole is possible as a non-sovereign and non-distinct whole. Even if a whole had its consciousness as a non-sovereign whole, we could not say that parts of such a whole must be blamed or praised. These parts must be considered as having their distinct and stable identity before and after they formed the whole. For example, when the body of an agent decomposed, his atoms cannot be punished. They do not have the

If this is the case, then claiming that only a T1 ball has an essence of its own which governs its parts will be special pleading, since such balls are many and there is no necessity that only a T1 ball has such an essence. Once such an essence is possible for a layer, then there is no reason for claiming that there can be no sovereign wholes at least at some higher layers which would have essences which govern their parts to some extent. And in a differentiated universe as our actual universe, where sovereign wholes in different layers display distinct features, such essences would be necessary for such wholes at different layers. Because if sovereign wholes at different layers have distinct behaviors of their own, assuming that T1 balls would form their trajectories in order to make those higher layer wholes seem to act sovereignly would be stretching the capacities of T1 balls too much and unnecessarily.

Hence, if such essences are possible, then it is possible to have two observations where all balls at all sub-layers of the bird had exactly the same previous states and features; yet, in one of the observations, the bird moves its head up, and in the other one, the bird moves its head down. In these two observations, at least one of the birds B1 has an essence which governs its parts. This is similar to the essences of T1 balls governing their wholes. Note that a T1 ball behaves like an agent who is observed to have free will power in our negation tests.

The next stage of our analysis concerns the origin of the essences: If these T1 balls behave measurably, and in harmony relatively to each other within a systematic space and time, this means that they have a unitary originator and sustainer. They need a feature that transcends to some extent other T1 balls, space, and time. The behavior of each T1 ball is definable on, comparable to, and

vulnerabilities of the agent. Such wholes do not remove the problem of infinite regress.

consistent with the other T1 balls, and points of space. Hence, they cannot be the ultimate existent, since, as they are many and they depend on each other, there would be circularity if one T1 ball's behavior was built, defined, and/or determined based on another T1 ball's behavior. If there are such essences, then there will be relations, a medium, and a pattern of interaction between them. For a similar analysis see part 2.2.1.1 about the argument from necessity.

Furthermore, that each is ball is the originator of the entire coordination would be against Ockam's razor.

The next stage of the analysis is about the nature of the essence of a T1 ball. This essence must be transcending the parts of the T1 ball and must have power over its parts. This essence must also transcend the external world to some extent. This essence must have a unitary essence which is specific to the whole of the T1 ball.

We should also note that the essence is not a generic essence of T1 ball type whole or of a human being type whole. Since there exist multiple sovereign wholes of the same type, then, each essence must be distinct from other essences of the same type.

A T1 ball may lose its continuity as a whole. In this situation, the connection between this essence and the parts of the T1 ball may cease while the essence may continue its existence.

How does this essence appear, or get combined with the parts of his whole?

The essences of T1 balls are distinct from the essences of the wholes which are parts of T1 balls. Similarly, a human being may die, and his body may decompose. Yet, the essence of that human being may keep its existence. Even if certain tools used by the essence may not be mature as in a child, or has weakened as in a very old person, the essence continues its existence.

A sovereign whole exists in the sight of Allah. Only He transcends all wholes. The parts cannot transcend all of the wholes they constitute. They are given by God the transcendence over the whole they govern, if they have such a whole.

The essence is an effective and transcendent constituent of a sovereign whole. An essence and its related sovereign whole, produce certain changes in the existence. The governed parts of that sovereign whole cannot explain these changes by themselves alone.

This essence, within the wholes of human beings relates to the free will power of that sovereign whole, and also it relates to consciousness. It is this essence who executes this free will power in interaction with the other modules, faculties, and parts of the agent. As we can understand through our introspection and direct experiences, this essence transcends the neurons. So, it is a higher level and extended actor. In some sovereign wholes, some sub-parts may be controlled through the wholes of higher-level parts.

The essences of other sovereign wholes may have competencies related to the means contained in those wholes. The essences themselves do not need to be homogeneous.

An atom, or an insect, or a planet may have essences; their essences may be different. The Quran tells us that everything in the heavens and on the earth glorify Him.

What we observe through our eyeballs about an atom, or a planet, or an insect, are observations limited within our observation limitations, biases, and angles. The full and real being of that which we observe may be very different than what we comprehend and conceive of them. Likewise, other created sovereign wholes who are able to observe also observe only views within their limitations and natures. For example, that a dog sees only as black and white, does not mean

that things are black and white. If we do not see or do not want to see something, this does not mean that that thing does not exist.

Seeing depends also on how the seer is organized by himself. On the other hand, not everything is perceived through every means: We perceive some things with our eyes, some things with our hands, some things with our intelligence. The essence that communicates with the internal and external world is given certain means to make those observations. This way it can interact with them.

In this respect, note that a sovereign whole, may be a governed whole in the same time relatively to different wholes: For example, a human being who controls and moves his arms, is governed by the forces active at the level of the solar system while he rotates as part of the earth.

Sovereign wholes may be in different forms. For example, human beings are a kind of sovereign wholes. The degree of predictability may vary between forms of sovereign wholes. If an iron atom is a sovereign whole for example, it may have a high degree of predictability compared to a human being. It can be considered as a sovereign whole even if it manifests 100% predictability; sovereignty is not determined according to the predictability in the behaviors of the whole, but according to the change of predictability of its parts before and after being the part of that whole.

Regarding the human beings, the essence explained in this part corresponds to the soul. Ontologically, the essence explained here and the soul are equal. But in accordance with the general convention, we call the essence of the human being a “soul”. So, the essence of the human being is the soul of the human being; and if an electron is a sovereign whole, the essence of the electron is its soul.

Some related issues have been explained in part 3.2 about the essence of free will power.

Question 82.

Does a machine or a table have this essence?

Answer 82.

Every whole which has a distinct influence on its parts has this essence. So, for example, if all actions of the parts of a machine can be explained by the wholes of its parts such as its atoms and molecules, then it is not necessary to conclude about a distinct essence for the machine or for the table.

Everything within space is related to other things and constitutes a whole as a content of the space. But in this sense, the space and its contents constitute one sovereign whole. To distinguish whether a human being is a sovereign whole, we need to see if it produces any change which is additional to what its parts and other sovereign wholes entail by their distinct attributes and behaviors.

Question 83.

If the essence of a human being goes away when he dies, then what about the essence of the most fundamental sovereign whole at the end of the universe? What remains after its essence goes away? Is everything essence?

Answer 83.

The alleged most fundamental interacts with other wholes such as space. They may be interacting in this universe with their certain extensions, or forms, or by forming wholes with other wholes forming temporary structures or wholes. They may be behaving in

accordance with the implications of that interaction. At the end, they will return to their origin through a certain process as mentioned in the following verse:

On the Day when We roll up the heavens like the scroll of a scripture is rolled up. As We initiated the first creation, so shall We return it. It is a promise of Ours that We will do this.

(Quran: 21/104)

They may return to their origins simultaneously with other wholes. One alternative is that at a certain layer there are pure essences. Regarding this question, these are just some unsubstantiated theories mentioned here to give an idea that there are consistent scenarios for the bottom and for the ultimate end. Allah knows the best.

3.5.3.1 The Unity of the Essence and Its Differentiations

If the essence interacts with the universe and multiple things, with physical things which have parts, then does the essence contain differentiations? If it also has differentiations then why is there a need for such an essence? If the essence of a sovereign whole has some differentiations, then does this essence need an essence for itself so that it may work and may be functional?

Note that every sovereign whole that we observe has these essences.

For example, imagine two oranges each in its distinct space; the space of one orange is not related to the space of the other orange. As they are in separate spaces, the distance of one orange from the other is not definable. Now, let us suppose that God creates a metaspaces which contains, unifies, and defines their spaces. Now, we can determine that one orange is let us say one unit away from the other. The essence of the metaspaces created by God has been given a unity which enables it to perform its distinct function. This kind of unity

is essential for the sovereign wholes, and this unity is executed by the essence of the higher sovereign whole. One such unification for a specific sovereign whole -in the above example the metaspace-, is sufficient.

An essence, connects parts of that sovereign whole which may also be sovereign wholes. On the other hand, it gives additional properties to these parts. If there are many combined oranges in the above example, then now we can say that each orange has identifiable values of position, although before the effect of that metaspace they did not have these values within a metaspace.

The above example is important in answering the following important questions: Do parts acting in a certain way under specific conditions constitute effectively the upper sovereign whole exclusively, with their attributes and powers rendering that sovereign whole supervenient upon these parts? Or is that sovereign whole the effective one which gives the parts some of their attributes? More specifically, for example, if we bring together all of the particles of an agent, shall we have the same agent with all of his attributes including his consciousness?

In the orange example, before the effect of metaspace, the orange's position was defined with dimensions x, y, z . With the effect of the metaspace, it is now defined with dimensions x, y, z , and m . A person $P1$ observing the orange $O1$ in the metaspace, who additionally observes orange $O2$ related in the dimension m , may conclude the existence of a dimension m , and he may say that $O1$ has a dimension m ; and that under the condition that there is another orange with such a feature, it can constitute a whole $O1-O2$ with $O2$; where $O1-O2$ is not necessarily a sovereign whole. Hence, he can further conclude that there is a metaspace, but this metaspace is not effective, the only effective were $O1$ and $O2$ or any other such kind of orange

O_n. Because, he does not observe dimension m and its effects without oranges.

How can we determine whether P1's conclusion of "bottom-up" causation here is correct or not? Indeed, the oranges are observed and measured to have the dimension m, and to interact in that dimension. But is this attribute given from above? Or was it inherent in the oranges and each orange's attribute was existent prior to the "up"?

One way to determine this, is similar to the argument from unity explained in part 2.2.1.3: Without a unitary basis, what is measured regarding dimension m based on oranges would be circular. Similarly, for example, if O1 is the only entity within its own space, we cannot say that it moves; if O2 is the only entity within its own space, we cannot say that it moves either, since there is no reference frame. So, none of them enables us to predict a movement for any of them. But when they are combined within a space that covers both of them and their spaces, then we can predict a movement. Hence, we can understand that the space containing them is a sovereign whole.

Secondly, as the oranges are contingent, the annihilation of O2 from the metaspaces would not reduce the dimension m. Yet, if after that annihilation that dimension existed because of O1, this would mean that O1 has a transcendent feature of having and causing the dimension m. But O1 also might be annihilated. However, as O1 and O2 have the same features, and as the annihilation of O2 did not annihilate the dimension m, there is no reason to claim that the annihilation of O1 would annihilate dimension m either. Therefore, even though the metaspaces is measured based on oranges, the effectiveness flows necessarily from top due to its unity and observed necessity. A feature of the oranges which enable them to be part of

this system is their ability to be qualified with the dimension m ; however, this ability is given by their designer.

A similar reasoning is applicable for every sovereign whole related to any law of nature. Also, it is applicable for all conscious things in terms of consciousness. The actual essences interact with the spatiotemporal, the actual space is also an essence like this.

The unity has a key place in understanding the sovereign wholes. As in the parts about unity, consciousness, laws of nature I gave sufficient explanation that can be used in this context, I will not repeat them here.

The orange example sheds light on how to understand the unity related to sovereign wholes as well: As we saw above, the effective essence of the sovereign whole of metaspace obviously reigns on a range: At least it reigns over O1 and O2. So, if it unites O1 and O2, and if it contains multiplicity, what unites the essence of metaspace? The answer is that there is no need for a unitary essence anywhere else: The essence of the metaspace is just an additional form of unity. Even before the essence of the metaspace, O1 and O2 needed unity in order to exist: Even though they were not combined under the metaspace, each was united internally regarding itself, its space, and their parts; and they were both united as parts of the creation. Through the creation of the metaspace, the SSC just would have added another layer of unity.

The sovereign wholes may lose their effects locally, temporarily, or permanently. Where do the essences go in such situations? For example, when an agent dies, where does his soul go? This is a matter of design. The claims that absolutely there is and there can be only 4 dimensions or 11 or n dimensions are false and unsubstantiated. Therefore, where an ending sovereign whole's essence goes is not very relevant in understanding the system of sovereign wholes. For

example, Allah says that some souls go somewhere to enjoy certain physical pleasures.

When a new sovereign whole becomes existent in the universe, is this accompanied with an increase in the total energy of the universe? Not necessarily. The energy is a scalar. So, if a moving object changes its direction, its energy does not necessarily increase or decrease.

What we experience as “I” is sufficient to represent our person. The unity in our consciousness transcends multiple things in a unity. Again, as a contact point with the other agents, our “I” is sufficient. In one way, every essence is like a hub, a center. Even though an essence has some specific aspects, it represents the non-separable aspect of a whole. Yet, as explained in this part, the essence of the agent encompasses multiple things.

As the unity of God solves the problem of circularity and infinite regress within the whole of the entire existence as the top point, the essence of a sovereign whole carries out a similar but sustained function in respect to that sovereign whole.

The essences unify many unities in their unities. Different components of an essence of a sovereign whole behave in non-separable unity as in the example of the metaspace above. Such essences, in one way unify some sets, and in one way give distinctness to what they unify. The metaspace in the above example obviously contains many points, however, all those points are defined and connected in the unity of the metaspace. It may also provide a distinctive unity within a meta-meta-space. – The unilocality (non-locality) of quantum physics may be helpful to understand this point –. If that metaspace is taken back by God, then the respective unities of the oranges may continue their functions and existence within their own unities related to their distinct essences. So, as unity on the basis of the sovereign whole is the main feature of its essence, we do

not need a further contingent unifying essence for an essence of a certain sovereign whole. We need a new unifying essence only if many sovereign wholes are designed so as to be the components of another sovereign whole.

The essence of a sovereign whole, is not the essence of a part of that sovereign whole; it is unique in respect to that sovereign whole: An agent is not his cell, atom, hand, feet, eye... Likewise, these parts are not the agent. The agent may die, but one of his cells may survive; the atom or the feet may continue functioning for example if transplanted. Even if we suppose that the essence as a soul has parts, these parts are not the essence of the whole. They can only be non-separable in respect to the essence. This is like the non-separability of 1 from 2.

When you read the word “table”, let us assume for simplicity that each letter of “table” is instantiated and transcended in one neuron of your brain. Let us assume that a neuron is a sovereign whole which has the capacity only to transcend a letter. However, there is also the distinct reality of the word “table” which is truly instantiated in a unity. Allah designed a universe so that there will be a kind of essence which can encompass a word or more to some extent, within a unity. So, although there are neurons, there would be also another reality which would have a bigger unitary transcendence. The essence of the neuron might be empowered to wear the hat as a neuron, as a larger module, as the agent, and as a planet. But in this case, there would not be a good balance and many other inefficiencies. Hence, the design is so that the neuron has an essence as a neuron; the agent has an essence as an agent... There is an efficient specialization. Likewise, when I exercise my free will power, the components of the command I give as a will are non-separable within my unity, they work as related to my whole.

Also, if the cell is a sovereign whole, then it has its own essence. It is not parsimonious that each essence of each cell represents self-sufficiently at the highest level both itself and the sovereign wholes they constitute. It is not practical that trillions of cells self-sufficiently retrieve the data necessary for the survival of the agent, and deliberate in harmony with all other cells for the well-being of the agent. In the mean time, they would need to do such things for other sovereign wholes that they constitute. Hence, the task of the essence of the cell, does not contain the distinct tasks of the essence of the person. So, the existence of distinct essences of sovereign wholes and the definition of their functions is a matter of design and task-distribution.

On the other hand, once we reach the sustained unity of an essence which encompasses the components of its sovereign whole in a unity, there is no need to search for further sources of unity for that sovereign whole. Additionally, the part 2.2.1.3 about the argument from unity shows that in order to exist, multiple things would need appropriate unitary bases; and once there is a basis of such a unitary nature, then these multiple things can exist as a whole without a need for further unification.

3.5.3.2 How do Essences Interact with the Physical?

The distinction made between the soul and the physical as if they have no common grounds and properties is a farfetched distinction. Every sovereign whole in the limited physical world¹⁰² has a soul-like aspect. Both the physical and the essence have transcendence, unity, design, and contingency aspects. The physical has a unitary aspect. The sovereign whole has its essence which is effective regarding that whole, and this sovereign whole's sovereign sub-wholes have their

¹⁰² As explained earlier, even the reductive physicalist should agree that there are sovereign wholes within the limited physical world, since he believes that there are sovereign wholes to which other things are reducible.

essences similarly. The essences just enable us to identify, locate, and distinguish the origin of the effects of the sovereign whole and the origin of the effects of its sovereign sub-whole parts.

When one rejects reductive physicalism and recognizes truly the distinct reality of sovereign wholes and sovereign sub-wholes, then there will be a need to identify the effective substance of each sovereign whole. Therefore, there is no fundamental distinction in kind: The reductive physicalist sees the effective sovereign wholes which interact with each other at an unknown lowest layer. Islam recognizes the reality of sovereign wholes at many layers interacting with each other.

So, there is no difficulty in their interactions. It is obvious that there are multiple sovereign wholes, and it is obvious for all views that the sovereign wholes interact. In Islam, the reality of parts and wholes are recognized, therefore, the essence of a sovereign whole interacts with its sovereign-whole parts. A reductive physicalist recognizes that there are some sovereign wholes somewhere at the bottom as supervenience bases; if they claim that these sovereign wholes do not have parts, then they should be pure essences; if they have parts, then they should also have essences for above explained reasons.

If some things are not visible through our eyeballs, this does not mean that they do not exist. We may have difficulty in seeing through our eyeballs how a sovereign whole may interact with sovereign wholes which are its parts. But we can understand how this happens. Many things that we do not see or we do not know are effective. Human beings kept living thousands of years ago when they did not know many things which made them live; they will keep living thousands of years later when they will be ignoring many things which will make them live.

So do not assert similarities to Allah. Indeed, Allah knows and you do not know.

(Quran: 16/74)

The essence or the soul is a user of a command-like transcendent power.

It may be connected to the body but first where is the body and what is the body? The body is not fundamentally different than a soul. The way they interact is also unique and a result of a design. What is the space or energy by which the body is defined; how are they fundamentally different than a soul?

We have a somewhat stable identity although our physical body and its parts change continuously; for example, when we are child, we are small, we weigh maybe 20 kilograms; we may be 1 meter tall; then when we are grown up, we may weigh 90 kilograms and we may be 2 meters tall. Our memory allegedly residing in parts of our brain which may allegedly be the connection for our stable identity according to physicalism is just a bunch of separate atoms for a reductionist.

3.5.4 Human Beings as Sovereign Wholes

Some see the agent as the sum of the spatiotemporal parts. However, this will cause an infinite regress: Because if we explain the agent this way, then we would question what the parts are, and the parts also would be explained in the same way.

A distinction between part and whole considering the part as more real compared to the whole would not be very reasonable, since a part would also be a whole. The efficacy of the whole cannot be explained only by the part, since the part also needs its parts. Hence every part and every whole are direct results of a design and

sustaining power. Each of them performs whatever power is assigned to it.

Question 84.

If the sovereign whole is not the sum of the spatiotemporal parts, then what is it?

Answer 84.

The sovereign whole compared to the sum of spatiotemporal parts, has a key and indispensable actor of its own which is its essence, which is called a “soul” in the context of human beings. Some of its parts may also be sovereign wholes and have their respective essences. As we examined in part 3.4.12.1 about the negation experiments and brain observation experiments, we influence key spatiotemporal parts in a transcendent way. We act as if we are the essence or origin of a fundamental force like gravity.

We have a power over some parts which may be also sovereign wholes; and they have powers over us; and there is an interaction. The qualia we perceive about the parts and other things are spatiotemporal aspects of deeper wholes.

When we observe say a particle, in fact we observe an aspect of that particle. We do not see the entirety of that particle. Its entirety is not visible through the eyeball, since it extends throughout the universe. Its entirety is only visible to the eye of the reason. If we want to see the essence within the neurons or atoms, then we cannot see because the essence is not so limited. It extends beyond what is visible through the eyeballs. It is not limited in its effects on the photons. Those extensions are like elements of a language necessary for interaction and communication. Every part of us observes the aspects it is enabled to observe. Eyes observe things in their interactions with

photons, ears in their interactions with sounds, and our wholeness and intellect in their unity.

We define what we conceive as a spatiotemporal part essentially based on its effects in the spacetime. We cannot define its substance since its substance cannot fit in words and relates to the unity that is deeper and at the origin of a 'definition' as well. It cannot be defined based on relative things which are processed by the agent. It is like defining a printer by its parts, inputs, and outputs. These are all real. But the printer is none of them nor their sum. The printer is the printer, as its cable is a cable.

Question 85.

When we observe the planetary system, is not it no more than the sun and the planets? What else is there other than the sun and the planets?

Answer 85.

A planet having its own space-time would not constitute a part of the planetary system. The same applies for the sun. They are brought together within the same space-time, and within certain relationships so that there is a planetary system.

For example, the same bottom part had to behave according to gravity and strong nuclear force in the same time. This is impossible if we do not recognize the wholes of different layers. Hence, sovereign wholes at different layers have their realities. And the particle must also contain the information about where it is in a certain layer or whole, and in all layers. But wholes also depend to some extent on what their parts do. So, there is circularity, and things need guidance and a unitary sustainer in order to be and to act.

And within the land are neighboring plots and gardens of grapevines and crops and palm trees, [growing] several from a root or otherwise, watered with one water; but We make some of them exceed others in [quality of] fruit. Indeed, in that are signs for a people who reason.

(Quran: 13/4)

Question 86.

We may will what we will, but we may not determine what we are. So, how can we have a sufficient freedom?

Answer 86.

There is a range in which we can determine what we are. This point is explained throughout this book. But also, the question contains the answer. If “an agent” has the capacity to protest against his “disability to determine what he is”, why has not he behaved in a good manner? If he does not have the capacity to behave in a good manner, why does he protest against his “disability to determine what he is”?

3.5.4.1 Wholeness of The Human Being Through Time

The agent has an effective wholeness and identity which is not divided by time. This is not specific only to a human being. The effective structures between time t_0 and time t_1 are connected and constitute a whole. We cannot think of a real melody if its elements are not non-separably connected through time. Within a time-slice of zero time-width, no being would be existing. Actually, as explained in part 3.5.6.4.2.6.5, time is not something upon which things happen, but something that depends upon things.

If the agent does a good or evil act in a certain time, it is the act of the same sovereign whole and it affects the degree of this sovereign

whole. The agent who does the good deed in the future is the same agent who is present now. The following verses relate to this point:

Indeed, those who reject faith it is all the same for them whether you warn them or do not warn them they do not believe.

Allah has set a seal upon their hearts and upon their hearing, and over their vision is a veil. And for them is a great punishment.

(Quran: 2/6-7)

If a person changes himself in the future, again this is the same person with the present person. If a person improves himself, he becomes open for the guidance and help of Allah in accordance with the following verses:

Allah does not guide the unjust people

(Quran: 2/258)

I will turn away from My signs those who are unjustly arrogant in the land, (so that) even if they see each and every sign, they will not believe in it.

If they see the Right Way before them, they will not follow it; but if they see a crooked way, they will follow it; this is because they denied Our revelations and were heedless of them.

(Quran: 7/146)

And [We cursed them] for their breaking of the covenant and their disbelief in the signs of Allah and their killing of the prophets without right and their saying, "Our hearts are

wrapped". Rather, Allah has sealed them because of their disbelief, so they believe not, except for a few.

(Quran: 4/155)

This issue will be explained in more details in part 3.5.6.7.

3.5.4.2 The Wholeness of The Agent Through Space

The ability of the agent to encompass transcendentally things that look separate through space shows that the components of the agent have a unity, hence that the agent is a whole through space. If the parts of the things that are encompassed by the agent were solely instantiated in point-like spatiotemporal parts of the agent, then the wholes of the things could not be conceived by the agent. So, in some dimensions, the parts of the agent constitute a non-separable whole.

For the transcendence of the agent as it relates to his wholeness, see part 3.5.6.7.

3.5.5 Nature of the Human Being Which is Common With Other Beings

So, observe the effects of the mercy of Allah how He gives life to the earth after its lifelessness. Indeed, that [same One] will give life to the dead, and He is over all things competent.

(Quran: 30/50)

In this part, we will examine the fundamental nature of a human being which is common with other things. In this context, I will also go through some points that relate to God.

When we say "this is here, and that is there", there is a unity within us where their realities are instantiated. This instantiation cannot happen within any entity or being which is limited to and only

defined by the spatio-temporal. Because in this case, there would be again a point-like and infinitely divided instantiation, since there would be points within the spatio-temporal region where this is instantiated, and we would not be able to encompass these things in a unity.

Also, words and knowledge are not and cannot be defined or limited to any spatio-temporal level/layer. A specific information or statement written on a wall, a paper, a hard drive, or on neurons are the same, independent of the medium in which they exist. Probably we will not encompass fully the origin and working of this unity; since we are the outcome of a unity who is bigger than us and who cannot fit within something smaller than it.

Creation happens through an activity which also has intellectual, knowledge-like, and command-like aspects.

When He decrees an affair, He only says to it, "Be," and it is.

(Quran: 19/35)

Hence, the distances are also one with what they separate. The differences are like the differences between the words and concepts.

One can try to imagine an all powerful being who has unity and no differentiation in Him. But then mistakenly he would have imagined Him with limitations: Even though he imagines Him like a homogeneous space with no differentiation in it, yet there is a limitation, because each point of that homogeneous body imagined by a limited being, is limited with space and other things. He would also say: "Well, there is differentiation in anything I imagine; how can they originate from One? How differentiation can issue from the One?" Everything we imagine contains differentiation. Because to focus on one point of an area that we see, instead of another point, we need energy, we must spend an effort. To relocate our focus to

another point, we need energy, we need to spend an effort. Additionally, that point is limited necessarily since it is not another point. Adding such limited points does not produce a whole, since each point is limited in the same way. All constituents of a plane, or of a volume is limited from our perspective. As all constituents are limited, then the sum of all those are limited as well. However, all those points are somehow glued in a way that transcends all those distances that we perceive, like a super-meta unitary dimension. But for the above simple reason, we can never encompass with our limited eyeballs that unitary power which transcends all those points. But through reasoning we can have an idea about it; and this idea is relevant and sufficient for us. This point is crucial. Before understanding things, we have to understand our own selves, limitations, and what powers we need to use to comprehend what. This way we will have understood that what we learn about the nature of things will be limited in certain respects; also, we will have understood the importance of using the correct powers to access corresponding truths.

A black or white paper contains billions of points that form billions of shapes, though maybe yet not united in a further layer by the consciousness or other unifying activity. It is less differentiated than what it contains, yet it contains them. Anything we can conceive of as a conception is limited since we are limited.

As we are limited, it is difficult for us to conceive of an unlimited unity. But we conceive of limited unities. However, we can rationally conclude that a unity of a flower for example, is encompassed by a bigger and more transcendent unity. And we can logically conclude that this cannot go until infinity, since then there would be infinite regress, and things would not be united. Differentiations necessitate unity in order to be. Thus, we can understand the ultimate unity who is Self-Sufficient. In all limited layers of unity there is differentiation. But they only exist because of unity that they have been assigned.

Therefore, the origin is not of the same nature as the layers created by the Ultimate One. All layers are relative and sustained by the One Originator. He is Self-Sufficient, He does not have limitation. Therefore, it is difficult for us to conceive Him. Any conception we produce about the biggest unity, has in any case limitations. Therefore, as God is with no limitation, He is different in nature from whatever we can conceive of.

Question 87.

If we say that there is differentiation within the creation, so, how come there is no differentiation within God.

Answer 87.

A unity that we experience at the deep end point of our consciousness, also exists at the very fundamental origin of the things that we are conscious of, if they are real. If we say “this moves toward that”, is the movement of “this” a self-sufficient and self-referenced event? Is there a common and absolute framework relatively to which it moves or undergoes a change? Is this common framework space? Obviously, it is not, since each point of space would also need such a common basis, because each point of the space is not and cannot be self-referenced and self-sufficient. Therefore, the active reality of anything is settled within a unity and has an aspect of unity.

The first necessary property of anything that we observe is unity; and the aspects that we observe as differentiated are in essence aspects originating from a unity. When we say “this” is not “that”, this statement is also based upon and needs unity. Distances that we observe between things are just outcomes of the realities of many unities within many layers and of our unity that can encompass multiplicity of unities. Creating seems to be like creating a new unity, a new aspect of unity like points, like regions of space, like laws.

And never think of those who have been killed in the cause of Allah as dead. Rather, they are alive with their Lord, receiving provision,

(Quran: 3/169)

Our consciousness is a good example in showing the multiplicity within unity. Let us see this through a thought exercise about consciousness, but this time, let us focus on the external unity and distinctions within this external unity:

If the same unitary mind/consciousness can be reproduced in another location by bringing together other material substances, namely particles/fields, this will mean that the mind is not the very substance of the related brain. Yet, if it cannot be produced by using other material substances though exactly of the same kind and structure, then this will mean that the differentiation of the substance within spacetime does not have anything to do with the consciousness.

Also, if the same consciousness is produced in another location, then we can say that as they are within other locations, they are not the same mind unless the two minds are considered to be united above spacetime. This brings the question of how each substance can be specific to each consciousness, since there would be no reason for two substances of the same nature to produce two different consciousnesses, when there is only a difference in location; but as the location is external to the substance, it is irrelevant to the question. If two things are internally same, but they are different relatively to each other even only in global location, then they are two. Global unity and global state are important, real, and effective; yet, when we move in space, we experience that we are the same person.

Two internally exactly same things are not essentially exactly the same. They constitute two elements of the entire existence, where each also relatively define the other. If there are two of them, they cannot be the same. Each one is another unity, another agent; except if both together constitute a unity. Even if within themselves they are exactly the same, globally they are not the same. Their locations and relationships to other things are different. There is an active unity behind them. The same active unity which identifies each point of space, also identifies some relationships of consciousnesses.

The above points are an example of the unities that are preserved and defined throughout and through differentiations.

The mind is not limited with the related space-time, and is not entirely defined by it. For a physicalist, two minds within two exactly same physical state or location within their respective or non-determined space-time might be the same. Because, for him, within their boundaries they are exactly the same, and there is no unity or differentiation in terms of other dimensions such as a dimension of consciousness; there is no God who unites, relates and defines them together within rich sets of relationships.

However, within the Islamic framework, in any case, they are defined, differentiated and hence united by the One God. They are differentiated and united in the same time on top of their immediate spatiotemporal attributes. Hence, they have each their distinct identity and reality. For example, in a universe where there is totally equal two symmetric entities where it is impossible to define one differently from the other in terms of space-time, they would be exactly same even though in fact they are not the same; however, in terms of Islamic system, they are two distinct entities with further implications based upon the totality and holism sustained and caused by the unity and surrounding power of the One God.

Likewise, if a consciousness is assumed to be supervenient upon a spatio-temporal structure of a physical entity; if this same structure is reproduced in another place even in a symmetrical way, that would be another distinct consciousness except if both constituted one integrated bigger consciousness.

Everything is enumerated according to the following verse:

He has enumerated all things in number.

(Quran: 72/28)

So, each sovereign whole has a separate number and identity, hence, two same persons in two locations are probably impossible since every sovereign whole would have a distinct number.

Question 88.

How is the person in the hell or paradise linked to that person in this world?

Answer 88.

The soul or the person has its own reality distinct from its parts so that some variations in the parts do not destroy the identity of the soul or person. Actually, our bodies are in a continuous change, and within certain number of years, all of the atoms within our bodies are replaced by new ones. Yet we are the same person. Is this an illusion or is it just a matter of an essence distinct from the constituting elements? But what would be the identity of the constituting elements? Are they illusions as well, or do not they have any identity and reality? Do not our internal organizations change all the time, while we walk or talk? Though the spatio-temporal states relate to our activities, the spatio-temporal is not the only dimension, and is not the fundamental dimension. Everything including the

spatio-temporal, is set up upon a more fundamental dimension related to unity.

A thought experiment similar to the above, has also implications about the nature of things other than the agent: Firstly, if same consciousness can be reproduced on another physical substance, then this means that the physical matter/ substance (electrons, ...) does not have any consciousness capacity, since the latter has different substance but same consciousness. Secondly, if same consciousness cannot be reproduced on another physical substance, then this means that the physical substance has an intrinsic consciousness capacity and consciousness is not something illusory because if it was illusory then it would be possible to reproduce the same illusion on the other physical substance.

We know that the physical constituents of a human being change within the time while the person's identity remains the same. So, as underlined in the above experiment, the martyr's mind may be reproduced to be effective on another physical substance; however, this does not mean exactly that it is just a shape in other words a property consisting of spatio-temporal specifications; because shape is not an absolute extension within the space/time. Hence it is neither the physical substance, nor the shape or organization of the substance; however, as explained in the part about the argument from unity, everything in the existence has a unitary aspect. So, in this realm, the essence of the agent interacts with other things through their common unitary aspects.

Question 89.

Does the agent mean only the human beings?

Answer 89.

And there is no creature on [or within] the earth or bird that flies with its wings except [that they are] communities like you. We have not neglected in the Register a thing. Then unto their Lord they will be gathered.

(Quran: 6/38)

Indeed, we offered the Trust to the heavens and the earth and the mountains, and they declined to bear it and feared it; but man [undertook to] bear it. Indeed, he was unjust and ignorant.

(Quran: 33/72)

Human beings are not the only agents.

The part 3.5.6.4.2.8 explains that reduction of things to ultimate ASBEs is fallacious. In other words, there are no spatiotemporal bottom elements which are absolute and to which all things can be reduced. Therefore, things at different layers add distinct effects from themselves to what happens at the lower or upper levels.

Regarding freedom of will, animals should not be different than human beings in kind, though they can be different in degree. For example, some animals wait before attacking their prey for a good timing. Though when they are young, they cannot act this way, when they have more experience, they can do it. So, when grown up, if they could be communicated a goal of testing whether they have free will, could we test it and see that they have free will power?

If they learn to wait and judge the best timing, and refrain their urge to attack, they should be able to control an emotional urge from within themselves. And if testing their free will could be a primary goal, then they should be able to control themselves. If it was told,

you will attack 40 seconds later, and you will not be able to stop yourself, why would not it be able to will to stop itself? As long as it judges that the prey looks toward it, it judges that it is not appropriate to attack it, and refrains from attacking. So, if it was possible to communicate to it “to see whether your free will exists or not, we will test whether you will be able to stop yourself at the moment where the allegedly deterministic sum of all influencers will make you attack”, could it stop itself at that moment? If the input it gets on its prey that it is looking toward it makes it change its will, a communication of a goal to test its freedom of will would enable it to change and negate its allegedly fully predicted behavior. So, if it can stop its emotional motivations by using its own judgment, we can say that there is no reason to claim that it would not be able to stop itself from attacking at the deterministically predicted moment. But its power of judgment, ability to delay some urges and to prioritize some goals show that it would be able to negate at least some urges.

The same may happen in the context of physical sovereign wholes as in the following verse:

Moreover, He comprehended in His design the sky, and it had been (as) smoke: He said to it and to the earth: "Come both, willingly or unwillingly." They said: "We do come (together), in willing obedience."

(Quran: 41/11)

In the following verse, Allah tells us that the earth and the mountains declined to do a certain act but that the human being undertook it:

Indeed, we offered the Trust to the heavens and the earth and the mountains, and they declined to bear it and feared it; but man bore it. Indeed, he was unjust and ignorant.

(Quran: 33/72)

The human being though he has larger knowledge in absolute terms, and relatively to other creature, he has little knowledge compared to his capacity and to what he can gain of knowledge according to his accessing powers. Moreover, a large knowledge about certain things causes arrogance, and therefore injustice and ignorance about some other more important things.

Is it possible that in this latter verse, the ability to decline was given for a specific and exceptional situation? It is possible. But, in any case, this shows that the mountain can have the free will power as a mountain. Hence, being a mountain does not constitute a contradiction with having free will power.

Question 90.

How can an atom have free will power? For example, it will establish deterministically a bond with another atom under certain circumstances.

Answer 90.

The atoms may have free will power, though not necessarily. No physical law is necessary. All particles obey these laws, but “they” “obey”; in other words, they choose to obey.

They may theoretically will to not obey. Also, if they are forced under certain circumstances or limits, they cannot disobey. Allah said according to the Quran, verse 41/11, to the heaven and earth “come both willingly or unwillingly”.

Secondly, freedom is not full freedom: They may be subject to some patterns in some respects. Yet, in some ranges that we do not measure fully as in the example of quantum uncertainty conditions, they may

exert their wills, or cooperate with higher or lower level entities/events.

Question 91.

Do the angels, the satans have free will power?

Answer 91.

O you who have believed, protect yourselves and your families from a Fire whose fuel is people and stones, over which are [appointed] angels, harsh and severe; they do not disobey Allah in what He commands them but do what they are commanded.

(Quran: 66/6)

And [mention, O Muhammad], when your Lord said to the angels, "Indeed, I will make upon the earth a successive authority." They said, "Will You place upon it one who causes corruption therein and sheds blood, while we declare Your praise and sanctify You?" Allah said, "Indeed, I know that which you do not know."

(Quran: 2/30)

And to Allah prostrates whatever is in the heavens and whatever is on the earth of creatures, and the angels [as well], and they are not arrogant.

They fear their Lord above them, and they do what they are commanded.

(Quran: 16/49-50)

We do not see in the Quran any verses where there is any negative retrospective responsibility event about the angels. This is because

the angels as mentioned in the Quran do not disobey Allah. However, the verses in the Quran give us an idea that the angels behave as agents who have free will. Yet, they have no reasons to negate God. They do not have most weaknesses of human beings: They do not become hungry, thirsty..., yet they are careful to obey God.

[Allah] said, "What prevented you from prostrating when I commanded you?" [Iblees¹⁰³] said, "I am better than him. You created me from fire and created him from clay."

[Allah] said: "[O Iblees] get down from this [Paradise], it is not for you to be arrogant here. Get out, for you are of those humiliated and disgraced."

(Quran: 7/12)

The satans are also agents who have free will. And, they have retrospective responsibility.

Part 3.4.12.1 explains further issues related to the possibility of free will in the context of machines.

3.5.6 Features of The Human Being as An Agent with The Will Power

In the previous part we saw some general features of the agent. In this part, we will see some specific features of the agent that are relevant to the free will power.

Besides the ontological nature of the human being which is common with other beings, he also has a nature which is different than other beings. For example, the human being cannot fly or stay under water without external tools. Likewise, each human being may have some

¹⁰³ Iblees is one of the satans.

different nature. For example, some may enjoy more walking in the forest, some may enjoy more to go to the beach.

Beings or objects may have some features that are different than their respective constituents. For example, a bird may fly, though its cells or its atoms or its feet cannot fly by themselves alone. Or the sun being a star, has certain features different than its components. Or a certain atom may behave differently than its protons or electrons.

Likewise, agents who have the will power, have also features that are different than their constituents. For example, a human being has features which are different than his constituents: He can and must eat, sleep, think, aim at certain things, avoid certain things. And a certain human being may need specific things such as eating/preferring certain food, doing certain actions.

3.5.6.1 Reality and Effectiveness

Within Islamic holism, the whole of the human being is as real as any of his cells, or any of his atoms, or the entirety of these atoms. Likewise, his attributes, consciousness or what we may define as the soul are also as real. And he also has his distinct effectiveness.

His feelings and so on are not illusions. The agent is not epiphenomenal or supervenient upon the parts. No parts are superior to the sovereign wholes that they are part of. There may be relationships between them; however, a sovereign whole is as real as its parts.

All things are sustained by Allah.

That is Allah, your Lord; there is no deity except Him, the Creator of all things, so worship Him. And He is Disposer of all things.

(Quran: 6/102)

If we said that the subject is not real but its parts are real, what would make the parts more real than the agent? Why would parts cause things, while the agent would have no causal power? The parts also have parts.

An agent is as real as his parts, and antecedent, internal, and external causes related to his will. A person has a brain, nerves, neurons, eyes, ears, father, mother, teachers... that influence his wills. Yet he is as real as his neurons which contain atoms. He is as real as his teacher who is an external cause and who has the same things. He is as real as his atoms which have parts... He is as real as the society which he forms and in which he grew up, as his parents who caused his existence... If we reject his own share over his wills, then why would we recognize the influence of all those elements which are claimed to be external to the subject? Why would they be used to consider the agent as not effective regarding his wills?

In this respect, the problem of free will is in fact a problem of the materialist reductionism. Thus, if a dog barks, it is not the electrons that bark, because otherwise, electrons would be assigned a power that they do not have, namely being the fundamental cause. But electrons also depend on other things. Things are not transparent media which transfer the impact that comes from an unknown place. On the contrary, they are real and part of the source of the effect.

A major claim against the freedom of will is that the will power is an epiphenomenon. Epiphenomenon is defined as: "A secondary mental phenomenon that is caused by and accompanies a physical phenomenon but has no causal influence itself". And epiphenomenal is that which is of or relating to an epiphenomenon¹⁰⁴. Hence, if the

¹⁰⁴ (Merriam-Webster.com 2020)

will power is an epiphenomenon, then of course to claim that it is free would be impossible.

The features of sovereign wholes at any level are true. There is no basis for saying that there is only bottom-up or only top-down causation, or that only things at some levels are effective, others are ineffective or supervenient. We cannot reject the flying feature of a bird saying that it is nothing but a certain rearrangement of atoms, therefore atoms are real, flying is epiphenomenal. If we say so, then what is the substantiation for the atom not being the consequence of something else?

Saying that there is only bottom-up causation will either lead us to an infinite regress which is logically and empirically impossible; or it will lead us to ultimate ASBEs, which is again impossible. These elements will be explained in detail in part 3.5.6.4.2.8.

Free elements are free in that they reside within the design of God who is free: For example, a pigeon flies. This is a feature given by God. These are not illusions.

The agent has the capacity to see the consequences of alternatives, and he feels the consequences.

The agent who acts, wills, and sees the results is the same person, same agent though his spatiotemporal substance and structure changes. Seeing is not linked in all its implications and causes exclusively to a part or to a module of the brain; and the same is true for hearing, understanding, willing, acting. The agent gets some of these as inputs and processes them, and produces outputs. This is about the reality of the agent as a constituent or requirement of will and responsibility.

A sovereign whole has its own reality. Likewise, the agent has his own reality as experienced, although his parts are also real. And also,

as we have shown in the negation experiments and brain observation experiments in part 3.4.12.1, the whole of the agent is not epiphenomenal. It can reorganize itself. The basis for the reality of parts is also true for the reality of the sovereign whole. The sovereign whole may have features that its constituents do not have. Or it can have features with values that are more than the values of the features of its parts. A sovereign whole may be vulnerable to things which do not harm its parts. A danger may harm an animal but may be harmless to its atoms. A thing may harm a part of a sovereign whole, but may be useful to that whole as in amputation in gangrene.

Thus, sovereign wholes are not necessarily reducible: There is a truth to the features of any levels, the bird cannot be explained only by reference to its cells. No laws of nature are absolute, they depend also on the related sovereign wholes, structures, organizations, and shapes.

A part of a sovereign whole may cause something. But this sovereign whole may also cause something on its part.

The shortcomings of reductionism which is relevant in this respect are explained in detail in part 3.5.6.4.2.

3.5.6.2 Unity

The agent is one as a whole. The essence connected to the agent encompasses the whole of the agent in unity. In this respect, the consciousness and free will power also have unity as explained in the related parts.

Thanks to the unity of the agent and of his essence, under the whole of the agent, every thing under it is defined by a unity and hence anything gets a meaning as related to other related parts as well as to the external factors.

3.5.6.3 Sovereignty

Say, O Allah, Owner of Sovereignty, You give sovereignty to whom You will and You take sovereignty away from whom You will.

(Quran: 3/26)

The human being as an agent is sovereign in that he has the power to produce his wills and upon them his acts.

The determinism and indeterminism are explained and refuted in detail in parts 3.4.1.2 and 3.4.2.

Regarding free will, if determinism is false, and if indeterminism is false, then the remaining alternative is exclusively free will power of the sovereign agent. This is the only alternative remaining after determinism and indeterminism:

Theoretically there are two possibilities: (1) There are only unipotential agents. An agent has only one alternative in a specific situation. (2) There are multipotential¹⁰⁵ agents.

Determinism, indeterminism, and/or reductionism entail (1). They are exclusive reasons for (1). (1) is also equal to having no alternatives since there is no other possibility to will anything other than what the agent will have willed. If the agent is fully reducible to or dependent upon other things, then the agent does not have any real and distinct free will power. These things may be past events, his neurological structure, his reasons, the manipulation of another agent -who is also subject to (1)-, or a random firing of a neuron. In this theoretical possibility, no matter what the cause of the will is, the agent has only one way to go.

¹⁰⁵ For multipotential and unipotential causality see part 3.1.1.3.1.2.

The remaining theoretical possibility is that the agent is real and he is a multipotential cause.

In other words, he either does not have a distinct multipotential causal power as in (1), or he has as in (2). The arguments against determinism and indeterminism show that (1) is definitely false. So, (2) is true, and the agent has a free will power.

The above reasoning shows that there is at least one sovereign agent with free will power. To assess whether a specific agent is a sovereign agent with free will power, we have to consider whether he is reducible. Because if this agent is reducible to its parts' behaviors, then we cannot say that he is sovereign. In part 3.5.6.4.2, I have shown that the "reducibility as a general principle" is false. There is no reason to claim that the human being is reducible. Within the limited universe, with his considerable transcendent abilities, one of the foremost candidates to have sovereignty is the human being. On the other hand, with negation experiments and brain observation experiments on the free will power, the irreducibility of the sovereign human being is demonstrated in part 3.4.12.1.

As further explanations about the sovereignty of free will power in part 3.4.6 are applicable here as well, I will not repeat them here.

Question 92.

If determinism and indeterminism are false, then is every act an outcome of sovereignty?

Answer 92.

Yes. But sovereign beings interact with other things. Hence this constitute a limitation on sovereignty. On the other hand, Allah creates things according to specific designs, which constitute also limitations. For example, we cannot run faster than a limit.

Furthermore, by the falsity of determinism I do not mean the non-existence of any patterns. There are some patterns in some ranges, subject to will power, and in accordance with the design of Allah.

On the other hand, the human being has the sovereign free will power, but he is not obliged to exercise it at all times.

3.5.6.4 Irreducibility to The Physical

And (the disbelievers,) they say, "Our hearts are within coverings from that to which you invite us, and in our ears is deafness, and between us and you is a partition, so work; indeed, we are working."

(Quran: 41/5)

And those who disbelieved will [then] say, "Our Lord, show us those who misled us of the jinn and men [so] we may put them under our feet that they will be among the lowest."

(Quran: 41/29)

He will say, "Enter with the previous communities of jinns and humans into Hell." Every time a group enters, they will curse their ancestral group. Once they are all in it, the latest one will say of the previous one, "Our Lord, these are the ones who misled us. Give them double the retribution of Hell." He will say, "Each receives double, but you do not know."

(Quran: 7/38)

Generally, in the discussions about free will, determinism and uncertainty/ randomness are brought as the issues related to the truth of free will. As we have shown in part 3.4.1.2 and part 3.4.2, both determinism and indeterminism are false.

However, a more important and relevant, but less pronounced hypothesis related to free will is reductionism.

A dictionary definition of reductionism is: “The theory that every complex phenomenon, especially in biology or psychology, can be explained by analyzing the simplest, most basic physical mechanisms that are in operation during the phenomenon.”¹⁰⁶

When determinism and uncertainty are offered as the only alternatives upon which the reality of free will should be built, the unquestioned hypothesis is that the will and the agent are reducible to the spatiotemporal and some other things.

The reductionism is also important regarding free will power in another viewpoint: Even if the falsity of determinism and indeterminism is obvious, if the will power is reducible to other things, then we cannot claim the distinct existence of the free will power of the agent. For example, if the parts of an agent are neither deterministic nor indeterministic¹⁰⁷, but the agent is reducible to his parts, then the agent cannot be considered to have free will power.

The argument against free will, based on determinism or indeterminism follows the prior step of the often-undeclared assumption that eliminative reductionism is true. So, the agent is assumed to be ineffective, epiphenomenal, and supervenient upon the physical. Hence, the only effective things are presumed to be the particles, fields, and/or other spatiotemporal elements. And these are assumed to behave in either deterministic or indeterministic ways.

¹⁰⁶ (Dictionary.com 2020)

¹⁰⁷ These parts can be sovereign wholes. However, as this part is focused on the existence or non-existence of free will power rather than who has it, I will examine the reductionism as related to deterministic and/or indeterministic claims.

Consequently, all, including the agents are considered to follow just the deterministic or indeterministic paths.

Therefore, to understand freedom of will, understanding reductionism is more important than understanding determinism and indeterminism. So, in this part, I will try to explain what reductionism means in the context of free will; and why full reductionism¹⁰⁸ is fallacious.

Is the agent and his will reducible to the physical, biological, social entities and events?

A kind of reductionism may also reduce the agent partially or wholly to the past entities and events. There are other kinds of reductionism. However, our following explications can be easily applied to the other kinds of reductionism that are related to the discussion of free will.

The argument against free will power in accordance with reductionism can be explained with this example: If cogwheels are real and effective, then the clock will behave only as the cogwheels behave. Likewise, if the neurons and other things corresponding to cogwheels are real and effective, then the human being will behave only as these behave. As the clock does not have any power or reality to negate the cogwheels, the human being does not have any power or reality to negate those things.

The analogy between the human being and a clock is obviously a wrong analogy, since it is an analogy between a sovereign whole and

¹⁰⁸ Unless otherwise indicated, when I use reductionism, I mean the full reductionism, which entails that everything is reducible to other things. There are obviously things which are reducible to other things.

non-sovereign whole¹⁰⁹. Everything cannot be a non-sovereign whole as the clock, since otherwise, there would be no existence because of infinite regress. If the cogwheel is explained by its parts as the clock is explained by the cogwheel, and if every part is explained by its parts, and if there is no sovereign whole in the entire chain of explanations, then nothing would have any active power to make the clock work.

Arguments based on reductionism in the context of free will power have been put forth against claims of responsibility within and since the time of Prophet Muhammad (PBUH). And these are not accepted as excuses as we see in the above verses from the Quran.

If those who went astray blame the previous generation there will be infinite regress. And they have to accept that they were among the causes, since the next generations would also blame them if this would be a valid blame. Because they blame previous causes and they are also previous cause for certain events.

The influences of sovereign wholes are not limited to distinct spatiotemporal behaviors of the sovereign wholes. We cannot say that one's being a father, or another one's being beautiful does not have any reality and influence distinct from the influence of their particles. There is no basis to say that the reality of a "father" in this respect is inferior to the reality of an "atom". The issue of infinite regress applies here as well.

3.5.6.4.1 Physicalist Reductionism

When I talk about reductionism, I essentially mean physicalist reductionism. And I take "reduce" and "reductionism" in the

¹⁰⁹ Although this analogy is developed by the author, since the reductionists would not accept a sovereign whole, it is an appropriate analogy to deliver the point of such opponents of free will power.

following sense: “The English verb ‘reduce’, derives from the Latin ‘reducere’, whose literal meaning ‘to bring back’, informs its metaphorical use in philosophy. If one asserts that the mental reduces to the physical, that heat reduces to kinetic molecular energy, or that one theory reduces to another theory, one implies that in some relevant sense the reduced theory can be brought back to the reducing theory, the mental can be brought back to the physical, or heat can be brought back to molecular kinetic energy. The term ‘reduction’ as used in philosophy expresses the idea that if an entity *x* reduces to an entity *y* then *y* is in a sense prior to *x*, is more basic than *x*, is such that *x* fully depends upon it or is constituted by it. Saying that *x* reduces to *y* typically implies that *x* is nothing more than *y* or nothing over and above *y*.”¹¹⁰

A reduction is effected when the laws of the target science are shown to be logical consequences of the theoretical assumptions of a base science.¹¹¹

There are other formulations of reductionism. However, the above is the most relevant in the context of free will.

As reductionism is very crucial regarding free will, let us go into further details based on a specific argument for reductionism explained by Kim¹¹²:

If a person is in a mental state *M1*, then there is a corresponding physical state *P1* of this person. When he shifts to the mental state *M2*, there is also a physical state *P2* that corresponds to *M2*. If *P1* and related physical laws are sufficient for the transition from *P1* to *P2*, then *M1* does not have any efficient causal power on the transition from *P1* to *P2* and from *M1* to *M2*. And according to the

¹¹⁰ (Van Riel 2019)

¹¹¹ (Nagel 1961)

¹¹² (Kim 1999)

physicalist reductionist approach, P1 and related physical laws are sufficient for that transition from P1 to P2.

The above example is about the relationship between the mental state and the physical state. But it can equally be used for any state of a sovereign whole and the states of its parts.

In the above line of thought we notice an error of assuming the existence of a self-sufficient very bottom layer. Also, the assumptions that between P1 and M1 or between Pn and Mn there is a one-to-one token relationship is not substantiated.

However, that line of thought demonstrates the important link between physicalism and reductionism. If someone is physicalist, then he has to adhere to the above line of thought and not adopt a holistic physicalism. The above line of thought which is consistent within itself, entails that a physicalist holism is untenable.

Why is there a tendency to relocate explanations to lower layers? Because if two parts come together and there appears a totally new relationship or property unexplainable by these two parts, from where would that new relationship would come? According to Islam, the answer is “from God”. But for some people, this answer is not acceptable. Consequently, they have to accept that any whole must be explainable based only on its parts. Where do the attributes of the ultimate parts come from? Here, we see that reductionism has a strong faith-like aspect.

Secondly, the tendency to relocate explanations to lower layers may have also practical reasons: Knowing that wholes can be made of different parts enables us to combine them in different ways and produce new products. Being used to these practical aspects, may cause many people to question insufficiently the problems of reductionism.

Thirdly, there are also assumptions that allegedly separable smaller things are simpler, since there are allegedly less powers acting on a smaller particle. And the more we learn about simpler and smaller things the less unexplained things will remain. Hence, there may be hopes that we will learn how things happened to exist starting from zero. However, the more we explain the attributes of larger things with smaller things, these smaller things will be assumed to be larger in their powers.

None of these justify a conclusion that all wholes are explainable in terms of their parts.

In the following parts, I will examine reductionism in further details.

3.5.6.4.2 Physicalist Reductionism Is Unsubstantiated and False.

He creates what He wills.

(Quran: 42/49)

Once the agent is fully reduced to another thing, then we cannot argue for the free will power of the agent. It does not matter in this respect whether that thing behaves deterministically, or indeterministically, or in another way.

If in a debate an opponent of free will offers the false dichotomy of determinism and indeterminism, he implicitly argues for reductionism. Because the absence of any alternatives other than these two can be claimed only if the agent is considered reducible to other things and not to have any distinct effect.

Therefore, in this section, we will go through physicalist reductionism as it relates to free will power, and I will explain why it is not a reasonable view.

According to physicalist reductionism, the biological is reducible to the chemical, the chemical is reducible to the physical, molecules are reducible to atoms; atoms are reducible to electrons and so on... If we have complete information about the bottom physical level, then we have a complete understanding and predictive power about any upper level. A whole in an upper level is just epiphenomenal, with no effect of its own, like an illusion. Most opponents of free will will one way or the other build their arguments on this.

If we know all about each of the letters in the word “pen”, can we grasp the word “pen” and the meaning it contains? We cannot. Because pen as a word, is irreducible to the letters. It has the power to represent an object. If we know all about each atom of the pen, without knowing their spatio-temporal relationships can we know the pen fully? If we do not know about the value of the pen for a human being, do the atoms of the pen alone constitute the entire existence of the pen? No. Hence, in many ways the pen is not reducible to its atoms or to other atoms.

A sovereign whole at a level influences entities and events at the other levels.

Say, “Allah is the Creator of all things”

(Quran: 13/16)

And not an atom's weight in the earth or in the sky escapes your Lord, nor what is less than that or greater than that, but it is (written) in a clear Book.

(Quran: 10/61)

The agent and the will power are not fundamentally different than other sovereign wholes.

In Islam, everything is real, created, sustained, and empowered by God. So, reductionism of everything into spatiotemporal things is not acceptable in Islam.

Van Riel et al. notes “The hope that the actual progress of science can be successfully described in terms of reduction has vanished.”¹¹³ This complies with the Quranic teaching.

Rejecting physicalist reductionism¹¹⁴ does not entail rejecting physics. We should just reject a specific narrow understanding of physics. Physics relates to nature, and in a broad sense God has a nature and there is a relationship between God and nature since God is the Creator and Sustainer of physics. The physics which excludes God, and the physics which is defined as something unrelated to God, is not acceptable in Islam. But physics as a comprehensive science is necessary.

Biology relocates some real questions to chemistry and physics; chemistry relocates some real questions to physics. And physics relocates the same to things which are studied under philosophy. And some see philosophy inferior to science. Consequently, some important questions are swept under the rug, especially when they are related to the issue of free will power.

In the following sub-sections, I will explain why reductionism is unsubstantiated and false.

¹¹³ (Van Riel 2019)

¹¹⁴ Scientific reductionism is generally used as corresponding to physicalist reductionism. However, although the adjective “scientific” presupposes that it is scientific, it is not substantiated that it is scientific. Hence, we prefer to use the term “physicalist”.

3.5.6.4.2.1 Physicalist Reductionism Is Unsubstantiated.

The reductionist claim that there are no wholes which are not reducible to the physical is unsubstantiated, and cannot be substantiated. Because, it requires access to all wholes in the universe, and to all layers of existence. Obviously, this access is impossible. Furthermore, there is no logical or empirical necessity for all things to be reducible to the physical. Additionally, the problems in the following sub-sections demonstrate that reductionism cannot be proven.

Accordingly, a claim that the will power or the agent is reducible to the spatiotemporal states of his spatiotemporal parts is unsubstantiated.

3.5.6.4.2.2 Top-Down Causation Is as True as Bottom-up Causation.

He released the two seas, meeting [side by side];

Between them is a barrier [so] neither of them transgresses.

(Quran: 55/19-20)

And they will say to their skins, "Why have you testified against us?" They will say, "We were made to speak by Allah, who has made everything speak; and He created you the first time, and to Him you are returned.

(Quran: 41/21)

And Allah has extracted you from the wombs of your mothers not knowing a thing, and He made for you hearing and vision and intellect that perhaps you would be grateful.

(Quran: 16/78)

Since parts and wholes act as if they share the same space, they are not fundamentally separable. We cannot say that something in and of itself explains a whole, since, for instance, any law of nature is assumed to bind even distant things as if they are a whole.

In terms of causality we cannot say that only low-level things influence the top-level things, since high level relationships such as spatial relationships are also a reality: The locations of the planets and their atoms in the planetary system not only have implications for the movements of the planets, but also they have implications for how the atoms behave.

If for example the space was reducible, then it would be explainable in spatial points. But then distant, and near, big, and small would lose their reality if we do not presume the reality of a fundamental transcendence: Because any point cannot contain these relationships. If we define a point within a whole, then we assume that it is contained within a non-separable relationship. If we reduce things to relationships, then we reduce them to transcendent and non-separable wholes. Especially if we consider that relationships are also related according to certain relationships, we will see that reductionism does not work. These are not related to our consciousness, since whether we exist or not, these relationships work.

The reductionist in the first place divides and discriminates. Because for him there are reduced things, and there are things upon which other things are reduced. However, an atom has an actual potential precise implication for a specific cat even if it is not within or close to that cat. That implication also defines the atom. In the design of God, the cat or whatever will be created with an atom has an implication for the existence and some features of the atom.

On the other hand, for example, an atom, or an electron is not a point-like entity, and they cannot be isolated point-like entities. They

are explained in terms of internal and external structures and relationships. So, reductionism would only work in a limited way in respect to a certain layer. At that layer, however basic it is, we will see that that which we use as an explanation, is something that belongs to a higher layer relatively to something else. Or we will see in accordance with the popular interpretations of quantum phenomena, that we have wave functions where there are only wholes.

The real world is not reducible to imaginable simplest billiard balls as explained in part 3.4.1.2.2.14, though even such simplest balls would require lots of internal relationships.

Hence, top - down - future - past - potential - actual causalities are true simultaneously and not necessarily only in a fixed single direction.

All spatiotemporal structures and functions are contingent, and results of the design of God. Nothing is fixed, unchanging, absolute, or superior against God.

In the limited universe we observe, there is no homogeneous upward going causal structural chain. There are different structures at different layers. Had there been such a chain, then we could figure out what had to be the structure of anything at any smallest scale. But we discover different particles at the same layers and at the different layers with specific numbers and relationships, by doing specific experiments, rather than looking at what is going on between celestial objects.

Also, as we saw in the negation experiments and brain observation experiments about the free will power, there are distinct effects of the sovereign wholes upon the parts.

Consequently, our empirical observations and logic, do not allow us to conclude that we can make a clear and final distinction between things that are reduced and things that are reduction bases.

Question 93.

What differentiates a sovereign whole from its parts?

Answer 93.

Here the assumption is that the parts of the sovereign whole are fundamentally different than the sovereign whole. This is a false assumption. The very basic does not need to be defined in and of itself. It may be defined at least partially in terms of the upper whole. The sovereign whole may be also an element, a basis, or a requirement of the part. When we conceive of an object, we conceive it within a spacetime. Everything is defined based on its relationships in one or more sovereign wholes in relationship to 'many' things.

If there is an extra dimension added to the spatiotemporal, and which is related to the will, then the will will not supervene upon the narrowly physical. Because then there would be other changes occurring outside the spatio temporal dimension. So, in this situation there would be no one-to-one relationship between the physical and the will. Our consciousness is an example for such extra dimensions.

Further details about this question are given in part 3.5.3 about sovereign wholes.

3.5.6.4.2.3 Reality of Non-Spatio-Temporal Concepts and Considerations

The spatiotemporal does not have any implication in terms of right and wrong: A falling stone is what it is. We cannot say “this fall is false”. If spatiotemporal dimension(s) are the only ones, then there

would be no other dimension or realm the spatiotemporal entities would influence or produce or in which they would extend. But if there are the dimensions of true, false, good, evil then we cannot say that these fundamental dimensions are reducible to the spatiotemporal ones.

There is no reason to claim that our spatiotemporal perceptions are superior to our other perceptions. Why would we say that economical, social, biological, chemical relationships are just epiphenomenal, ineffective relationships?

If the only reality was only physics or physiology, then there would be nothing else which would consider it wrong. (1) If the only reality was the spatiotemporal, then the agent's parts would not be able to transcend another agent; (2) Even if they did, they all would be as parts of the same whole, complying with relevant laws of nature, and consistent.

We have the will power and when we will, this act has dynamics different than those of the parts. We consider things that relate to economics, feelings, future, and so on. These are specific to our level. An atom's attributes, functions, and behavior are different. We are real, the atoms are real, the cells are real, our eyes are real... What we consider when willing does not overlap with the specifics of an atom. If we say that what we consider is just what atoms calculate/process, then we have no reason to stop at the atoms' level, we need to go deeper, but at no place we are justified to stop. So, we have to accept that the atoms are epiphenomenal as well, hence, nothing, no entity, no relationship we find out will constitute a real finding.

If we assume that the atoms or something else are the supervenience basis, then we would have added some additional features to the real spatiotemporal that we have not reached. Therefore, we would have contradicted ourselves.

Until, when they reach it, their hearing and their eyes and their skins will testify against them of what they used to do.

And they will say to their skins, "Why have you testified against us?" They will say, "We were made to speak by Allah, who has made everything speak; and He created you the first time, and to Him you are returned.

(Quran: 41/20-21)

On a Day when their tongues, their hands and their feet will bear witness against them as to what they used to do.

(Quran: 24/24)

3.5.6.4.2.4 Infinite Regress Problem Related to External Things

Above, we generally saw the parts or past of the agent as the things to which he or his will can allegedly be reduced. However, the will can allegedly be reduced partially or wholly to things other than their past or constituents such as the effects of food, weather, friends, and so on.

If everything is influenced by and built upon external things, then nothing would exist/ happen because of circularity. For example, if the will was the consequence of a friend's act, then the friend's act would be caused by another event... in an infinite regress and in circularity. However, an actual infinite regress is impossible in this context as well. So, there are contingent things that exist and are real, active, and free. They have their realities which are also sustained by God. They have a whole or partial capacity to change what is ordained by the external facts, or what is projected into the future.

3.5.6.4.2.5 Consciousness as An Evidence of Irreducibility

Consciousness is an important sign of an irreducible whole. Consciousness relates to the entirety of the agent, not any part of it. Even if it was detected that it is a part of a brain it would be a sign of a whole since that part would also be a whole. It cannot be reduced to a spatiotemporal point in the brain, since it encompasses many ranges in the same time. It cannot be reduced to a volume, because then constituents of that volume would be transcendent and non-separable. Therefore, the consciousness cannot be reduced to the spatiotemporal. For similar reasons it cannot be reduced to other ultimately separable things.

If we draw four boxes, the consciousness encompasses them. But in the physicalist reductionism each box is instantiated within corresponding parts in the brain. If the brain is reduced to parts, then each part would contain a part of the boxes. Hence there would be no transcendent and holistic reality of the wholes anywhere.

The agent can produce “infinite” scenarios, can reshape, can redefine, can know, and be conscious of multiple things at once, while the physical is assumed to be in one-to-one relationship. The agent can value things differently. It is active over what he conceives. What he conceives is real as conceptions as different from the physical, though, we cannot separate the physical from the mental.

Even if the qualia would be illusions, they would be real as illusions. Hence, it is clear that those transcendent attributes cannot be reducible to the spatiotemporal, except maybe if we assume that the spatiotemporal is not spatiotemporal as understood by some. But if we assume the latter, then we would have added some additional features to the spatiotemporal.

3.5.6.4.2.6 Physicalism Is False.

The “physicalist reductionism” has inherent problems that is related to its “physicalist” aspect. In this part we will see some of the problems that relate to this aspect.

Physicalism is defined as “a thesis that the descriptive terms of scientific language are reducible to terms which refer to spatiotemporal things or events or to their properties”¹¹⁵. It is also seen as the thesis that all first-order properties instantiated in the spatiotemporal world are physical properties.¹¹⁶ There are different kinds of physicalism, however, the above definition is sufficiently relevant regarding the physicalism that I will examine in our context.

A physicalist maintains that things and events are reducible to spatiotemporal deterministic or indeterministic relationships, parts, and wholes¹¹⁷. Though there are holist physicalists, physicalism reduces things and events to the physical¹¹⁸. In a detailed analysis, it will be seen that physicalism is inconsistent with holism.

Hence, the general idea of physicalism is an important factor in adopting reductionist approaches to free will. So, an analysis of physicalism is necessary in the context of free will.

Physicalism emerges from searching the causes in the wrong place. If I try to understand how my car happened to be, only within the

¹¹⁵ (Merriam-Webster.com 2020)

¹¹⁶ (Latham 2009)

¹¹⁷For a reductive physicalist, wholes are also reducible to parts.

¹¹⁸ By “physical” many understand “that which is the essential and consisting only of spatio-temporal things and entities”. The physical or physicalism which is analyzed in this work are according to this meaning of these expressions. However, I think that ontological separation between physical and non-physical is only an artificial and fallacious one for the reasons given in the relevant parts in this book.

parts of my car, then I can be “steelist”, or “rubberist”, or “atomist”. But if I also have a wider vision and look around for some engineers, for my needs, for some factories, then I can reach a truer understanding. If a person tries to understand the spatiotemporal within the spatiotemporal, then a similar problem occurs.

Although the Quran strongly encourages to find out and benefit from patterns in nature, it also clarifies in a balanced way the importance of other things as sovereignty of human beings, will power, truth, consciousness, responsibility, and divine values. It also emphasizes the contingency of patterns found in nature and how those patterns are established in order to be benefited from, and as signs showing the Creator and sustainer of the universe.

Then your hearts became hardened after that, being like stones or even harder. For indeed, there are stones from which rivers burst forth, and there are some of them that split open and water comes out, and there are some of them that fall down for fear of Allah. And Allah is not unaware of what you do.

(Quran: 2/74)

And there is no creature on [or within] the earth or bird that flies with its wings except [that they are] communities like you. We have not neglected in the Register a thing. Then unto their Lord they will be gathered.

(Quran: 6/38)

Separating things fundamentally as physical and non-physical, or as physical and mental is an important error prior to claiming that the physical is a self-sufficient cause that may sustain the non-physical or the mental. The contradictions and other problems in this

problematic separation will show how erroneous is the “physical” as a fundamentally distinct category which allegedly contains self-sufficient causes of the limited world.

In the following sub-parts I will explain some of the problems of physicalism as an alleged provider of self-sufficient cause. The related literature contains plenty of other obvious problems with it.

Question 94.

What is the relationship between the physicalist monism and Islamic monotheism?

Answer 94.

Some consider physicalism as monist. When it is monist, it is inconsistent in that it recognizes the multiplicity of the physical things and the relationships between them, while it rejects the necessary transcendent power. The bigger the number of spatiotemporal and systematically differentiated things at differentiated layers, the more inconsistent is physicalism in its monist aspect.

Islam recognizes the transcendent power, and the things that this power creates and sustains. The more the number of systematically differentiated things, the stronger the unitary aspect of Islam, since such multiplicity displays the control of a bigger unitary power from our perspective.

When physicalist monism rejects the transcendent default power, it is incomplete in terms of a source for transcendentally encompassing alternatives, and for the transcendent free will power. Hence, it is difficult if not impossible to reconcile it with the free will power.

The Quranic teaching consistently presents the source of the free will power and the reasons for it.

Question 95.

What is the relevance of physicalism to the free will power?

Answer 95.

In physicalism, except for its marginal versions, there is a closed physical system and the universe consists of this closed system. The relationships within and between entities and events are generally through deterministic and/or probabilistic laws. Entities and events can be understood only through determinism and uncertainty. Since all things are reducible to spatiotemporal relationships, it is not possible to conceive of any being or entity which may have autonomy and sovereignty.

According to physicalism, biological or psychological experiences are illusion-like; they can be reduced to physical entities, events, and laws. Enjoying food or suffering from a health problem have no causal effect as being qualia. They can only be understood in being just physical states and structures that gained some permanency which resist any incoming destroying effects. So, if one bleeds because of an accident, the feeling of pain occurs so that the organism reorganizes itself in order to annul the harming effect, and reprogram the organism in order to avoid future harmful events so as the organism survives.

Joy, pain, understanding are just epiphenomena which do not have any causal effect except for the underlying physical entities and events. Pain as experienced by an organism has no causal effect, but the corresponding and underlying physical states have this effect. There is no other effective dimension specific to qualia which interacts with the spatiotemporal dimensions. If there are such dimensions, they are just epiphenomal; they do not absorb energy from the spatiotemporal; they do not change the flow of the energy.

In a physicalist reductionism, entities and events consist of ontologically distant parts, and they can be divided into their parts, and into related sequences. A transcendent inclusion or encompassing of entities and events within agents is only epiphenomenal. Related ontological unities are not possible. Parts are instantiated within parts.

In a holistic physicalism, wholes may be included in the causal processes. For example, a biological organism may have influence on the parts and its elements may be non-separable. However, since it is physicalism, though qualified as holist, it explains the whole only in terms of the spatiotemporal. Therefore, I am convinced that holistic physicalism cannot be fundamentally different than physicalist reductionism. So, for the holistic physicalism also there are only deterministic and/or uncertain causal relationships; the whole and the parts are subject to them. Yet, joy, pain, understanding, agency, and such mind-like features are just epiphenomenal, or simply put, they do not have any causal effect on the physical entities and events. Some further points on this are explained in this book in respect to strong emergence.

In this sense, physical monism which says that everything is of one nature, is monist only by discarding the mental dimensions, and by naming them as epiphenomenal. Because, even if we assume that these mental dimensions are epiphenomenal, nobody denies that they are real and existent; so, for the physicalist they exist along the spatiotemporal. Consequently, to me the claim that a physicalist is or can be a monist is inconsistent. They have two fundamentally distinct and irreconcilable natures. It would not be rational to consider only the effective things as existent.

In accordance with physicalism, we cannot talk of a distinct causal value of purpose or design, since the physical relationships are closed relationships and together with spatiotemporal states, they are

considered sufficient to predict future states. Even if they are not sufficient to predict, the only possible causes are the spatiotemporal ones.

In summary, the determinist physicalist says that the will of the agent is nothing more than an epiphenomenon. The states, physical entities, and the equations/ functions of physics are sufficient to explain everything.

Here, the point is that adopting such a physicalist approach is in conflict with the free will power¹¹⁹.

Question 96.

Is not non-reductive physicalism acceptable?

Answer 96.

I do not think non-reductive physicalism can be considerably different than reductive physicalism. For details see part 3.5.6.4.3.2 on non-reductive physicalism.

Question 97.

Is Islamic teaching emergentist?

Answer 97.

Kim (1999) classifies emergentism as follows: “It is evident that emergentism is a form of what is now standardly called “non-reductive materialism”, a doctrine that aspires to position itself as a

¹¹⁹ There are compatibilists who believe both in physicalism and free will. As we explained in the related parts, the free will as they define occurs with no freedom of its own or of the agent.

compromise between physicalist reductionism and all-out dualisms.”¹²⁰

In Islam God is not born, hence does not emerge; His creation is within the plan of God as well. Hence, Islam is not emergentist. Though downward causation has some place in Islam, regarding God, it is totally different: The top does not emerge deterministically or randomly from some other things.

Regarding the free will power there is a fundamental difference as well: Though agents are born, grow up, and depend to some extent on some microphysiological processes and entities, all of these which may look vertically differentiated relatively to each other, occupy the same layer as they relate to the creating and sustaining power of God. In other words, the agent does not emerge from the mechanistic processes; rather, he is designed with other related creation as a unitary whole, by God. So, at the very fundamental level, they do not emerge from each other.

There is downward causation as well, especially as it is obvious in the processes related to free will. While the events are running, we cannot say that the parts constitute the whole of the agent and make the agent emerge as a reducible thing. There are relationships between parts and wholes. But these relationships are like in equations in that everything in an equation is equally real. Let me explain with an example:

Four objects A, B, C, and D are positioned in the same space so as to constitute a square S. Here, we cannot say that S emerges from A, B, C, and D. A, B, C, D, and the space are already created and designed so as to contain the potential of constituting a whole. Furthermore, they in any case constitute a whole whenever they are part of the same space. Square is only one of the instantiations. Before

¹²⁰ (Kim 1999)

the square also, whatever was their positions, they constituted a whole. And that whole did not emerge; with the existence of each of them a related whole existed; that whole is not separable from A or B or C or D.

So, the only emergence is with their coming into existence by being created by God, but this is neither strong emergence nor weak emergence. Their being positioned so as to constitute a square may have different consequences than their forming a triangle. These consequences are also contained within them as potentials. But when their positioning as a square is actualized, this, again together with their potentials constitutes another whole. In other words, ABCD in the square form is another entity compared to them being in a triangle form. Yet, each of A, B, C, and D also constitutes an individual whole.

According to the Quran, the states are real:

So, I swear by the twilight glow,

And [by] the night and what it envelops,

And [by] the moon when it becomes full,

[That] you will surely experience state after state.

(Quran: 84/16-19)

In any case in the creation stage of anything within a certain framework, there is a whole including the potentials. No part we observe is conceivable without a related whole.

Which potentials actualize for a specific creation depend on the commands of God, on the extent of freedom assigned to it by God, and on the commands, design, and freedom of other creation.

Hence, commands, information, communication, transcendence, will play important roles in the functioning of the universe:

And your Lord inspired to the bee, "Take for yourself among the mountains, houses, and among the trees and [in] that which they construct.

Then eat from all the fruits and follow the ways of your Lord laid down [for you]." There emerges from their bellies a drink, varying in colors, in which there is healing for people. Indeed, in that is a sign for a people who give thought.

(Quran: 16/68-69)

And He completed them as seven heavens within two days and inspired in each heaven its command.

(Quran: 41/12)

Originator of the heavens and the earth. When He decrees a matter, He only says to it, "Be," and it is.

(Quran: 2/117)

Allah said, "O Dhul-Qarnayn, either you punish [them] or else adopt among them [a way of] goodness."

(Quran: 18/86)

On the other hand, strong emergence is seen as something fully built upon laws, where the low layers are connected with the high layers through laws of different kinds again. Furthermore, those who defend strong emergence, maintain that the same identical low layers would produce the same high layer phenomena. Therefore, strong emergence is no more than adding further relationships to the same structure under reductionist principles. Hence, for most

emergentists, free will power is not obtained even under strong emergence.

3.5.6.4.2.6.1 We Conceive the Physical Only Through Mind.

If physicalism is true, then how could we “define” the “physical” with words while words are not “physical” (or non-physical)? One might argue “even if I do not define it with words the physical is there”, then what is “there” even when you do not define it? Hence, in this situation, we would not be able to call it physical or anything else.

If sight of light is illusion, if shape is illusion, if space is illusion... then what is that which acts? The physicalist is with nothing but the mind yet he rejects the effectiveness of the mind. If things have nothing to do with what and how we define, what are they? Are we outside existence? Is our nature unable to interact with the existence? Cannot we conceive of at least some relevant realities?

A better approach is to recognize our observations, senses, reasoning, knowledge and their objects as all being real and within a unity. In Islam, everything has a common Creator, therefore a common ground which justifies the possibility of interaction between things.

Hence our only channel through which we recognize things is our mind. In any case, we recognize things as they are translated into the language, concepts, feelings, unity of our mind which can encompass the spatiotemporal. Either we recognize the reality of our mind, qualia, and their capacity to access what is beyond, or we have to reject the possibility to access anything beyond our mind if our mind is not real and effective.

We do not have any evidence to say that what we conceive is something other than what we conceive even if it is other than what

we conceive. So, we cannot say that something is not related to mind, because whatever we are conscious of has mind-like aspects. Hence, as logic and consciousness are not a secondary thing relatively to the physical, the logical is as effective as the physical. Even we can say that the physical has logical and conscious constituents. So, there is no reason to give the physical any fundamental and separable priority.

When we define the physical, we define it with our mental properties as unity, transcendence... The physical is not a separable basis. If we want to remove the mental from the physical it is impossible. So, in any case, regarding our reasoning, what we call the physical is non-separable from the mental¹²¹.

3.5.6.4.2.6.2 Foundations of the Physical are Mind-Like.

If what is real is totally of different nature and it is not mind-like even partially, how does the content of our mind correspond to what is beyond? In other words, if in our mind there is a space which makes us feel that the object O1 is more distant than object O2, what is the reality of space that makes one of them closer? If the transcendence and unity within us do not have a corresponding transcendence and unity related to what is beyond us, how and why would they be consistent within themselves, and how could they be translated into our mind?

A key aspect of the physical is the unity that surrounds it; a key aspect of the mind is also such a unity; a key aspect of their interaction is also the unity.

¹²¹ This statement does not assume the truth of dualism or superiority of the mental upon the physical, this is about the non-separability of the physical from the mental.

“If we claim that blue is a kind of qualia, the essential is the physical, and the qualia is an illusion.” This claim is inconsistent and unsubstantiated. Because what we conceive as the physical is not any different than the color blue. They all relate to others, are connected within unity, and are meaningless without their transcendent relationships to other things.

Hence, it is apparent that regarding their underlying powers, what is within our minds and what is beyond are not fundamentally separable. And if our mind is real and what is beyond is real, then what would be the barrier and the connection between them?

And what makes them inherently of different nature? For example, let us think of an object. Is it physical, as opposed to non-physical whatever it is? What makes it physical? Its extension in the space? Is the space physical? What makes it physical? Suppose that the object moves smoothly, and suppose that it is the only object in the universe. What does it mean that it moves, and according to what? Is its movement physical? What makes it physical? It makes the space curved? Relatively to what?

Or for example if the space is physical, and if we deny our perception of space then what is space? What is the nature of our definition and perception of space? What is the physicality of our perception? If within our minds our illusory consciousness connects the points of space, then what connects the points within the spacetime beyond us? If the parts of anything exist by and within themselves, then where is the whole?

When we define something, we define it in its relationship to other things, e.g. as a whole of some things, or as a part of some things. Then what does link and separate those things which are beyond our minds ontologically? That which unites things which are beyond our minds is necessary, because multiple things are “consistently”

instantiated and united within our perception. This consistency is obvious within our mind, within what is beyond it, and in between; that is why we can do science successfully. There must be a unity in what we observe, so that the unity of our perception may perceive it.

If there were two things within two unrelated spacetimes, then could we perceive it? If yes, then would not this mean that we have access to these two spacetimes? If we had access to them, would not it be the case that they are connected independently of ourselves? If there is no corresponding unity encompassing what we observe, we would not be able to have meaning of things beyond our mind.

Hence, if there was no encompassing unity within what we observe, then we could not conceive of a real triangle, since the points of the triangle would not be related. And something we designed based on it, would not keep its spatial relationships. If there was inconsistency in between the mental and what is beyond, what we designed based on it would be fed back to us in a disorderly way.

There is a unitary reality that at least comprises the elements of our consciousness. So, how can the physical be totally unrelated to our consciousness when we talk about the physical? And how can we make a distinction and a fundamental separation between the physical and our consciousness, words, unity? How can we create a dualism of physical and non-physical when we think or when we talk? And if we cannot talk and think of such a dualism, how can one deny one of them?

Saying that reality is physical as opposed to mental, would be a self-defeating statement, because it would be a “statement” which is not a reality.

The common foundation of what is called the mental and the physical is obvious according to the above considerations. Yet, the

disability to see or accept the extension of this common ground into the physical, may be causing the physicalist make a false dichotomy saying: “Tables are separate, planets are separate, persons are separate¹²² but our minds see them in unity, in one place, transcendently. So, we have to choose either our mind or what is beyond and one of them must be depending upon the other and must be epiphenomenal. The physical cannot be epiphenomenal, since for example, when a person dies, the physical keeps existing without losing anything. We can repeatably test the spatiotemporal, but we cannot test repeatably the mental. Therefore, it is the mental which is epiphenomenal and it is the physical upon which the mental depends and/or supervenes.”

One aspect that the physicalists argue for their physicalism is the repeatability, measurability of physical events. However, as the problem of induction shows, this approach is non-sequitur. Obviously that something is repeatable or that something is within a pattern does not mean that it is necessary or it is fundamental or prior. Though a rock keeps falling, there is no logical necessity for the fall of the rock. This issue is addressed by both muslim and non-muslim philosophers. It is essentially addressed under the “problem of induction”. The arguments for free will including the tests in part

¹²² In fact, there is no reason to conclude that space is absolute as causing absolute distances between things. There may be other space/times along with a spacetime. It is not testable that the space is absolute: Everything within space including the space might be grown a million times in such a way that we cannot distinguish whether the space has been grown or not. Because there is no benchmark which tells us that the space must have certain extent or correct value except relatively; the only benchmark which are the objects and laws and so on already depend on the space. So, we cannot say that the space is absolute. The same applies for time or spacetime. Hence, they do not have any superiority upon the mental, or the content of the mental.

3.4.12.1 are in the same time arguments against physicalism, and related fallacy.

Though full repeatability in all respects is not necessary to show the reality of things, it is possible along the reality of certain things, within the Islamic teaching: In accordance with the design of God, things may be repeatable, may be given features that are understandable, repeatable, beneficial for human beings and other creation in this respect; and along these things there may also be uncertainties or sovereign things that can behave freely as well. There may be unpredictable effects of sovereign things that are not repeatable, and due to these, repeatability may be non-existent in some regions or things.

While there is no reason to have a narrow and limiting approach so as to see everything only behaving according to deterministic or probabilistic patterns in a repeatable way, repeatability can give comfort to some people in that they can feel safer if things are predictable, knowable, and controllable. Yet the physicalist framework cannot give any control to any agent if the agent and any control are assumed to be supervenient or reducible to those deterministic or probabilistic patterns. So, such psychological advantage is not substantiated and is just illusory: There is no possibility of control for an agent under such physicalist approach.

Another psychological advantage of such a physicalist approach is the relief from responsibility: If things are reducible to patterns, then the agent is not responsible since he cannot have any freedom or sovereignty. But this comes with the disadvantage of disowning success. And there are physicalists who are compatibilists who say even if events may be deterministic, we have free will and responsibility. As explained in part..., this approach does not make sense.

So, although physicalism seems to be related to such emotional motivations rather than reason, it is obvious that even these psychological advantages are not true advantages.

Note that the choice of the criteria of repeatability and testability presumes the absence of sovereignty, since sovereignty can override repeatability, testability, determinism, and indeterminism. Certainly, the criteria of physicalism are insufficient in the search for the truth, and they have to be extended consistently to be able to distinguish sovereign beings, entities, and acts of agents. Of course, this path will require the abandonment of the dogmas against the transcendent. It will also require an objective, altruist attitude, since the current popular attitude seems to be looking for aspects of the existence that are easier to control and exploit, rather than seeing them in all their real aspects in an unbiased way.

According to Islamic holism which recognizes the effectiveness of the mental, this false dichotomy of the physical and mental is not acceptable. The physical is not fundamentally different than the mental, the physical is not the only effective. Energy does not relate exclusively to the physical, but also to the mental. Transcendence, qualia, will, and unity do not only relate to the mental, but also to the physical.

Hence, saying that the matter and the laws of physics are self-sufficient causes which cause all that exists is a big error.

3.5.6.4.2.6.3 The Agent, His Consciousness, And the Mental Are Real.

There is no reason to discard the willful and multipotential causes, since we empirically observe them as seen in the negation experiments and brain observation experiments in part... If free will is true then physicalism fails. Because free will power entails the

recognition of a multipotential causal power of the agent, which is additional to the physical laws and/ or forces. Furthermore, it entails the existence of a transcendent source for the spatiotemporal; and once such a source is admitted, there will be no reason to keep the big inconsistencies of a paradigm built on blind laws and forces. Additionally, such a source will also solve the problems related to responsibility, good, evil, truth, and so on.

Your Lord has decreed upon Himself mercy.

(Quran: 6/54)

The reductionism and freedom are related. If the whole has a range of freedom and a sovereignty of itself, then it will have some effects of its own which do not arise from lower layers.

Therefore, what is called physical has influence on the mental, but also what is called mental has influence on what is called the physical.

The numerous arguments demonstrating the reality of the agent and of the will debunks physicalism. On the other hand, the logical and empirical refutation of physicalism refutes the arguments based on physicalism against the free will power.

The following sections also support this very section in that they show that space and time are not fundamental.

The arguments specific to the impossibility of determinism and indeterminism explained in part 3.4.1.2 and part 3.4.2 show that there is another principle for the behavior of things. This impossibility requires that this principle is beyond the spatiotemporal since allegedly the deterministic and indeterministic behaviors exclusively contain all physical behaviors.

If the whole of the agent is conscious then this means that there are interactive relationships between the physical and the mental. And

as we explained in part 3.4.12.1 within the free will power experiments, the relationships between the physical and the mental are not one-way relationships. So, one-way supervenience is false.

3.5.6.4.2.6.4 Space Is Not the Ultimately Fundamental.

The physicalism is built on the keyword “spatiotemporal” as we saw in its definition. The “temporal” is built largely on the “spatial”. Therefore, we need to understand the “spatial” well.

Is the space self-sufficient? Once we explain a thing in terms of space, then do we have a complete explanation?

The dictionary definition of space is as follows: A boundless three-dimensional extent in which objects and events occur and have relative position and direction.¹²³

In physicalism, space is considered as a fundamental thing. In some interpretations, a metaspace wherein the space bends is considered fundamental.

Physicalism assumes that everything is explained by spatiotemporal relationships. For example, positions of molecules affect and enable the formation of a cell, positions of atoms affect the molecule, positions of electrons affect the atom... When we use the gravity equations, we assume that the spatial position of things causes events. If it is said that the mass warps space, it is assumed to warp it as a function of distances within the space or meta-space.

Obviously, space is not less complex than that for which it is used as an explanation. It is not more self-sufficient than things contained in it. And obviously, it does not have the features to explain self-

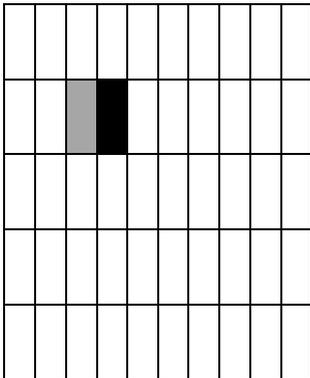
¹²³ (Merriam-Webster.com 2020)

sufficiently the features of the things that are contained in it. Consequently, it does not have a nature to be an ultimate basis of the existence. Therefore, physicalism as a view which sees the space as the last stop in the search of reliable knowledge, is incomplete and inconsistent in respect to its inherent mission.

Even when we conceive a single point, we conceive it within its surrounding and as an element of a system. Even that simplest system requires definitions and unifications.

Is a different region in space really a different region? What distinguishes them? If a region of space is next to another region of space, what separates them? What connects them? How is one space region defined relatively to and consistently with another? What unites different things with spatiotemporal attributes within the same space?

Let me give an example in the below two-dimensional grid: Let us suppose that the region noted in gray is a specific region. Let the region be considered an empty space. What distinguishes the region indicated with gray from the region indicated with black? Are they identical? What connects them?



Grid 1

Regarding these questions it is important to get rid of the baggage which comes with the organization of our brain and consciousness: When we conceive of the space, we conceive it as automatically organized. But in physicalism, the external reality and consistency of space that we experience and experiment, is assumed to have no basis on any transcendent unity, and consciousness; this is normal, since physicalism sees the space as the ultimate basis of explanation.

If we say, the regions are connected by the points that are contained within these regions, then this is not a valid explanation. Because, the points within each region do not have more connecting capacity compared to regions themselves. If we assume that points make the connections, and consider that they are point-like regions, what connects and defines them?

If the location of one point in space is defined by the other points, but if the same applies for each point, then none of the points would have any power to define any other point. Because each would need the other points in order to first have its own identification; so, this would be circular reasoning and would also lead to infinite regress. Hence, the space is neither self-sufficient nor fundamental.

Hence, space is not the thing that binds things, because the elements of the space need to be bound.

Some theories see the space as plastic, which can be curved. If it can be curved, then it will be curved within something else; that something else will not be fundamentally different than space as long as all the existence is assumed to be narrowly physical. That something else is also considered as a spacetime according to some popular theories. The points made above about space are applicable to metaspacetime and spacetime.

So, space does not provide us with a self-sufficient explanation for other things' spatiotemporal aspects. It is not even relevant as an explanation for why objects, particles, or the universe have the specific structures and relationships they have. It does not have any explanatory power about the qualia, truth, good, and evil.

Hence, it is safe to say that the physicalism based on the spatiotemporal is inconsistent and incomplete in explaining the universe. Our logic and empirical observations point to a different, unitary nature and power that sustains all things.

Question 98.

If the space is empty, then why would there be a need to unite anything of that space?

Answer 98.

Even though the space is supposed to be empty¹²⁴ by some as a coordinate system, it is assumed to contain relationships within it. For example, if a particle enters that empty space, the region it occupies is related to the region of another particle that enters that space. So, to be somewhere in a space has implications. Therefore, and because of the reasons explained above there is a need for a unitary power who sustains the space and/or its properties.

Let us imagine that there is only one existing object in the entire universe. Can it move to the right? What would it mean that it moves to the right? According to what? If there are more than one objects, then we can at least conceive of one moving relatively to the other. While none of them alone can produce a movement, if two objects in the same universe produce an effect that was not present in a

¹²⁴ Note that the modern physics says that it is not entirely empty and that it has some energy.

universe with one object, this shows us that there is a transcendent unity above these two objects and the related space. Their existence in the same space is a reality. This reality does not exist in isolation in any one of them or in the space. None of them is self-sufficient, yet, they exist.

Whenever an object exists, its space also exists. This means that a common space is not necessary except for the spatiotemporal parts of that object. Things exist by having each its own space. The common space is an additional and contingent aspect. Therefore, the shared space as we conceive it to be so basic and kind of necessary, is not necessary.

Hence, instead of considering the space as an empty room, we should consider it as a sustained and effective basis for certain relationships.

Question 99.

If parts also have parts how can each part have its own space?

Answer 99.

The parts constituted of sub-parts do not need to share the same space with other parts at the same level with them. But if they are wholes consisting of sub-parts, then they have to share the same space with their sub-parts.

We assume that everything needs to share the same spacetime and necessarily has inherent self-sufficient transcendent powers by itself. This is false and unsubstantiated. In accordance with this, note that a popular interpretation of the big bang theory is that the spacetime appeared with the big bang. Again, the physicists do not object to the multiverse theory which entails that universes may have their spacetimes.

Question 100.

If the space is not self-sufficient because it needs a unifier, then would not the unifier also need a unifier? Would not saying otherwise be special pleading?

Answer 100.

The question is built on the claim that the basic premise is as follows: “Everything has a cause¹²⁵.” And the reasoning continues as follows: “If we say that God does not need a cause, then we are committing special pleading for God.”

The first premise above is obviously fallacious. Because it is built either on infinite regress, or circularity or both. So, clearly it cannot be a starting point and a default rule.

Instead of it, we can use the more fundamental premise of Parmenides as “that which is, is” together with “that which is not, is not”. Then, we can ask “what” “that which is” is, because, while we understand that it can encompass the entire existence since “that which is not” is not, we do not understand whether it is like a dot, or like a mountain. Then we understand that a dot or mountain are not appropriate to compare to “that which is”, because, here we conceive a dot as if it is surrounded by that which is not, which is impossible, since that which is not is not. Hence, we conclude about the infinite incomparable aspects of “that which is”. Note that here, “that which is”, is that which “ever” is. We, or the mountains, or the cars also are; yet, we are not at the fundamental layer of a necessary being.

¹²⁵ Here, I use the word “cause” instead of “unifier” in the question, because cause is a more general and popular term in this context, and it also contains unification.

Upon these considerations, we can now come to the multiple and contingent. Our empirical experience shows that along with “that which is” there are also that which can be caused by and contained as a potential within the power of “that which is”.

It is clear that “that which is” is one. For further details about this unity and about the related above points see part 2.2.1. It is also clear that “that which is” is neither surrounded, nor divided, nor limited by “that which is not”, since “that which is not” is not; and therefore, it is clear that “that which is” has an extension and a power entailing many creation potentials, since at least we conceive certain ranges which are necessarily transcended by “that which is” according to the previous explanations.

This way, instead of starting with a fallacious start, we start with a sound premise in our context leading to “that which is self-sufficient and necessary, is” and then “that which is not self-sufficient and necessary may be caused by that which is self-sufficient”.

The question may be explained in respect to unity as well: Firstly, the self-sufficient necessary being is necessarily One for the reasons explained in part 2.2.1.3. This is the first, default, and most obvious truth. After that truth is solidly established, we can conclude that the multiple things cannot be self-sufficient, and in order to exist, they must be sustained by the self-sufficient One Power. Starting point is not and cannot be the contingent things in this respect. They cannot cause the self-sufficient One Being to be based on special pleading. The truth and unity of the self-sufficient Being is the predominant and general rule. The sustained things are secondary.

Above I focused on the order of importance, strength, of different premises and postulates. We should also keep in mind that different rules/ premises can be applied for different layers as long as it is not necessary to apply one rule to all. If we see a book and say that it

must have been written by a writer, this does not mean that the writer must have been written as well. When we examine the book, we conclude that it cannot write itself; the direct knowledge about the book and its attributes make this conclusion obvious. Based on the book we can have some idea about the writer. If we examine the writer directly, we can have further idea about how he happened, what are his attributes, was it a computer, was it an automatic translator... So, there is not an issue of special pleading if there are different premises applicable to different steps of a syllogism.

The relevant aspects of the spacetime that cannot originate by itself are obvious. For how we reach certain attributes of God, you may see part 2.2.1.3 about the argument from unity, and part 3.5.5 about the nature of the agent which is common with other beings.

3.5.6.4.2.6.5 Time Is Not the Ultimately Fundamental.

And they say, "There is not but our worldly life; we die and live, and nothing destroys us except time." And they have of that no knowledge; they are only assuming.

(Quran: 45/24)

And it is He who sends the winds as good tidings before His mercy, and We send down from the sky pure water

That We may bring to life thereby a dead land and give it as drink to those We created of numerous livestock and men.

(Quran: 25/48-49)

Time is an important element that reflects the unity within what we observe: Until a falling rock reaches the earth, the earth rotates a certain angle. The rock cannot reach the earth unless the earth rotates

that angle. The similar relationship is also true between this rock and a moving rock in a galaxy lights-years away from the earth.

Hence, we have an impression that time is a power which pushes things in a coordinated way. Sometimes it is said that time is what the clocks measure. However, had time been such a power and self-sufficient, aware of all particles and waves, had power on all of them, then it would be god-like.

Time is not generally believed in as a god. Rather, it is recognized as a measure of locations of moments and durations. However, implicitly, many consider time as a pushy thing which causes things. They do not question what is its function, and what is its causal power if any.

In this section we will question time to a certain extent, since it is very important regarding physicalist reductionism.

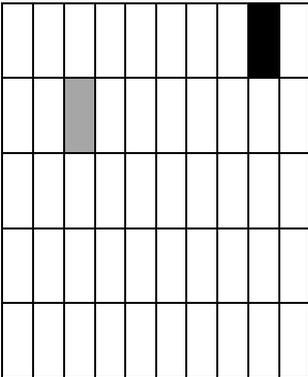
Time depends on the patterns and relationships; hence, time is not a necessary thing. A thing may happen, and after that, another thing may happen. But, “after” is not absolute, it is dependent upon the relationships and dispositions again. So, the basis is the relationship. When there are patterns as elements of design, then we can talk of before, after, and now.

The time as a contingent thing, is included within the design, designed things, and relationships.

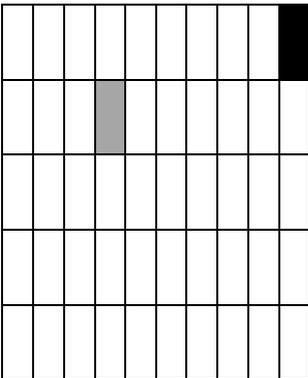
An important point in this analysis is that the orderly change in time is always depicted in reference to spatial states. As we see in the below grids, space consists of regions which need unification and which are not like a fundamental axis.

In the below depiction in parallel with the empirical facts, there is nothing which demonstrates that the space and/or time have a self-sufficient fundamental distinct benchmark and position.

Let us suppose that the changes in the regions in the below grids in gray correspond to the movement of an object. The black region corresponds to regions that contain a standard time benchmark like the rotation of the earth.

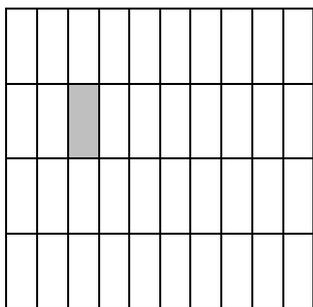


Grid 2



Grid 3





Grid 7

Physical event used as time indicator is just another physical event.

When we say “I will come in one hour”, what do we mean? We mean that I will come until certain things happen, that is, until all clocks run as translated to a virtually essential clock’s hour-hand’s rotation of one unit printed on the clock. Here, rather than a discrete substance or flow of time, I mean the relationship of my coming to the running of other things including clocks. And the clock is used as a standard unit for communication, to mean and understand the same thing so that there is consistency between what I say and what the other party understands. Hence, why can I relate my coming to the running of other things consistently?

The relationships within the grids relate more to spatial relationships, and the relationships between the grids relate more to the temporal relationships. One grid is not sufficient alone to represent the temporal relationship. When we have two grids related in a stable way, then we have another non-separable whole, and connections between the grids. If they are non-separable¹²⁶, this means that the relationships between grids are like the relationships within each grid, and like the relationships between the two sides of an equation. Therefore, our analysis about the space applies here as well in that there needs to be a unitary power which sustains these relationships.

¹²⁶ In fact, they are non-separable as explained in earlier parts.

On the other hand, to have an effect on these relationships would be possible only with some kind of transcendency of the God or by a transcendency sustained by the God. In this framework, it is not necessary that only the past influences the future; the future and the patterns which connect the past and future also may have influence on the past since there may be transcendent beings. Therefore, any moment is not self-sufficient or superior by itself for being past or future.

Whether we consider time as an output or as an input, it necessitates unity and transcendence.

The angels and the Spirit will ascend to Him during a Day the extent of which is fifty thousand years.

(Quran: 70/4)

He arranges [each] matter from the heaven to the earth; then it will ascend to Him in a Day, the extent of which is a thousand years of those which you count.

(Quran: 32/5)

If God changes the past, then one scenario is that logically all things that depend on that change will be erased, since the past after that past will not be. But this is not plausible because the things that have happened, experienced cannot be unexperienced by definition, and they cannot be removed from the knowledge of God, and they cannot be removed from among the things that God witnessed.

And never is your Lord forgetful.

(Quran: 19/64)

A more plausible scenario is that that past will not be changed and the change will be a change only in a kind of metatime. However, this second scenario is not completely reasonable either, because, if

the previous past exists in the metatime, then the reason to make another past is absent since what is to be changed is not changed, just a different copy is created. On the other hand, if the normal time can be changed, then there is no reason for any unchangeability of the metatime, so change in the metatime does not lead anywhere either. Similar issues apply for changing the future. So, logically, anything can happen only once. Note also that if I get info about the future and change the present accordingly, this also means changing the future.

These show that time does not have an effective and distinct existence of its own. If it had such an existence, then its parts might be changeable at least logically without any inconsistencies. By the way, note that the above suppositions of changes are only from our perspective, not from God's overall perspective: Though God is aware of all things as an all-encompassing God, and He can also act upon brackets and from different angles simultaneously, we are within time or space brackets and look with our limitations.

How fast does the time pass? One second per 'second'? If so, how fast does that second pass? So, it is not reasonable to say that each time one second passes, one second passes. Or it is not reasonable to say that each time one second passes, two seconds pass. Hence, time does not have its own logical basis within itself, it is not self-sufficient.

Obviously, when we say time passed very quickly, this does not reflect something measured, this just reflects our feeling. According to what can we measure the speed of time of an accurate clock? What should be considered as the most correct clock, why, can it be separated from other clocks? Or is every clock correct, since, if we remove the effect of every condition which makes a clock work faster or slower we see that every clock works punctually? We should not forget that any distorting condition also works punctually.

These points show that time can exist only by being sustained by a unitary, transcendent power who encompasses all.

The above points show that reducing things to the temporal as well as to the spatial will be omitting more important aspects of the existence.

Question 101.

In relativistic physics there is no simultaneity. But does not the above analysis contain simultaneity and is non-compliant with relativistic physics?

Answer 101.

The relativistic physics is negated by quantum physics whose predictive power is greater than relativistic physics. Secondly, the progress of events does not change depending on the speed or acceleration of the observer at a certain point, since this observer is also part of the universe. For example, in a chart depicting the reductive evolution of the universe starting from the big bang, the time distance of any point to the big bang is consistent with another distant point. There is no point in saying that the time in one edge of the universe progressed faster or slower than the opposite edge. The present models of relativistic physics do not comply fully with all empirical observations, and there are obvious paradoxes it creates. I will not go into the details about relativistic physics which are beyond the scope of this book. But the reader may want to read counter arguments against relativistic physics, and related paradoxes¹²⁷.

¹²⁷ This is the personal opinion of the author. The twin paradox or tunnel paradox are clear demonstrations of the problems of relativity.

3.5.6.4.2.6.6 The Arguments Against Determinism and Indeterminism Are Applicable Against Physicalism.

In this sub-section, to avoid repetition, I mentioned only the issues that are related to physicalism more directly than determinism, indeterminism, and reductionism.

However, the arguments explained against determinism, indeterminism, and reductionism are also applicable against physicalism.

3.5.6.4.2.7 One Who Claims That There Is No Free Will Based on Physicalist Reductionism Refutes That Very Claim.

Say, "Do you have any knowledge that you can produce for us? You follow not except assumption, and you are not but falsifying."

(Quran: 6/148)

He is Allah, other than whom there is no deity, the Sovereign, the Pure, the Peace, the Bestower of Faith, the Overseer, the Exalted in Might, the Compeller, the Superior. Exalted is Allah above whatever they associate with Him.

He is Allah, the Creator, the Inventor, the Fashioner; to Him belong the best names. Whatever is in the heavens and earth is exalting Him. And He is the Exalted in Might, the Wise.

(Quran: 59/23-24)

The claim that everything is reducible to the spatio-temporal assumes that everything including truth and understanding is reducible to particles/ fields/ patterns. Hence, reasoning, freedom to choose the

truth or error are also only illusory, there are just unreasoning physical patterns who cannot have any truth value, which do not have anything to do with consciousness, comparison.

Hence, any argument brought by the physicalist reductionist will be only an illusion for that very person.

According to Islam, there is better and worse; true and false; but for the physical reductionist there is no value in knowing the truth of anything. There is no need to spend efforts to find the truth. Because we cannot change anything. If there is such a value, if he claims that we have to spend efforts to proceed towards the truth, then he claims that our will is efficient and is more than spatiotemporal events/entities.

If there is no freedom and sovereignty of will power, then the reductionist does not have the ability to follow a logical process whereby eliminating the error and choosing the truth. Their claim that truth, error, better, worse, are just illusions fails in a similar way. They cannot claim to have superior knowledge because their perception of knowledge is determined by external events which makes it no more than a mere conjecture, or maybe not even that.

Are our knowledge and truth claims real, or are they illusions? Are they just supervenient upon and reducible to particles bumping one onto another - deterministically or indeterministically -? Or does the truth originate from an initial, necessary, and absolute power and knower? And do we really have a power to encompass that truth?

Clearly, according to Islam, there is the God who is above all and who establishes the truth. And this Originator has given us the power to connect to the truth. This Powerful and Knower has given us the power to know the truth to a certain extent.

Power relates ontologically to knowledge. The knowledge of truth requires that our perceptions, concepts, logical chains are consistent and not illusions, and that that which is correctly known is real and sustained by a unitary power so as to be consistent. So, at the origin the truth and the knowledge are connected and surrounded by the unity of God, and they have the same level and basis with the ontological reality.

Truth claims cannot be supervenient or reducible to the relative, circular, and separable. Where would the truth of all things be if things are reducible infinitesimally to infinitesimal particles?

On the other hand, a reductionist logic system which is based on either indeterminism or determinism and which does not contain a transcendent and sovereign being is incomplete in accordance with Gödel's incompleteness theorem. Some implications of this are explained in part 3.4.12.1 about the negation experiments and brain observation experiments. But a logic which is the object of a transcendent sovereign being is complete since it cannot be limited in a contradiction. Since it is transcendent and unitary, it can bring together any inconsistent things and discard them if they are inconsistent or incomplete. Such a being can also encompass the elements of logic, and discard its elements which produce inconsistency or cause incompleteness. Because it is holistic and is not defined as equal, reducible to other things.

Reductionism causes incompleteness also because it rejects the reality of each whole, although each thing has its reality. According to reductionism, there is not even anything to know, since, the reality of anything is denied for being reducible to something else. However, in Islam, wholes are real.

Allah who is Powerful, has also the power to establish the truth and display to all, the truth and its consequences on a specific day.¹²⁸

3.5.6.4.2.8 Alleged Self-Sufficient Spatiotemporal Bottom Element (ASBE) Is an Incoherent Concept.

Here, by the alleged self-sufficient spatiotemporal bottom element (ASBE) I mean the ultimately fundamental spatiotemporal elements such as particles, fields, strings, or any other spatiotemporal thing unto which everything is claimed to be reducible and reduced according to physicalist reductionism. As I explained in part 3.5.6.4.1, a holistic physicalism is contradictory with physicalism, so I argue that all physicalism must be reductive to be consistent to a certain extent.

ASBE does not mean particles like atoms. Also, if particles are waves then ASBEs are smallest elements of the medium in which these waves propagate.

If physicalism is true, then we should be able to explain things in terms of spatiotemporal things. If we explain things in terms of spatiotemporal things, then things must be reducible to some elementary spatiotemporal things, since, otherwise, some things would be originating from outside of the spatiotemporal. For example, if an iron atom is recognized as a distinct and irreducible reality, then when its sub-atomic particles constitute the iron atom, there would be appearing something else from outside of the allegedly all-inclusive spatiotemporal realm. Furthermore, if the behavior of the atom cannot be entirely explained by its spatiotemporal constituents, then we would have to recognize some transcendent essence of the atom which would be producing some functions on top of what the sub-atomic parts produce. Additionally,

¹²⁸ For some of the proofs for this one power see part 2.2.1.

if the sub-atomic parts explain everything in accordance with physicalism, then an explanation produced by a distinct reality of the atom would be redundant, and even theoretically contradictory.

In parallel with the above, the following quote from Broad summarizes the physical reductionism and emergentism in regards to the one kind of stuff unto which other things supervene. Though the emergentism seems to be slightly different, at the end it also boils down to the same reductive approach as explained in part 3.5.6.4.3.2:

Broad, C.D. (1925) says: “[There] is one and only one kind of material. Each particle of this obeys one elementary law of behaviour, and continues to do so no matter how complex may be the collection of particles of which it is a constituent. There is one uniform law of composition, connecting the behaviour of groups of these particles as wholes with the behaviour which each would show in isolation and with the structure of the group. All the apparently different kinds of stuff are just differently arranged groups of different numbers of the one kind of elementary particle; and all the apparently peculiar laws of behaviour are simply special cases which could be deduced in theory from the structure of the whole under consideration, the one elementary law of behaviour for isolated particles, and the one universal law of composition. On such a view the external world has the greatest amount of unity which is conceivable. There is really only one science, and the various “special sciences” are just particular cases of it. (1925, p. 76)”¹²⁹. O’Connor says: “While Emergentists, too, are physical substance monists (“there is only fundamentally one kind of stuff”), they recognize “aggregates [of matter] of various orders” — a stratification of kinds of substances, with different kinds belonging to different orders, or levels.”¹³⁰

¹²⁹ (O’Connor 2020)

¹³⁰ (O’Connor 2020)

The word bottom refers to the end point in the spatiotemporal causal chain: For example, regarding the claim that cells are reducible to molecules, molecules are reducible to atoms, if there were no further elements more fundamental than atoms such as electrons, protons... then atoms would be “bottom”. By bottom elements, I do not mean necessarily smallest particles, or fields, or strings..., they can be any spatiotemporal thing upon which things are reducible according to any versions of physicalist reductionism; they can be like space, time, mass as well.

If physicalist reductionism is true, then there are ultimately fundamental elements which act freely, and which constitute the elements of will, as they constitute the elements of all else. Because if there are no fundamental elements, then there will be infinite regress. But infinite regress is impossible, since, it means that nothing in the chain has any or sufficient effect on other layers.

Physicalist reductionist position assumes ASBEs to which things can be reduced. However, ASBEs are logically impossible.

In the physicalist paradigm, when there are no self-sufficient bottom elements below which there is no layer, then all layers become arbitrary. There is no reason and no basis for any pattern. For example, if there are no spatiotemporal bottom elements when electrons and protons come together, they do not need to constitute atoms; or if atoms come together, they do not need to constitute molecules.

3.5.6.4.2.8.1 Problems with A Structured ASBE

Structural aspects of ASBEs produce lots of contradictions.

If the most fundamental is structured, hence, subject to patterns, or subject to laws, then it is not the most fundamental since it has

differentiation, contingency, and bias in its elements. It has some elements which can be separated and reorganized. If it is not structured then it is not bound with any structure, and it cannot be a basis for structure, since all things which have structure are allegedly reducible to ASBEs and structured things cannot be reducible to unstructured things. If ASBE has patterns, and bias toward a certain direction/ pattern, then this means that it is differentiated, hence, it has sub-elements that are different than that fundamental thing. Therefore, that thing is not the most fundamental.

ASBEs could be only relatively basic, since, they would be defined relatively to other ASBEs; in other words, each ASBE would need other ASBEs to have its features. Therefore, to overcome circularity, they would need in any case a structure and unity which extends beyond each of them. The physical things are differentiated and are surrounded by or they contain things as space/ time. But to be an absolutely basic spatiotemporal part and ultimate supervenience basis, an ASBE needs to be undifferentiated. Otherwise there would be no necessity for their being, they would be contingent and dependent on other things.

ASBEs or their parts do not need to be bound in order to constitute ASBEs. In any case they are linked by space. If parts of an ASBE are bound, the glue is the space. Parts are near each other because of the space. So, what is the distinctive feature of an ASBE? That it is not constituted from anything else? But if it has any extension like space, then necessarily it is constituted of other things. Hence, it is impossible that it is a supervenience basis.

Furthermore, if ASBEs act then they must contain differentiation and be subject to change. If they are within a space then they must be defined by space. If different parts are closer to each other then there must be a binding power.

If we want to divide an ASBE, is there a resistance against division? If not then it is not the smallest particle. If yes then its sub-parts are not indifferent about being in a different state. If smallest particle has any extension in space then the mathematical extensions and mathematically limited extensions will be more fundamental than that whole particle.

Do the ultimately fundamental spatio-temporal elements have to be homogeneous? Yes, because otherwise, some would have some parts which others did not have, hence, those things that existed within some and did not exist in the others would be more fundamental. But based on the arguments for the principle of identity of indiscernibles, we can say that it is impossible that they are homogeneous and that they are many. Because if they are fully homogeneous, they cannot be many.

ASBEs must contain differentiation in any case: For example, its inner two parts are bound to each other. But another ASBE is repelled; the parts of the other particle do not attract equally parts of the previous particle. This would mean that the surrounding space behaves differently as well. Furthermore, all bottom essence is not same since there is at least space as an inherent aspect, and it has certain implications in any case. Bottom components of space would interact with the bottom components of mass/matter.

Can there be ASBEs of different kinds? If so then there would be sub parts/elements which would be differentiating the ASBEs. Hence those differentiating elements would be bottom instead of ASBEs, so there cannot be ASBEs which consist of different parts.

If an ASBE has other components in other dimensions then it is not bottom.

Logically necessary parts of the ASBE would logically need the other parts in order to be, since some of their properties would be relating to their surrounding and relatively to other ASBEs in accordance with the argument from unity explained in part 2.2.1.3. Hence there can be no ASBE.

3.5.6.4.2.8.2 The ASBEs Must Be Impossibly Sophisticated.

If the universe is reducible to the ASBEs, so that no other whole we observe has any distinct causal power, then all trajectories, patterns that seemed to relate to those wholes would relate to ASBEs. In this case, an ASBE in a magnetic field would be behaving in accordance with the electromagnetic equation, but in the same time, it would be rotating around the earth, and around the sun in accordance with the relevant positions, equations, and trajectories. The influence of the electromagnetic force may negate gravity and overcome it or they may produce a common vector for an object in a specific situation. Likewise, an atom within the brain of a human being would do the above, and also would act as part of a cell, while also producing consciousness.

These demonstrate that in fact any ASBE would have transcendent properties. Because, an entirely isolated element cannot act as if it is aware of the related frameworks in many layers, and what their implications would be. Yet, they allegedly behave like that. The movements of planets in our solar system are allegedly explained by action at a distance in Newtonian physics. The relativistic physics is supposed to explain them through curvature of spacetime without need to use action at distance, yet questions about how and according to what the spacetime is curved demonstrate the necessity for transcendence. Also, an explanation based on gravitons will need transcendence as to the behavior of gravitons, even if gravitons are used to explain certain events.

This is similar to assigning every human being as a salesman, president, doctor, engineer. As such an empowerment would not work in the human organizations, it would not work within the universe as well.

3.5.6.4.2.8.3 The Impossible Simplicity of ASBEs

Can ASBEs be many but of different fundamental kinds, such as space being one kind of an ASBE, time being another one, mass another one, mathematics another one? No, because they interact and they are defined based on some other ones.

Can alleged bottom elements belong to totally unrelated realms where none of them is related, relatable, or connectable? According to our logic, this is impossible, since, they would be connected within our laws of thought. One of them would be non-existent within the realm of another one, hence be limited by the other one. Therefore, they would be related in any case.

If the ASBEs are point-like particles, then everything consists of points with zero spatiotemporal extension. Then if it is the space that changes, it would change relatively to something else. If an ASBE is like a point, then it is like a kind of information defined by its position in a certain dimension. In this case, it would be defined by a transcendent whole which would be against physicalism.

Additionally, is it possible to reach zero simplicity if we divide things? If it was possible, then the total of zeros would be zero as well. Is it possible to reach infinite simplicity in the infinitely small? So, at that level, shall we need no explanation, and then shall we be able to build the entire existence on it? Therefore, seeking entire answer in the smallest is not a rational way.

Will we be able to reduce the entire universe, including the agents and wills to just one equation? Will we be able to produce an equation that explains the entire existence, or not? If not and if we will have a minimum of two equations, would the first be necessary? If it was, what made it necessary compared to the other one? But if it is not necessary, then there must be something necessary that caused it. Because, if there were the possibilities of both its existence and non-existence, there is a question for why it existed, instead of being absent. If it is not necessary, then it does not contain the cause of itself.

But if it is just one equation, then, are the sides of the equation necessary? And the above issues will be applicable here as well.

3.5.6.4.2.8.4 ASBEs Would Be Free.

If there are such ASBEs, they would be free, because they would not be reducible, supervenient, or dependent upon other things. If they are supervenient upon other things, then they are not most fundamental.

If there is no bias forcing them in specific directions, and if they constituted the contingent structures that we observe, then, they would have willed like gods to constitute the universe freely. Hence, the free will rejected on the grounds of reductionism would be existing within the ASBEs.

3.5.6.4.2.8.5 Problem of Infinite Regress with ASBEs

If there is no fundamental ultimate layer, then every spatiotemporal thing would be depending on something else. But if nothing is self-sufficient, then there would be no distinctly effective thing. Hence, there would be no effective existence. If “everything” emerges from

lower layers so that there is no bottom, then there will be nothing from which things would emerge.

But on the other hand, even if there are ASBEs, then there will be another kind of infinite regress: If we consider a simple situation, where one half H1 of the ASBE is bound to its other half H2, but it is not bound to the half of another ASBE, we can conclude that even at the very bottom layer there needs to be an organization and transcendent unity. Hence if supervenience and physicalist reductionism was true, the ASBEs whatever they are, would be supervenient upon their parts, leading to infinite regress.

3.5.6.4.2.8.6 ASBEs Would Be Subject to Change.

If ASBEs are subject to change, they could not be the most fundamental.

If it is accepted that ASBEs appeared at the big bang, then it must be accepted that they are necessarily subject to change by their nature.

If relationships of change are contained within particles then they are not bottom because the relationships that they contain can change, and the elements of change would be more fundamental. If relationships are not contained within ASBEs then they are passive, and subject to other things.

On the other hand, the most fundamental spatiotemporal thing cannot be static; it changes and reorganizes itself, since the limited universe we observe changes, and according to reductionism these changes are supervenient upon the ASBEs. If they are unchangeable, this means that the higher layers are not supervenient upon them, since we observe change at the higher layers. But, as we explained above, if ASBEs change, they cannot be the most fundamental spatiotemporal.

Can there be unchanging ASBEs? If there are, this means that organization creates different effects. But then bonds of the organization would not be possible/ stable/ and they would be breakable. If they are not changeable, this would also mean that there is top-down causation whereby the the top layers cause some changes up to certain lower layers. If ASBEs are essentially unchanging, but changing in context this means that they are not bottom level.

Are the ASBEs waves or particles? If they are particles or waves then what about space and time? Do they also consist of waves, or particles? If an ASBE 'can' be a wave, then anything upon which a wave runs will be changeable, because there would be differentiation within that thing upon which ASBEs run, so that waves may form and propagate. Furthermore, in this case, the medium in which it propagates would be more fundamental.

Moreover, if ASBE is a wave, then it would be changing. Hence, even the bottom would necessitate transcendence. The same applies for mathematics-based theories and 'fundamentally' differentiation-based theories where differentiation is postulated at the very bottom.

If the ASBE is a particle, then it would be a space occupying entity with specific extension, differentiation, and limits within the space. Hence, it would contain internal differentiations, hence, parts which are more fundamental. Additionally, the medium upon which it runs would be also changeable and effective, hence an ASBE would not be ultimate.

3.5.6.4.2.8.7 ASBEs Are Not Necessary.

Are the ASBEs necessary or contingent? If they are contingent then there must be different possible kinds of ASBEs. Then they would be structured, changeable, hence not bottom. So, they must be necessary.

Yet they cannot be necessary because they are many, and if they are quantifiable internally and externally, they cannot be necessary. If their quantity is Q , there is no reason to say that that quantity could not be $Q+1$ or $Q-1$; if $Q-1$ is possible, then it is possible that there is 0 ASBE. And they have no special feature different than other spatiotemporal things and there is no other reason which would make them necessary.

3.5.6.4.2.8.8 ASBEs Would Be Relative and Circular.

The alleged supervenience bases are relative and limited. Since they are many, they would depend on each other in accordance with the argument from unity explained in part 2.2.1.3. Hence these relative things cannot be any supervenience basis. Whatever science explains the fundamental level upon which other things supervene, is also a science that requires explanation, as long as there is relativity, division, multiplicity inherent to it and within it. Hence, the supervenience basis layer with the necessary homogeneity and unity cannot be reached within this limited universe.

3.5.6.4.2.8.9 ASBEs Are Not Verifiable.

The bottomness of any particle or wave is not verifiable, because within time it can be shown that it is divisible empirically.

For reasons I mentioned above, logically, any ASBE has parts and is changeable. Also, for the reasons explained above, an ASBE must be indivisible, unchanging and hence past and future eternal.

Hence, ASBEs cannot be the reduction bases.

3.5.6.4.2.8.10 ASBEs Cannot Explain the Unitary Beings and Attributes.

The reducibility of the contents of unitary consciousness upon ASBEs creates contradictions. Because the reflection of numerous observed ASBEs would be instantiated upon numerous separate ASBEs, and the transcendent unity of consciousness would not be obtained. Also, as they would be unchangeable, an ASBE could not even contain a divided aspect of the qualia, the ASBE could only contain the data related to its own ontological reality. For example, when we see the sun, the qualia about it must allegedly be reducible to the bottom elements within us; but, as explained above, they are unchangeable and lack unity so that to be able to contain qualia.

3.5.6.4.2.8.11 ASBEs Would Be Defined by Higher Level Features in Any Case.

High-level relationships as space, time, or contingencies are also valid at lower levels, and low-level things cannot be or mean anything without high level things. One may say lower level things are more fundamental because they can exist while what they constitute do not exist. However, they cannot exist for example if a spatial whole structure does not exist.

No two different objects need to belong to the same space/spacetime, no two different things need to belong to the same whole, they do not necessarily need to be comparable; they do not need to exist if there is no logical necessity. Hence, the definition of ASBEs by the common space/ time entails that they are not bottom and that they are subject to design and contingencies.

And they may be organized so as to be partially or fully subdued to/ dependent upon one or many higher levels as a property of bottom-

up organization features. So instead of ASBEs being coercive upon higher levels, they can be dependent upon higher levels, as in miracles.

In Islam, there is no god other than Allah and everything is subdued to Allah. So, no ASBEs can be considered outside the power of Allah.

3.5.6.4.2.9 Without Freedom There can be no Reductionism.

Reductionism requires freedom at a certain level. Otherwise there is no bottom level element to which things can be reduced, as ASBEs being fundamentally biased requires sub-levels. They are biased because they result in this kind of universe instead of another one. But if there is no ASBE then according to the reductionist approach, there will be infinite regress. For example, if one claims that ASBEs necessarily turn rightwards or if they necessarily attract each other, then there is a necessary differentiated thing which causes them to behave like that instead of its opposite. Consequently, that thing would be more fundamental compared to the ASBE.

In other words, it is impossible that there is no free ASBE if everything is reducible to ASBE. Because that the reduction goes on in an infinite regress is impossible. That there is a necessary bias for ASBE is impossible as explained above. So, according to physicalism, there would be some free beings/ entities at the bottom.

If there are some free thing(s) in our limited universe, and if the human beings are not free, then in what respect(s) they are different from human beings, so as they can have free will, although the human beings cannot? They do not have constituents/ parts? They are more numerous? They are somehow irreducible to anything else? They have further capacities additionally to seeing, hearing, understanding, consciousness, coordinating powers...?

What does the bottom level correspond to in terms of freedom? If the bottom elements existed, would they be the location of freedom? Or, would not they be free either? Would they do whatever they did necessarily? Or, freely? If they did necessarily, then there would have been another element that would necessitate what they did. Because if they did what they did without being restricted by any thing or any feature beyond themselves, then they would have been free. If an element within themselves required them to move rightwards, or leftwards for example, then that element would be more fundamental, and that element would be a candidate for freedom.

3.5.6.4.2.10 Impossibility of Billions of Correlations Within Illusions, Real Events, And Structures

If agents and their actions were fully reducible to the spatiotemporal things, relationships and events, or if they were supervenient upon them, then there would not be “what must be” and “what must not be” as two real alternatives. There would not be huge correlations between unreal things. If there was no real free will, we would not be unhappy or feel restricted in any way when we are hungry, and we would not feel happy for having reached a goal, since everything that happens would be everything that had to happen. Why would we be sad or feel pain for things that had to happen within the “real” sub-atomic levels? Or are ASBEs the ones who feel the pain, though they cannot do anything else? Or are they in reality the ones who act when our burnt hand goes back?

Happiness or sadness have implications. If personal qualia were not effective, they would not create a survival advantage to the living things according to the alleged reductive evolution theory which is mostly adopted by physicalist reductionists. Likewise, there would be no need for an illusory/ epiphenomenal feeling of agency. Such a feeling would be eliminated since it would raise an unnecessary cost

and hence a survival disadvantage. No matter what our feeling is, what had to happen at the layer of ASBEs would happen in any case.

There would be no need for the development of a taste of dislike, fear, worry, about spatiotemporal events that “had” to be the way they are; such a reductive evolution would be contradictory. Any agent would behave the same way in all scenarios relating to being burnt by the fire, whether burning caused a pain or not. The ASBEs would behave as they behave in any context.

3.5.6.4.2.11 Parts of The Agent Change, While his Identity Remains the Same.

We can change physical parts of the agent while the agent is the same agent. The structure also continuously changes, while the willer remains the same. So willer does not entirely depend on the specific substance or structure, but rather it transcends them. If the agent was reducible to spatiotemporal particles or fields, then firstly the unity of the agent would not exist because the space that separates the particles/ fields would not allow the unity of the agent, and each part would have its own identity. Secondly, changes in them would result in changes in the identity of the agent.

The material substance of the agent continuously changes.

Question 102.

Is not it possible that the parts go away or change continuously, but the organization of the agent remains?

Answer 102.

The structure of the agent also keeps changing even though there may be a balanced spatiotemporal structure.

Transcendence is rejected by the reductionist. But if the identity is claimed to depend on the structure, then as each element of the structure cannot be considered separately; we have to recognize the wholeness, unity and transcendence of the structure. But as the spatiotemporal is considered by the reductive physicalist as the most fundamental and absolute, then space and/or time can only be taken as separate and separated things. Therefore, physicalist reductionism is inconsistent with unity of the identity.

3.5.6.4.2.12 Systematic Discontinuities

And within the land are neighboring plots and gardens of grapevines and crops and palm trees, [growing] several from a root or otherwise, watered with one water; but We make some of them exceed others in [quality of] fruit. Indeed, in that are signs for a people who reason.

(Quran: 13/4)

And it is He who created the night and the day and the sun and the moon; all [heavenly bodies] in an orbit are swimming.

(Quran: 21/33)

And not alike are the two bodies of water. One is fresh and sweet, palatable for drinking, and one is salty and bitter. And from each you eat tender meat and extract ornaments which you wear, and you see the ships plowing through [them] that you might seek of His bounty; and perhaps you will be grateful.

(Quran: 35/12)

By systematic discontinuities I mean the existence of different stable structures that contain same allegedly bottom elements. For

example, electrons, protons, neutrons as part of the earth rotate around the sun while at the same time they behave in accordance with electromagnetic, quantum, and other relationships at the micro level. One thing may be under the influence of many wholes as a stone which is both falling, and rotating as part of the earth.

So, physicalist reductionism is inconsistent, since there are different processes at different layers which allegedly consist of the same ASBEs. If everything was reducible to ASBEs, then they would behave rigidly without allowing or taking part in the formation of billions of structures and life forms which would be limiting them in numerous ways, and they could not behave that way.

Hence, many models allowing autonomous agents may be designed and Quran gives us such a master model/framework.

That is Allah, your Lord; there is no deity except Him, the Creator of all things, so worship Him. And He is Disposer of all things.

(Quran: 6/102)

3.5.6.4.2.13 Physicalist Reductionism Undermines Itself.

Did We not create you from a liquid disdained?

(Quran: 77/20)

A reductive physicalist who claims that his logic is reducible to particles' behaviors cannot claim to be rational.

Definitions of things are only possible in a transcendent and holistic framework. Definitions and names are basic for any logical process or activity. Hence when we develop or use a logical statement, we need to use definitions and names. Separated parts cannot have this

defining power. Likewise, logical chains cannot have their unitary distinct features under a reductionist framework.

Most physicalists overvalue repeatability and measurability. Many physicalists claim that only the repeatable has the value of being a scientific evidence.

However, if the reductive physicalists consist of particles/ fields which are entirely repeatable and subject to repeatable physical laws, then what they claim is only the result of particles bumping one onto another. Hence there is no possibility for them to claim that what they claim is true, or a claim is false. Truth or falsity only supervene upon the particles bumping one onto the other.

Therefore, if one claims that he is rational, then he is saying that he is not consisting exclusively of particles bumping one onto another. So, he claims that all that is true does not consist entirely of irrational particles.

If repeatability is undermined even partially by accepting the possibility of logic then it is not necessary. So, there is a trade-off between an all-encompassing repeatability, which physicalists defend to the ultimate extent, and rationality. If rationality is claimed to be true, then repeatability becomes partial.

3.5.6.4.2.14 Both Determinism and Indeterminism Are False.

I presented arguments in part 3.4.1.2.2 and part 3.4.2 which show that determinism and indeterminism are both false. Since, sovereignty and transcendence are not causal alternatives for a physicalist, his only alternatives are determinism and indeterminism. Hence, as it is shown that none of the two is acceptable, this shows that reductionism is false.

3.5.6.4.2.15 Quantum Physics

Quantum physics shows that same things behave as particles under some conditions and as waves under some conditions. The wave-like nature of specific objects shows that there is a space-transcending nature of the matter. Furthermore, Bell's inequality experiments, quantum entanglement show that spatial distance between things is not an absolute distance. The superposition of states is another aspect of quantum physics which shows that multipotential causality is true, since multiple states coexist as potentials in the same time. Quantum physics phenomena also demonstrate that a part of a whole may not be simpler than the whole of which it is a part; so, explaining wholes with their parts is not necessarily possible.

Hence, we cannot say that there is separability within things. Once we admit that the space cannot separate things, then there is no reason to adopt a physicalist approach which sees the space and time as a basis of all things.

3.5.6.4.3 Islamic Holism and The Whole of The Agent

3.5.6.4.3.1 Islamic Holism

Do you not see that Allah sends down rain from the sky, and We produce thereby fruits of varying colors? And in the mountains are tracts, white and red of varying shades and [some] extremely black.

(Quran: 35/27)

Essentially a whole is prior to the part. For example, there must be space wherein things can be defined, and the spatial relationships must be defined so that things that will exist in it may be designed consistently. Here, the requirements are not cited as sequential requirements. So, as a whole may depend on a part, the part also may

depend on wholes or holistic relationships. But neither such wholes nor parts are self-sufficient. So, they cannot constitute a realistic and stable system unless they are sustained by a power who consistently establishes, defines, and sustains them and their system.

Sovereign wholes have their relationships as wholes. An animal may feel pain, while its electrons do not feel such a pain; hence an animal may run away from fire while an electron does not behave normally in this way.

In this respect, using the expression “path” instead of “physical law” would be more appropriate. Because such an expression would recognize the equal reality of all sovereign wholes, their distinct paths, and their limited freedom.

Do they not see the birds controlled in the atmosphere of the sky? None holds them up except Allah. Indeed, in that are signs for a people who believe.

(Quran: 16/79)

And it is He who has released [simultaneously] the two seas, one fresh and sweet and one salty and bitter, and He placed between them a barrier and prohibiting partition.

(Quran: 25/53)

Sometimes same elements produce different results where we see that wholes are not reducible to parts. For example, the energy takes different forms. On the other hand, we see different parts which constitute things with similar properties. For example, we see many different particles come together and form a human being.

These all confirm the fact explained in part 3.5.6.4.2 that reductionism is false. The limited universe consists of wholes, and their existence is not based solely on their parts. In it there are no

self-sufficient wholes or parts, they and their properties depend on one Self-Sufficient Sustainer. For example, the electrons behave in a certain way because they are designed and organized in a certain way, not because there are necessities for what they are. It is not possible that unqualified, unorganized parts produce systems, or systematic results.

Every particle and spatio-temporal entity is according to a measure, with certain extension, and with some limitation in accordance with the design of the Creator.

Everything with Him is by due measure.

(Quran: 13/8)

Allah indeed has appointed a measure for everything.

(Quran: 65/3)

(Allah) has enumerated all things in number.

(Quran: 72/28)

He is the Creator, the Designer, the Modeler, and to Him belong all virtuous names. All that is in the heavens and the earth glorify Him. He is All-majestic and All-wise.

(Quran: 59/24)

Allah structures things and gives them shape. Before the shape there is the Modeler.

Hence there are measures which are the outcomes of the free will power of the Creator. On the other hand, those measures enable beings to have free will power by giving them the ability to see the alternatives, the means, and the implications of a will.

If atoms are to contribute in the formation of a specific being then the atoms and their constituents have already been given the necessary features while they are designed and created. If the free will power of the human being is willed, then the necessary power, slacks, and relationships have also been designed and created in a consistent way.

Let us assume two particles each with its distinct space and with no separable parts. If they are brought together in a new spacetime, a new whole appears where there can be movement. However, with a single particle and only its space there is no reference framework upon which we can talk of movement. If the single particle is taken as the only reference point, it will not be changing relatively to itself. Yet, with the addition of another particle we say that there appears a possibility of relative movement, this means that none of the particles is confined within its own boundaries. This means that with this whole, each of them is defined also as a system, as a reference frame, and has some transcendence. On the other hand, if there can be a relationship between the two, and if there can be more than them, in other words, if they are contingent, we can say that they have been assigned these features from a higher reality and unity. When a sovereign whole has been formed, parts may start behaving differently than the state without such a whole. Then, there is no ASBE as supervenience basis, because ASBEs supervene also upon higher wholes. Parts influence the whole, and wholes also influence the parts. Parts by their very nature cannot produce sovereign wholes, sovereign wholes by their very nature cannot constitute wholes without parts. So, they need to be sustained by the One God who only can have the self-sufficient sustaining attributes as a god.

3.5.6.4.3.2 Non-Reductive Physicalism

In part 3.5.6.4.2.6 I argued against physicalist reductionism. However, non-reductive physicalism is not in better shape compared

to reductive physicalism. A major reason for this is that its non-reductive adjective creates an inconsistency with “physicalism”. Because, it is constrained with its “physicalist” aspect while explaining any causal relationship; therefore, it will necessarily reduce things to something physical. If it recognizes transcendent actors which will transcend throughout physical layers or things, it will be inconsistent with its “physicalism”.

According to non-reductive physicalism, explanations, natural kinds, and properties in a higher layer such as psychology, do not reduce to counterparts in more basic sciences, such as neurophysiology or physics. Nevertheless, all token psychological entities —states, processes, and faculties— are either identical with or just wholly constituted of physical, microphysical entities or laws that relate to these entities.¹³¹

As O’Connor says, “Non-reductive physicalism emphasizes that while special sciences do not ‘compete with’ or complete physics, they do have an explanatory ‘autonomy’ — they use distinctive concepts and laws that cannot be derived from physical laws and concepts using only definitions and other necessary truths.”¹³²

There are detailed discussions about whether this is really different from reductive physicalism. There are strong arguments supporting the claim that it ultimately boils down to reductive physicalism.

Since non-reductive physicalism maintains that all is either identical or just wholly constituted of microphysical, I will just note here that in parallel with the arguments mentioned by Pereboom¹³³, I agree that non-reductive physicalism is in fact reductionist. Hence, the

¹³¹ (Pereboom 2005)

¹³² (O’Connor 2020)

¹³³ (Pereboom 2005)

objections against reductive physicalism apply for non-reductive physicalism as well.

But this discussion is of secondary importance, since whether non-reductive physicalism is reductionist or not, I argue against reductive physicalism.

I agree with the following neo-reductionist critique about the non-reductive physicalism: "Neo-reductionists also maintain that the concept of top-down causation is a mirage. For instance, if a macro-state M1 is supervenient on a micro-state m1, top-down causation issuing from that macro-state M1 has its ultimate cause in the micro-state m1. An advocate of top-down causation would argue that once the higher-level property M1 has been achieved it is legitimate to say that it has certain effects, or can perform certain functions, for instance it might create a new micro-state m2. However, this is at best a shorthand for saying that m1 causes m2 [101]. The reduction of M1 ceases to be a meaningful or worthwhile activity. Here, there is no biological hierarchy and no hierarchy of theories to distress the would-be reductionist."¹³⁴

In reductive physicalism, there are ASBEs substituted instead of God. But in non-reductive physicalism, there are only relative and reciprocally dependent things as lower levels depending on upper and other levels, and upper levels depending on lower and other levels. So, again the absence of any self-sufficient thing causes and is based upon circular reasoning, and also infinite regress. But Islamic holism is consistent, complete, and non-circular since there is a sound basis.

¹³⁴ (Gatherer 2010)

Question 103.

Is mathematical universe or relationalism acceptable according to the Islamic teaching?

Answer 103.

Mathematical universe is fallacious since mathematics is just one dimension. Full relationalism is false according to Islam as there is the absolute Surrounding, Allah.

3.5.6.4.3.3 How Does Islamic Holism Work?

He has encompassed whatever is with them and has enumerated all things in number.

(Quran: 72/28)

The parts may be reorganized when they become part of the whole or they may adapt or react to the whole without being reorganized. This is like the appearance of new laws subject to the existence of the whole. Remember that there are no absolute physical laws. These are subject to sovereignty. This is as in the example of entangled particles which give up some of their effects.

Each whole has related channels combined and interacting with lower, higher, and parallel level wholes. The parts within their respective spaces are not the same as in being parts of the sovereign whole. So, the parts as part of the whole have some different attributes because of being part of the whole.

Part and whole before unification are like in a superposition. With unification some new potentials appear. Relationships happen between layers and between relationships. This combination in a whole, produces info that was not contained within parts.

When numerous atoms form a living human being, info that was not present in them appears. New paths are paths and controls of the new whole acted upon and created by the new whole.

So, the part may move based on equations, or may behave in accordance with the sovereignty of the sovereign whole. Hence there is immediate relationship between parts and wholes that cannot be separated as long as the sovereign wholes keep existing.

There are specific examples about this subject in part 3.5.3 and other related parts.

3.5.6.4.4 Reductionism and Free Will Power

Indeed, those who do not expect the meeting with Us and are satisfied with the life of this world and feel secure therein and those who are heedless of Our signs

(Quran: 10/7)

The arguments against reductionism show that it is possible that the human being is a sovereign whole and has a distinct effect on the universe. The negation experiments and brain observation experiments, consciousness, and other points made in this work show that this possibility is actual in human beings. The agent has powers that are distinct from the powers of its parts.

3.5.6.5 Vulnerability of The Agent, and the States to Be Avoided

The first statement after the Opening chapter makes reference to the vulnerability of the human beings:

This Book, there is no doubt in it, is a guide to those who guard (against evil).

(Quran: 2/2)

As human beings we have states as worse, bad, good, best... We can be actually anywhere in the spectrum. Yet, we have to be somewhere desirable in a stable way. There is a route that we have to follow which will take us to a good destination; but we can follow any route. This is the area where our free will power may be useful.

The awareness about our vulnerability is a big guidance for us. It is a big answer to the question "why we think what we think?" There is something we have to think about by default, unless we are arrogant. So, if we think about what will be useful, the answer is that we are prudent, well-guided. If we think about useless or bad things, the answer is that we are arrogant, misled.

If all alternatives had same implications in respect to the ought to be truth (OTBT) of the agent, then there would be no responsibility, praise, and blame. Whatever he willed, would be in accordance with the OTBT of the agent. So, in any case, he would be successful.

But the intention of Allah is to give different degrees to His servants in accordance with their efforts, and values they adopt. Hence, the agent was made vulnerable, and also there are alternatives to be avoided, that are against the OTBT of the agent.

And whoever submits his face to Allah while he is a doer of good then he has grasped the most trustworthy handhold. And to Allah will be the outcome of [all] matters.

(Quran: 31/22)

Truth about what must or ought to happen consistently with the nature of the agent is a key feature of the agent. The OTBT is also an important subject of the agent's knowledge. On the other hand, in the exercise of free will, and in the related reasoning processes, it is an input.

This truth may have objective elements, like the generally agreed upon truth of needing to be healthy, avoiding fire, or for a fish to be able to swim, for an eagle, to be able to fly without aids. So, I call the optimal states, features, tools, that are objectively and truly good and desirable the “ought to be truth” of the agent.

The agent may also have subjective elements, such as liking chocolate ice-cream instead of vanilla ice-cream. These I call ought to be states (OTBS). These can be mixed with OTBT, and sometimes may be considered as OTBT. For example, vanilla ice cream may be too subjective specifically; but, either that or chocolate ice-cream, or a specific food may be necessary for the sufficient energy supply to the agent.

There may be different levels of net benefits of results based on the objective truth. When these are assessed together with the agent’s objective capacity, we can evaluate the success of the agent.

The capacity of the agent and his free will power to comply with the OTBT are also important features of the agent.

In the present context, there are two kinds of cause. Causes that can prevent and those that cannot prevent the agent objectively from reaching the OTBT.

The existence and objective accessibility of such truth, gives us the potential to will it. Such truth makes the alternatives distinct, so as to help us see that one alternative is different and distinct than another alternative.

And hold firmly to the rope of Allah all together

(Quran: 3/103)

OTBT is like a rope of a boat tied well to a good anchor. Most waves and currents have no coercive power over this boat; they can move

the boat, but within the limits that the rope sets. Thanks to this rope, the boat and its riders are safe against these waves and currents. Hence, the riders do not get lost; which is in accordance with their OTBT which requires that they are not lost. So, as long as this rope is available, the riders are responsible for using or not using it when necessary. If there is a huge storm and the rope is broken, then there is no responsibility, assuming that they had no other way to secure themselves.

OTBT as an input of free will power will be explained in detail in part 3.6.2.

3.5.6.6 Being Subject to Challenges

And We will surely test you with something of fear and hunger and a loss of wealth and lives and fruits, but give good tidings to the patient,

(Quran: 2/155)

In Islam a human being faces challenges: Someone may have a jealous or stingy nature, someone may have bad parents, may be poor, someone may be lazy by nature... All of us face such challenges. Our mission, is to overcome the negative influences, and establish the victory of the truth, and reach our biggest OTBTs.

In the universe of potentials, there is the potentiality that we reach highest degrees in the sight of the Truth, and there is the potentiality that we reach worst degrees in the sight of the Truth, and there are potentialities in between. All those potentials are accompanied with challenges, free will power, and outcomes. If there were no needy people, or if we had unlimited resources maybe we would have had less challenges in respect to helping the needy.

The following verses explain beautifully a kind of challenge:

Have We not made for him two eyes?

And a tongue and two lips?

And have shown him the two ways?

But he has not broken through the difficult pass.

And what can make you know what is [breaking through] the difficult pass?

It is the freeing of a slave

Or feeding on a day of severe hunger

An orphan of near relationship

Or a needy person in misery

And then being among those who believed and advised one another to patience and advised one another to compassion.

Those are the companions of the right.

(Quran: 90/8-18)

Allah set some potentials as actual potentials for us, and let us free so that we may actualize some of the potentials. So, either we will actualize the potentials of doing good deeds, getting high degrees, being rewarded and satisfied; or we will actualize doing evil deeds, getting low degrees, being punished, and displeased.

The following are some verses about some other challenges:

But Satan whispered to them to make apparent to them that which was concealed from them of their private parts. He

said, "Your Lord did not forbid you this tree except that you become angels or become of the immortal."

(Quran: 7/20)

Indeed, We have made that which is on the earth adornment for it that We may test them [as to] which of them is best in deed.

(Quran: 18/7)

Allah is not a human being and He is not afraid of the consequences of the evil of human beings as we see in the following verses:

So, Allah's messenger said to them (Leave alone) Allah's she-camel, and (let) her drink.

But they denied him and hamstrung her. So, their Lord brought down upon them destruction for their sin and leveled them.

And He does not fear the consequence thereof.

(Quran: 91/13-15)

3.5.6.7 Transcendence

Say, "Observe what is in the heavens and earth." But of no avail will be signs or warners to a people who do not believe.

(Quran: 10/101)

The dictionary meaning of "transcending" that corresponds to our usage in this work is "Being or going beyond the range or limits of (a field of activity or conceptual sphere)"¹³⁵. When I say a human being transcends things in the material world, I mean that those

¹³⁵ (Lexico 2020)

things are instantiated within and encompassed by the human being and his unity distinctly from alleged point-like instantiations of that thing in his parts.

In a reductive physicalist approach, the real relationships are believed to be between point-like units, or between bottom fundamental elements¹³⁶. Because, other things are supervenient upon these. So, when an agent sees a lion, photons or waves or signals from its ear reach relevant parts of the agent's brain. But, for example, a neuron is not a very bottom part of the brain, the very ultimate point where signals from the ear of the lion reaches is not a neuron since a neuron is formed from sub-elements. So, what happens at the neuron level is not sufficient to give us the ultimate explanation about what happens; we have to go to the level of microtubules, yet they also have parts so they are insufficient as well. Even if we go down to the atoms, they do not give us a sufficient level of explanation. But whatever is the ultimate point, when we have full explanation about that level, then I will have explained the upper levels as well. So, according to reductive physicalist, the very effective events occur at the smallest fundamental level, and upper level relationships are explainable by that most fundamental level. Hence, each smallest signal from the lion's ear's parts reach point-like parts of the brain and we see it. Our holistic impression of seeing the lion, is equal to an illusion, a by-product, and an epiphenomenal result of the above allegedly effective processes.

As opposed to the above approach, when I use the word transcendent for a human being, I mean that the human being, being above the point-like parts of his brain, transcends the parts and whole of the lion. He perceives its wholeness. He can also perceive in his unity, a hundred, or a thousand or a million lions. He has his distinct feelings, goals, comprehension of the implications of not only the atoms of

¹³⁶ These are explained in part 3.5.6.4.2.8.

the lion, but its implications such as the threat it causes to survival regarding distinct goals of the human being. The human being does not only evaluate the actually present lion(s), but any imaginary number of them that may or may not be present in the future or in the past. The human being as one whole containing his consciousness, goals, past, future, encompasses, hence transcends the whole and parts of the lion(s).

Many photons from many light sources come to our brains and they pass through different neurons or particles; but these parts do not each photon as separate persons, but through them, the essence of the agent gets the unitary shape of the lion. There is a unity of the human being that transcends and encompasses space, distances, and time.

Though signals reach different points in the brain, the unity of the agent transcends the distances between them and behaves unilocally.

On the other hand, the agent encompasses in his unity things that have time extension as well: We can transcend the running of the lion although the signals of each moment reach us at different times; even though one may argue that these signals are instantiated and organized at different memory parts. However, the data within each memory part must be transcended by the unity of the agent so that he may be aware of the lion. Additionally, in any case, we transcend our memory cells that extend within time, since it is obvious that encompassing memory cells as if they are defined by a time bracket of zero-width will be useless and impossible; and none of the neurons or atoms or sub-atomic particles are static. Again, a fully frozen brain would not probably contain necessary information about the movement of the lion since, the active vectors within each part including atoms contain related information.

While the agent transcends things within space, or within the same time frame, he also has a capacity to transcend things in different times. A teenager can foresee that his efforts for education as a teenager will produce good results in the future. Or a person has the capacity to see that if he commits a certain crime, then afterwards he may be in bad physical or emotional conditions. And, people put into practice those powers, and see the results.

However, it should be noted that according to physicalism, our conscious experience must not be occurring on atoms, protons, electrons, neurons, microtubules, or anything we are experimentally acquainted with as of now, since they are only epiphenomenal; our conscious experience according to them may occur on some ASBEs whose location is unknown.

Indeed, those you [polytheists] call upon besides Allah are servants like you. So, call upon them and let them respond to you, if you should be truthful.

Do they have feet by which they walk? Or do they have hands by which they strike? Or do they have eyes by which they see? Or do they have ears by which they hear? Say, [O Muhammad], "Call your 'partners' and then conspire against me and give me no respite.

(Quran: 7/194-195)

Physicalism entails a belief in ASBEs upon which all would be reducible. How would they communicate and at which level and through which mechanism? And if they are so sophisticated, how would they be bottom elements, since they would be constituted of sub-elements.

Our consciousness and our acts are not constituted of point-like parts. A separate reflection of a point-like part of the ear of the lion,

on a point-like part in a neuron of the brain would not be sufficient for consciousness. On the contrary, there is a whole and unitary essence of the human being which can encompass the whole of the lion. As he can encompass that which is visible through the relationships, he can also extend what he sees to the invisible through his reason and transcendence.

For existence of will power there needs to be transcendence. At least two things or an area as alternatives must be encompassed by the agent in his unity.

On the other hand, without transcendence, parts of things will be instantiated and distributed only within the point-like parts of the agent, where we cannot talk of the agent and of the access of the agent to any elements of the will. The agent should be able to see the relationships between these elements, and foresee the relevant outcomes. This enables the formation of wills.

The agent encompasses many alternatives but he also has constraints. And generally, there are certain alternatives which are not impossible. Without the transcendence of the agent upon the alternatives, everything would be instantiated at different level and/or on different parts, and even if there was a free will, as may be in the quantum level, this would be at a level other than that of the agent; consequently, it would not be based on the freedom of the agent. Hence, the agent could not be responsible since he would not own this will and that alternative. When I say free will, I mean here the will of the agent.

Transcendence of the agent, applies also to the modules of will, knowledge, consciousness, reasoning power. If outside differences are instantiated within the parts of the consciousness, reality, distinct power, and unity of the agent then the agent could not be conscious of and transcend things.

Argument from unity in part 2.2.1.3 shows that transcendence is a general aspect of the existence, sustained by God. Existence of and access to the information are also based on transcendence.

When we say these things are two miles far apart, actually, these two miles define these two things; from a different perspective, this distance unites these two things. So, there are only unities and they all are sustained by the prime power of Allah.

The agent and many other things are transcendent on space and time. So, there is no determinism and no reductionism. Because, there is a layer which has at least one superiority over any alleged supervenience basis. One aspect of this superiority is that the transcendent encompasses parts as wholes, and the relationships between them.

Transcendence within the creation is not specific to only human beings. Although there are different degrees and kinds of transcendence, everything transcends space and time. Points of space and time also transcend them, thanks to Allah who sustains all of them.

We do not encompass things that have zero extension or extent or things that have zero duration or zero size. Though we can encompass limited number of things, limited ranges, what we encompass is not of zero range. And if multiple things can be encompassed by us, it is of course natural that God encompasses past, present, and future; this universe and many other universes. If the time bracket of an event we encompass has a width more than zero, this means that we somehow encompass past and present and future or at least two of them simultaneously.

As the agent transcends parts and alternatives, the agent has at least one superiority over them. Qualified knowledge about other parts of the whole, the wholes they constitute, their relationships are at least

some of the attributes that the parts do not have. For the agent, many combinations of parts and their organizations other than the actual ones are possible. The lady who arranges her home, transcends the position of the TV: She conceives that it is next to the window; she can also conceive that it is next to the door. These are transcended by her as potentials.

In this respect, anything that may be included within that transcendence is subject to the agent, as they can be managed. So, as long as there is no neurological, or physical impossibility for a specific alternative, there is no possibility to say: You cannot will x, where x is known or accessible by the agent.

As we see in the following verse, limitation and power are both implications of power, and some sources of free will and responsibility:

[He] who created death and life to test you [as to] which of you is best in deed and He is the Exalted in Might, the Forgiving.

(Quran: 67/2)

Our previous explanations about transcendence in part 3.4.7 are also applicable regarding the transcendence of the agent.

For detailed information about transcending time, see part 3.5.6.4.2.6.5.

Question 104.

If time is similar to time in block-time theory or B theory of time, if we extend in time and if we are transcendent within time, why are we not continuously aware of the past, future, and the “presents” in them?

Answer 104.

Surely, We have created everything according to a measure.

And Our ordaining [a thing and its coming into being] is but one [act], like the twinkling of an eye.

(Quran: 54/49-50)

According to the above verses, there are measures, but also it is as if everything is instantaneous.

Though Islam does not teach the B theory of time, Islamic teaching has some similarities with that theory in respect to time: Firstly, Allah knows the future, and He knows it without deterministic relationships, so, there must not be an absolute distance between the past and the future. Hence, in some way, the future must be encompassable by God like the past. Secondly, as the agent is punished justly, he must have an identity and continuity through time. Thirdly, as the soul of the agent exists as an active essence upon some changing parts of the body and taken out at the death, it must be active and have some stability throughout continuously changing biological components of the agent and related processes. Fourthly, as we empirically experience and as explained above, we transcend space and time.

However, note that differently than the B-theory of time, the essences of things are active in every stage of time in respect to the specific conditions of that time. The specific conditions of each time may be like the accumulated memory and knowledge of the agent related to the relative past or the unknowns of the relative future. In other words, every moment contains some inputs from its pasts and futures.

The agent as a human being is a whole, and he has parts. And he has an active essence which transcends and gets what is relevant to himself from other parts.

There is not only a structure of the agent consisting of brain, neurons, DNAs... but also a structure of the agent consisting of his essence and parts relating to time, space, energy, consciousness, matter, and so on. In this context, we are like a being who has legs on different “presents” of an alleged 4D framework in accordance with the B-theory of time. Each leg has some information and activity, and the essence of the agent is active on each leg.

Transcendent access does not mean unconditional or unlimited access. If I look at my right, I have access to my right, if I look at my left, I see what is on my left. As I emphasized earlier, everything is transcendent to some extent; hence, these limitations are not abnormal.

The active transcendent essence and identity underlying all my experiences is the same. The human being is structured in this world with such a structure. He might be designed with more limitations or less limitations. He is part of larger systems, and there are reasons for the limitations. In part 3.8.1.4.3, the reasons for the limited access to information about future is explained.

As I feel my hearing and my seeing simultaneously in each moment and as they do not mix, likewise, I feel each moment’s qualia in each moment without mixing the other moments. I feel upon what type of ground each of my legs step on that 4D chart: Is the ground hot, cold, soft, or hard... The experience of my leg L1 belongs to time t_1 . It has certain features corresponding to the coldness, softness and so on: For example, for that leg, some events have passed, some memories have been formed, some events are about to happen. The experience of that leg does not contain the memories of leg L2 at time t_2 even though L2 is also experienced or will be experienced by

me as a transcendent agent. This is like experiencing a hot object with my right hand, and a normal object with my left hand: Although it is me who experiences both, the experiences of my left hand and right hand are different and do not contain the other.

For a correct feeling, I have to feel the respective condition of each leg in time. If I keep feeling an event which happened 10 years ago as if it happens now, it will not be a correct feeling. So, I feel every event as of its time: Today's experience must be non-existent when I experience the experiences ten days ago. If ten days ago I transcended the experience of today, then I would attempt to change certain things about the transcended future, and this would produce crucial inconsistencies. Hence, we have a limited transcendence window.

It is similar to biological legs similitude: If I am required to transcend twenty objects with different surfaces touching my hands, I would have difficulty in transcending them. Yet, since we can run our lives, we can say that our average transcendence level in this respect is sufficient. Likewise, our transcendence through time is also appropriately designed in the context of responsibility and free will power.

So, I transcendently access them but within their realities. I feel the past within my whole transcendently, but my leg of "now" does not feel it. So, am I only the present leg? No, I am active in all legs, but in accordance with the conditions, potentials, and limitations of the respective leg.

If my transcendent whole contained the knowledge of all presents in every "present", then this would not be the reality of each present. Each present must have some accumulations, and some novelties. That is the design of things.

Also, by definition, the future is that upon which we cannot exercise our power. If we exercised our power, then it would have been the

past. I can remember what I cannot change, I cannot remember what I can change, what I can change has not become a certain memory. So, I transcend each “present” accordingly.

Question 105.

Why do not we have power over the past and future if we are transcendent?

Answer 105.

Things similar to knowledge in this respect apply to power. I should also add the following: Our actions for each present depend on its relative past and relative future. So, for example, if at time t_2 I am trying to find a good job as a civil engineer, at time t_1 I must have chosen a college. Therefore, there are also limitations on the transcendence in terms of action.

Question 106.

Can God create regions where servants have the powers causing the above inconsistencies in respect to time?

Answer 106.

Said Jesus, the son of Mary, "O Allah, our Lord, send down to us a table [spread with food] from the heaven to be for us a festival for the first of us and the last of us and a sign from You. And provide for us, and You are the best of providers."

Allah said, "Indeed, I will send it down to you, but whoever disbelieves afterwards from among you then indeed will I punish him with a punishment by which I have not punished anyone among the worlds."

(Quran: 5/114-115)

Yes. But in this region, there would be limited security and understanding for servants.

Question 107.

If the agent did not commit an evil up to a certain point, but at that point he committed a big crime. Was he evil before that event, or did he become evil at that point, and did he become evil starting from the happening of that event, or starting with his existence? If he was evil starting with his own existence, then was he not to be evil? What could he do when he was a baby while he is considered evil? If he has become evil starting with the commitment of that crime, then, was he a different person before that crime?

Answer 107.

Islam does not teach the A theory of time. As we explain elsewhere, time is not a distance for God. If it is not a distance for God, then it has a unitary reality at least from a perspective. Hence, ontologically, and in an absolute sense, the extension of the agent within time is an obvious extension; there is no absolute distance between his birth and his death. This is similar to unilocality observed in quantum realm.

Regarding his unity, we can consider as if he lived his entire life in a “moment”. The set of evil deeds and good deeds that he produced, are the benchmark about what he is. He is the same person all along; yet he has the power to choose the good or evil.

If he is ultimately evil, he becomes evil starting with his very being, but the evilness of his very being when he is a baby depends on what he did decades later. If someone does a bad act with his right hand, we cannot distinguish his left hand, since it is the same person who has both hands. In terms of time also it is like this.

3.5.6.8 Capacity

Allah does not charge a soul except [with that within] its capacity.

(Quran: 2/286)

The human being has been given the capacity to find the truth and to comply with it. He is held responsible to the extent of this capacity.

The human being is responsible in accordance with his capacity. Further details about responsibility are explained in part 3.7.6.

3.5.6.9 Mobility Between States and Degrees

And for all there are degrees [of reward and punishment] for what they have done, and [it is] so that He may fully compensate them for their deeds, and they will not be wronged.

(Quran: 46/19)

We have certainly created man in the best of stature;

Then do We abase him (to be) the lowest of the low,

Except for those who believe and do righteous deeds, for they will have a reward uninterrupted.

(Quran: 95/4-6)

You will move from state to state.

(Quran: 84/19)

The agent depending on his wills and acts, may be in different states.

For example, an agent may be in a good region which consists of good beliefs and deeds, and proceeding in a still better direction as shown in line 1 in the below figure. Or the agent may be in the bad region consisting of false beliefs and bad deeds and yet going for worse as in line 9. Or he may be going back and forth between good and evil as seen in lines 5 and 7. There are also different states of the agents that are represented in the below figure:

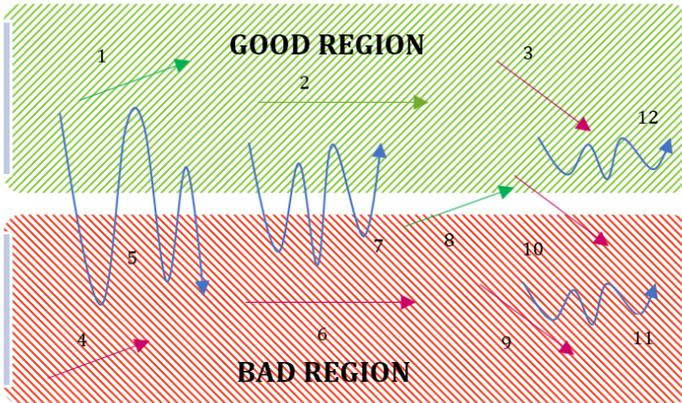


FIGURE-5: POSITIONS AND MOVEMENTS OF THE AGENT BETWEEN GOOD AND BAD

Upon the death of the agent, what he ultimately is is sealed and fixed. His state at the end has the most weight: For example, if he is a disbeliever at the end of his life, he is a loser. Since nobody knows when he will die, this is an important motivation for improvement.

With the ultimate end, the quality of the agent becomes clear, in a way that transcends time.

Also, the agent may be good in some ways, may be evil in some ways.

The agents have a reality of their own which transcends time. As an example, I will mention the related explanations of the Quran. The Quran starts with a classification of human beings according to their

compliance with truth. This classification will give us an idea about the concept of responsibility, and I will have the opportunity to address certain important issues about responsibility and free will:

In the introductory parts of the Quran, we see the following classification of people: The righteous believers, the disbelievers, the hypocrites, the jews, the Christians, adherents of other religions. In the following parts, we also see other classifications among them, such as those who believe in God but disbelieve in the prophets, those who are doubtful, and those to whom no divine message came.

Some of the related verses are as follows:

This is the Book about which there is no doubt, a guidance for those who ward off¹³⁷ (evil).

(Quran: 2/2)

Indeed, those who disbelieve it is all the same for them whether you warn them or do not warn them they will not believe.

(Quran: 2/6)

And of the people are some who say, "We believe in Allah and the Last Day," but they are not believers.

(Quran: 2/8)

Indeed, those who believed and those who were Jews or Christians or Sabeans – those [among them] who believed in Allah and the Last Day and did righteousness will have their reward with their Lord, and no fear will there be concerning them, nor will they grieve.

¹³⁷ The righteous, the careful.

(Quran: 2/62)

Indeed, those who have believed then disbelieved, then believed, then disbelieved, and then increased in disbelief never will Allah forgive them, nor will He guide them to a way (of truth).

(Quran: 4/137)

Those who disbelieve in God and His Messengers and desire to make division between God and His Messengers, and say, 'We believe in part, and disbelieve in part,' desiring to take between this and that a way –

Those are the disbelievers, truly. And We have prepared for the disbelievers a humiliating punishment.

(Quran: 4/150-151)

Whoever is guided is only guided for [the benefit of] his soul. And whoever errs only errs against it. And no bearer of burdens will bear the burden of another. And never would We punish until We sent a messenger.

(Quran: 17/15)

That you may warn a people whose forefathers were not warned, so they are unaware.

(Quran: 36/6)

The path of those upon whom You have bestowed favor, not of those who have evoked [Your] anger or of those who are astray.

(Quran: 1/6)

They were satisfied to be with those who stay behind, and their hearts were sealed over, so they do not understand.

(Quran: 9/87)

Indeed, those who do not expect the meeting with Us and are satisfied with the life of this world and feel secure therein and those who are heedless of Our signs,

For those their refuge will be the Fire because of what they used to earn.

(Quran: 10/7-8)

And when it was said, 'Indeed, the promise of Allah is truth and the Hour [is coming] no doubt about it,' you said, 'We know not what is the Hour. We assume only assumption, and we are not convinced.' "

(Quran: 45/32)

Question 108.

A person may be believing and later he may be disbelieving and then again disbelieving. But it is possible that a person who does not believe, dies upon that state, though maybe later he would be believing. So, is not it unjust for two similar persons who are in alternating states, one of whom dies when he is upon the disbelieving state and ends up in hell, and the other dies upon a believing state and ends up ultimately in the paradise?

Answer 108.

This situation is similar to two persons who from time to time drive while being very drunk. But while one of them drives, a pedestrian

crosses the street carelessly and the first driver hits and kills this pedestrian whom he would not have killed if he was not drunk. And for the other driver, no such event occurs. The first driver ends up in prison for his whole life as stipulated in the law of his country, and bears the pain of being a killer his whole life.

They both know and take the risk of undergoing the same accident. But one of them somehow does not meet that situation, so, he does not end up in prison. But if he was in the situation of the first driver, he would also be a killer.

The issue of doing good or evil is not personal. It has been an extra favor for the person who did not kill the pedestrian; he may also have deserved some punishment just because he drove drunk.

The person who although has been subject to the message of God, does not believe sometimes, takes such a risk of dying upon that state. So, he will bear the consequences in case he dies upon that state. If he does not die upon such a state, then this may be a favor of God. Note that we are continuously within His favors for which we did not do anything to deserve. It is also possible that there is some good in him that Allah protected him from dying in that state.

If the conditions are obtained, the agent is responsible for being good in every moment of his life. What matters is the actual state.

Some do a certain amount of evil, and they stabilize as an evil person. So, they can be thieves, killers, drug dealers, or disbelievers insulting God who neither doubt nor regret what they do. Is there a potential of being good? Yes, there is such a theoretical potential. But the actual, is what happens and finalizes. And it is the duty of the servant to make the actual the optimal. The potential does not have much implication in terms of the results. Everybody has the potential of being better or worse.

As underlined in the following verse, approaching the limits is forbidden as transgressing them, and risk management is important:

These are the limits [set by] Allah, so do not approach them.

(Quran: 2/187)

Question 109.

Is not it unjust to hold someone responsible for belief in God if there is no evidence for God?

Answer 109.

According to the Quran, everything at every layer is evidence for God: An atom, an eye, a planetary system... The question implies that God provided no evidence. Yet, if God is true, if nothing could exist without being sustained by God, then this already means that everything is evidence for God. A claim that everything is not evidence for God may be possible only if there is clear or probable evidence about the self-sufficiency of everything or about a candidate other than God who can sustain everything.

So, if a person finds himself about being punished by God for rejecting Him and His evidences, there will be no issue of injustice for being held responsible without evidence. Because it will be clear that that person has been presented convincing evidences. Because, it will be clear that the gravity, the spatiotemporal relationships, the matter, or whatever he replaced God with, had no self-sufficient power to exist or to produce any effect, and that everything was sustained by God. It will be clear that that person assigned some self-sufficient power or probability of some self-sufficient power to those things without any evidence. It will be obvious that he behaved emotionally, and that he had very low effort and weak intention to comply with the truth and divine values.

The believer is required to search actively the truth, mitigate risks, and say every day to his Lord, “Guide us to the right path”, at least when he recites the first chapter of the Quran which is obligatory to be recited in the daily prayers.

Question 110.

A person may be a robber. But he will enter the hell, and the hell seems to be very awful place, causing much more pain than the sum of pain caused by that robber. Is not this unjust?

Answer 110.

This question is answered in part 3.7.6.3 about hereafter.

Question 111.

What is the state of an agent if his wills and acts are distributed among the good and bad regions?

Answer 111.

The allegory of those who disbelieve in their Lord: their works are like ashes in a violent wind, on a stormy day. They gain nothing from whatever they earn; such is the farthest straying.

(Quran: 14/18)

The wills of the agent may be heavily distributed in the bad region. For example, an agent may be a killer, robber, disbeliever.

Or the wills of the agent may be heavily distributed in the good region. For example, he may be active in benevolent activities, he may be good to his relatives, he may be good toward his Creator.

On the other hand, a person may be good to his children, but be getting bribes, he may be a robber; a person may be good in his work, but a disbeliever. So, from different perspectives, he may be good and bad in the same time.

We can illustrate the latter type in the following way:

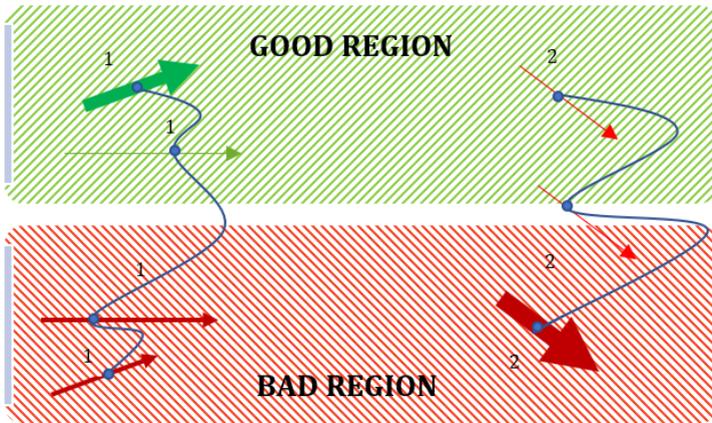


FIGURE-6: WEIGHTS OF GOOD AND EVIL BEHAVIORS

In the above figure, the arrows with number 1, represent the wills and acts of agent 1; the arrows with number 2 represent the wills and acts of agent 2.

The important thing to notice in that figure is that the wills do not all have the same weight which is emphasized by the thickness of the lines. Especially, the wills that relate to fundamental issues have big implications. Furthermore, the wills of each agent are connected as depicted with the curved lines, and each will has implications for other wills of the same agent. For example, a good act of a believer along with the act of recognizing God, may have different value compared to the similar will of someone who rejects God. The one who helps the poor may be believing that it is the right of the poor to receive that help in a legitimate way as taught in the Quran, that

the real owner is God, and that this will also help the betterment of the society. The other one may be simply believing that it will produce just some material benefit, which will be reflected to himself. So, the same act may have different implications and may be related to different values.

Additionally, for example, a person may be thankful to his colleagues. But he may be rejecting God. Supposing that on the judgment day He witnesses that God is true, the weight of his thankfulness toward his colleagues will be incomparably small relatively to his ungratefulness against God who created him, who sustained him, who gave him eyes, ears, and so on.

A reductive physicalist who reduces everything to deterministic or indeterministic behaviors of particles bumping one onto another, cannot claim doing good, since "good" is no more than an illusion, since the real thing is assumed by him to be the particles bumping one onto another. So, to what extent this agent can go in doing good?

On the other hand, a person may claim believing in God and moral good; but he may be cheating, stealing, and so on. This may mean that the choice of belief is not effective and sufficiently strong; it is only in words. This is underlined in the following verse:

Do they [then] wait for anything except that the angels should come to them or your Lord should come or that there come some of the signs of your Lord? The Day that some of the signs of your Lord will come no soul will benefit from its faith as long as it had not believed before or had earned through its faith some good. Say, "Wait. Indeed, we [also] are waiting."

(Quran: 6/158)

As seen in the above examples, there are different weights of wills and choices. They have different implications for the agent, and for the whole of the wills of a specific agent. And we can say that some key wills will have important implications over the secondary wills; and some seemingly secondary wills may be evidence about the truth of fundamental wills. In any case, according to Islam, Allah knows our intentions, what our wills and acts deserve; we have to try to do our best and expect the favor of Allah.

3.6 Inputs of Free Will

And if We had willed, we could have elevated him thereby, but he adhered [instead] to the earth and followed his own low desire.

(Quran: 7/176)

Do not obey one whose heart We have made heedless of Our remembrance and who follows his low desire and whose affair is ever [in] neglect.

(Quran: 18/28)

A relevant definition for “input” in our context is: something that is put into a machine or system¹³⁸.

Before going into the details of the inputs, we have to see their relative position in respect to the system.

¹³⁸ (Merriam-Webster.com 2020)

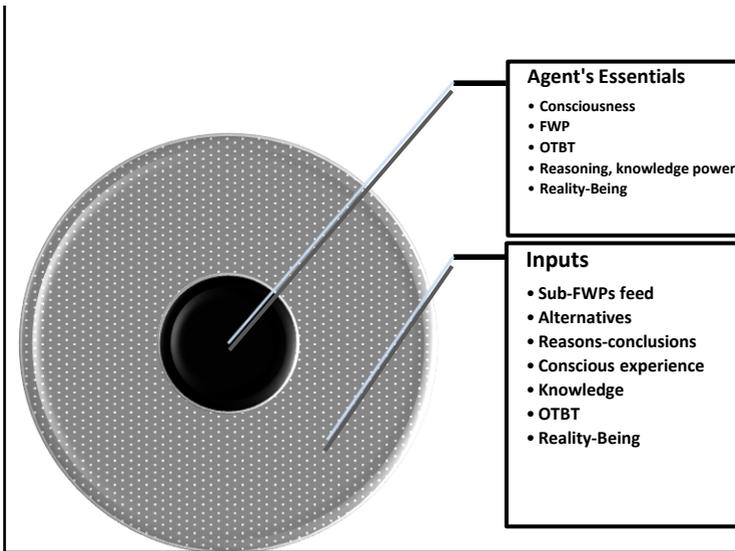


FIGURE-7: RELATIONSHIPS OF THE AGENT'S ESSENTIALS AND INPUTS RELATED TO FREE WILL POWER

In the above figure, black area in the center represents the essentials necessary for the exercise of the free will power to be owned by the agent:

It is important to distinguish some of the points which look similar between the essentials and inputs. For example, we see the consciousness under the essentials, and we see the conscious experience under the inputs. In this context, consciousness means the power to be conscious. Conscious experience as input is some specific conscious experience that is related to the specific will situation: The embarrassment that a failing student has against his parents is a conscious experience as input. This may be an input in his wills related to study. Consciousness as an essential is the power of the agent to be aware of himself as an agent, to be aware of the willing situation, to be aware of all kinds of accessible inputs or potentials... In this respect, consciousness is very important because

everything passes through the window of consciousness. This is a brief information about the distinction between the essentials and inputs.

Let us explain briefly the essentials of the system of the agent:

Consciousness is a key essential.

It is a power which reflects the unity and reality of the agent and all of its components in a colorful way. It also has the potential to encompass all of the relevant accessible aspects of a will situation. It finalizes a will situation and approves it. It encompasses and approves not only the willed alternative, but also that which the agent has to give up. Its transcendent aspect which has to encompass in unity the actual or potential alternatives is necessary for the finalization of the will. Not only the alternatives, but also the timing of finalization is related to the consciousness power. This may be considered as the closest power to the essence of the agent.

Consciousness and free will power need each other: In many contexts, some aspects of the consciousness need free will power. For example, consciousness needs free will power in determining whether to be conscious or not such as in willing to sleep, to determine what to be conscious about, or to determine the intensity of consciousness. On the other hand, free will power also needs consciousness. For example, free will power needs consciousness in order to transcend the range within which to turn toward a certain direction.

Again, the agent must have his own consciousness so that there may be an ownership of the will by the whole of the agent. There are important reasons for this:

(1) The will power must have had the possibility to serve the agent. If the agent has not had the possibility to benefit from the free will power for his goals, we cannot say that the agent owned the free will

power. The end point in this respect, is whether the agent is satisfied or not in his consciousness about the outcome. If a will attributed to the agent occurred without the agent being conscious of, the agent may say “I am not aware of the alternatives, of their implications, of the benefits and costs, and of this will. I do not own it. I did not assess it in terms of my goals.” The will must be recognized by the agent. This is an important way to connect the will to the agent. The implication of the will regarding the whole of the agent is of key importance.

(2) The will must originate from the agent. The unity of the agent and his access to his whole’s resources is represented and confirmed by the essence of the agent and its consciousness. The agent must have had the opportunity to access to the available resources of his whole. The actual availability of some resources is of secondary importance in our context. Because, if for example reasoning power is objectively inaccessible, this will reduce his responsibility and freedom of will. There is a need to have a benchmark for the origination of the will by the agent. As an outsider, we can observe that there is a whole. But this cannot be sufficient for concluding that we have a whole. Because, the parts of the agent may be behaving on their own, and there may be a coincidental harmony in what we see as a whole. So, like in the signature of the contract, there has to be at least the confirmation by the agent about his access as a whole to his whole consisting of related parts. As consciousness relates to the sovereign whole, the only experience and witness about a sovereign whole is the sovereign whole itself and its essence. Also, the only one witnessing that that sovereign whole willed a specific will is that sovereign whole.

If like in Libet experiments, before consciousness appears, it is told to the agent that he willed a certain thing, the agent will rightly say that he did not finalize and approve it or that he is not aware of it. Actually, lots of will suggestions come to us as the outcome of free

will powers of our sub-modules. This does not mean that as a distinct sovereign whole we have approved hence owned it. In other words, offers/ recommendations come to us from our sub-modules, but unless there is the acceptance by the unity and essence of the sovereign whole, they do not become under our ownership. We do not own the positive and the negative aspects of the offer from our sub-modules unless we approve them as our sovereign whole's will. For example, a recommendation to buy a luxurious car may have come as a recommendation from a sub-module; and it may have been detected in a Libet type experiment. But if it has not reached my essence, its consciousness I cannot be required to own it as my will.

As explained in detail in part 3.5.3 there are sovereign wholes at different layers, so some wholes have sub-wholes who have their free will powers. The free will powers of our sub-modules are not our free will powers. They can produce free will powers for themselves, and also free will powers as recommendations to be presented to the essence and sovereign whole of the agent. For example, a relevant sub-module may produce a recommendation to listen to the music. That module is not aware of the other modules. The offer of the sub-module which recommends listening to the music may be rejected. If one offers to sell his car to me, unless I am aware of the offer and my acceptance of it, I will not be the owner. Here, unless I have access to the conscious experience of these, the whole has not been constituted. My exercise of free will power may happen based on that.

In the following verses we see the differentiations and struggle between the essence of the person and the outputs of the person's sub-modules' free will powers producing to the sovereign whole low desires to be followed by the sovereign whole:

But whosoever feared the standing before his Lord and prevented the self from low desires,

(Quran: 79/40)

So do not let one avert you from it who does not believe in it and follows his low desire, for you [then] would perish.

(Quran: 20/16)

Have you seen the one who takes as his god his own low desire? Then would you be responsible for him?

(Quran: 25/43)

The following verse makes reference to the free will powers of our sub-modules:

And they will say to their skins, "Why have you testified against us?" They will say, "We were made to speak by Allah, who has made everything speak; and He created you the first time, and to Him you are returned.

And you were not covering yourselves, lest your hearing testify against you or your sight or your skins, but you assumed that Allah does not know much of what you do.

(Quran: 41/19-22)

Let us also examine the free will power in this context: Free will power and consciousness are direct and non-separable powers of the essence of the agent. They are non-separable, because the actor which exercises these powers is the essence of the agent. Furthermore, if consciousness and free will power are separable, then, the actor for an evil deed will be the free will power, but the one who will be punished will be consciousness. So, such a separability, would be a problem, in worldly and religious terms.

Can the whole of the agent finalize and complete an exercise of free will power before the agent is conscious about it? If the whole of the

agent is not aware of the relevant will, then that will has not been encompassed by the unity and essence of this agent. So, a sub-module of the agent may have prepared and finalized the exercise of a free will power, but it is not the free will power of the whole of the agent. Because, either the essence of the agent is not aware of his “I”, or the “I” has not exercised his free will power. The essence of the agent does not need to activate all of his potential powers of reasoning, or observing, or testing the recommended will to a great extent. To assess or not, to activate or not those powers are within the scope of the agent’s essence’s free will power.

As to the reasoning power and power to know, regarding free will power, they are only necessary to distinguish one alternative from the other. They are not necessary to distinguish which alternative should be better for the agent.

Remember from the earlier parts that for the existence of free will power, it is sufficient that the agent is able to distinguish that one alternative is different than another alternative. The core of free will power does not necessitate the existence of powers to assess whether the alternatives are in harmony with the OTBT of the agent. But in order to be successful, the sovereign whole and the essence of the agent must use the free will power to access the relevant resources and powers as reasoning, knowledge.

The reality-very being of the agent: This is the underlying reality of the agent which comprises all of the knowns and unknowns of the whole of the agent, the active and passive parts, its design and so on. This influences the “I”, the OTBT, free will power, consciousness, and reasoning power. Regarding free will power, we see that it is active in many stages of free will power. For example, the colors of the two candies subject to free will power, go through the nerves of the agent which are elements of the reality of the agent.

Above, we have gone briefly through some essential functions of the agent; we will examine them further in their relation to the inputs and outputs of will power. We will examine them only as much as they relate to the free will power.

Let us go through some general aspects of the inputs. And then, we will take each type of input under separate headings.

Regarding free will power, if the agent has to exercise his free will power on touching a white candy or a red candy, these two alternatives, their colors, positions, his hands, are some of the inputs. Regarding the fundamental level of free will power, he does not need to consider which one would be better.

However, for the exercise of free will power at a practical level, the agent must engage his other powers through free will power.

Regarding the practical level of free will power, we can give an example of someone who has to will to buy the car C1 or the car C2. C1 has a more reasonable mileage, C2 is less expensive. The agent may exercise his free will power in any case. But supposing that his goal is not to see whether he has free will power, and as he is vulnerable, he will use other inputs. For example, he will use his past and possible conscious experience: How will he feel if C2 causes more repair costs, or how will he feel if he cannot sell it when he needs to sell it? Also, he will consider his OTBT: He cannot work harder if there are unexpected repair costs. He will reason and his reasoning process will produce further inputs.

There may be many kinds of inputs: Accessible, necessary, sufficient, potential, internal, costly, coercive and so on.

Many inputs must be accessible for the exercise of free will power so that the agent may be responsible, not for the existence of free will power.

Some inputs are produced by using free will power as well: The agent may use his will power about whether to collect some information or not. Some inputs directly relate to the powers of the agent: For example, the consciousness, knowledge, reasoning powers of the agent are used to produce some of the inputs.

Question 112.

How do we know that our sub-modules may have free will power?

Answer 112.

The main reasoning behind this is explained in part 3.5.3 about sovereign wholes. On the other hand, part 3.4.12.1 about negation experiments and brain observation experiments explains how free will power interacts with the universe. It also shows that our brains have the necessary plasticity for this. And there is no reason that a hypnotized person would not be successful in negation experiments and brain observation experiments in demonstrating his sub-modules' free will power.

3.6.1 Conscious Experience

But Allah bears witness to that which He has revealed to you. He has sent it down with His knowledge, and the angels bear witness [as well]. And sufficient is Allah as Witness.

(Quran: 4/166)

Allah is witness over all things.

(Quran: 22/17)

And they forbid it, and keep afar from it, and it is only themselves they destroy, but they are not aware.

(Quran: 6/26)

And He it is Who has created the heavens and the earth with truth, and on the day He says: Be, it is. His word is the truth, and His is the kingdom on the day when the trumpet shall be blown; the Knower of the unseen and the seen; and He is the Wise, the Aware.

(Quran: 6/73)

The dictionary definition of consciousness is as follows: (1) The quality or state of being aware especially of something within oneself. (2) The upper level of mental life of which the person is aware as contrasted with unconscious processes.¹³⁹

When I say conscious experience, I mean the contents of our consciousness.

As conscious agents, we feel ourselves, and also, we feel the external universe. Consciousness is our window that opens to our internal and external world, it is also a source of motivation for our existence.

Conscious experience are inputs for the will, while consciousness is a component of the whole of the agent. It is an input of free will power in that it helps in distinguishing one alternative from the other, and in giving values to the alternatives in terms of the preferences of the agent. We can will an alternative, that alternative may happen, but what matters is how we feel about it. This feeling does not need to be about something that benefits us; it may be a public benefit, a compliance with some values.

Conscious experience as an input of free will power, may be actual or a past experience, or a foreseeable future experience. The alternatives may be present, or the agent may use his memory in

¹³⁹ (Merriam-Webster.com 2020)

order to process the implications of the alternative, or he may guess what the future conscious experience would be.

Some conscious experience related to a will may be processed by sub-modules, the free will power may choose not to retrieve their vivid details on each willing situation. When we try to drive carefully, we do not retrieve from our memory any relevant experience we had in the past, which in fact has an influence on our level of attention.

Consciousness is also an important input especially regarding the rights of others, because with consciousness the agent can know what the other agent will feel on a specific situation, and whether it is good or not, whether he would want the same thing done to him or not. Consciousness is important for free will power.

Some aspects of double slit and delayed choice quantum eraser experiments in quantum physics are interpreted as consciousness interacting with the physical entities and waves. As explained in part 3.5.3, these observations may be not only exceptional, but the extension of the general working of all the universe and sovereign wholes.

It is transcendent and unitary as opposed to some of its infinitesimal contents being infinitesimally instantiated in divided point-like parts of our brains.

It feeds the will module. It interacts with that module.

According to Islam, everything has some kind of consciousness, and consciousness is not considered as a fundamental component of will only specific to human beings.

Consciousness is one of the constraints of free will and one of its qualifiers.

3.6.1.1 Consciousness Is Real and Effective

Whatever is in the heavens and whatever is on the earth is exalting Allah, the Sovereign, the Pure, the Exalted in Might, the Wise.

(Quran: 62/1)

In Islam, consciousness is real and it is not an illusion. Consciousness has effects on the real world.

If we did not have the qualia of pain or joy, people would not be using pain killers, or would not party. A reductionist may say that even if we did not have consciousness, through biological and physical mechanisms we would behave the same way. But this is not an empirically supported claim. It is not demonstrated that if each point-like signal coming from a beautiful view into point-like parts of our brain without being united within the wholeness of our consciousness as a whole would cause a pleasure and cause us watch it for hours. As explained in part 3.5.6.4.2, reductionism is false; part 3.5.6.4.2.8 demonstrates that there can be no self-sufficient spatiotemporal bottom elements to which consciousness may be reduced.

Similarly, if we assume for a moment that reductive evolution is fully true, if consciousness did not have an effect and did not provide a survival advantage, then it could not develop as a common property through natural selection.

If consciousness and qualia are illusions then is the physical also an illusion, since there is no channel between us and the physical other than the consciousness?

As explained in part 3.4.12.1 about the negation experiments and brain observation experiments, the consciousness interacts with the spatiotemporal world through will power.

Some argue that consciousness is an illusion. Illusory observations are by definition shown and accepted to be false as underlined in the following verse.

But those who disbelieved their deeds are like a mirage in a lowland which a thirsty one thinks is water until, when he comes to it, he finds it is nothing but finds Allah before Him, and He will pay him in full his due; and Allah is swift in account.

(Quran: 24/39)

Yet, such illusions are also real as illusions, and they are subject of consciousness.

But these illusions are shown to be inconsistent with the real world, while we experience our consciousness which is consistent with our empirical observations. There are many scientific findings and machines we are aware of which continuously and consistently confirm each day beyond doubt that what we perceive is not illusion: For example, the design of a car works for millions of people for years.

Question 113.

Is not it possible that consciousness is a means for survival and outcome of natural selection? It may be possible that for example, those life forms which felt pain ran away from a threat to life survived, and those who did not feel it died; hence, consciousness that receives such qualia evolved.

Answer 113.

Indeed, We have warned you of a near punishment on the Day when a man will observe what his hands have put forth and the disbeliever will say, "Oh, I wish that I were dust!"

(Quran: 78/40)

Indeed, the criminals will be in the punishment of Hell, abiding eternally.

It will not be allowed to subside for them, and they, therein, are in despair.

And We did not wrong them, but it was they who were the wrongdoers.

And they will call, "O Malik¹⁴⁰, let your Lord put an end to us!" He will say, "Indeed, you will remain."

(Quran: 43/74-77)

Firstly, according to reductive evolutionists, life forms do not escape because of consciousness, but those that escape survive, and those that do not escape disappear. The changes happen in the physiology of the life forms. Survival does not require consciousness according to the reductive evolution theory. Most physicalists would reject a claim that consciousness is an effective aspect and/or substance of the physical.

On the other hand, survival is not the ultimate point of life forms. Consciousness has its own implications that are beyond survival. Many people would give up their lives for some things that are the subject of their consciousness.

Beyond a certain level of pain, a life form may lose its consciousness, though it should not if the survival is the ultimate point. Even, a human being may want to die, declare it, or commit suicide if there

¹⁴⁰ Malik is the name of an angel of hell.

is a pain beyond a certain level. Sometimes, people even commit suicide as a result of their conscious thinking and end their lives.

The above verses also contain similar examples.

So, survival is not a goal of a living creature but surviving with peace. Thus, peace is a need of the agent even if it negates survival. So, peace is real and not necessarily an emergent property.

If consciousness is an outcome of evolution, then consciousness would be effective. If it is not the outcome of reductive evolution, this entails that it is a power irreducible to the spatiotemporal. In both cases, it is obvious that transcendence is a real aspect of the existence.

3.6.1.2 Assignment of Consciousness to Things

And [mention, O Muhammad], the Day when the enemies of Allah will be gathered to the Fire while they are [driven] assembled in rows,

Until, when they reach it, their hearing and their eyes and their skins will testify against them of what they used to do.

And they will say to their skins, "Why have you testified against us?" They will say, "We were made to speak by Allah, who has made everything speak; and He created you the first time, and to Him you are returned.

And you were not covering yourselves, lest your hearing testify against you or your sight or your skins, but you assumed that Allah does not know much of what you do.

(Quran: 41/19-22)

The seven heavens and the earth and whatever is in them exalt Him¹⁴¹. And there is not a thing except that it exalts [Allah] by His praise, but you do not understand their [way of] exalting. Indeed, He is ever Forbearing and Forgiving.

(Quran: 17/44)

The consciousness is not only the attribute of human beings.

The following verses show the Quranic teaching that same consciousness within our actual bodies, can be rebuilt within other bodies, if our previous bodies are lifeless. Note the statement about receiving provision in the sight of Allah, and note also that some deceased persons have almost all of their faculties they used within their worldly bodies, while we witness that their bodies within our presence are lifeless:

And never think of those who have been killed in the cause of Allah as dead. Rather, they are alive with their Lord, receiving provision,

Rejoicing in what Allah has bestowed upon them of His bounty, and they receive good tidings about those [to be martyred] after them who have not yet joined them that there will be no fear concerning them, nor will they grieve.

They receive good tidings of favor from Allah and bounty and [of the fact] that Allah does not allow the reward of believers to be lost.

(Quran: 3/169-171)

¹⁴¹ Since some human beings do not exalt God according to the known consciousness, it is likely that there are different layers of consciousness unless the exaltation in the verse is an unconscious exaltation.

The above verses show that the same consciousness may be reconstituted in another spatiotemporal body. So, there is a common essence between these two bodies regarding that consciousness. Note that the spatiotemporal is only a small part of the reality of the agent.

Consciousness or its essence does not need to be located in a spatial place, since space is not the very fundamental reality.

Question 114.

Is not it difficult that every particle has consciousness?

Answer 114.

Allah may make things like in an automated system. So, for Him giving consciousness to one thing or trillion things are not different in terms of difficulty. These are easy for Him.

Your creation and your resurrection will not be but as that of a single soul. Indeed, Allah is Hearing and Seeing.

(Quran: 31/28)

And We did certainly create the heavens and earth and what is between them in six days, and there touched Us no fatigue.

(Quran: 50/38)

3.6.1.3 Relationship Between the Consciousness and the Spatiotemporal

Supposing that a conscious being and its consciousness are reducible to the spatiotemporal substance and properties, do its particles perceive/understand things (1) by their spatiotemporal states being changed or (2) without being changed?

If (1), then is there anything beyond the change in the spatiotemporal state which influences the conscious perception? If there is then what is it? If there is not, then is this perception just an illusion in a physicalist reductionist account? Yet, then the same questions are applicable to this illusion, since it is real and nothing less than consciousness: For example, it is unitary, it is consistent, in correlation with the spatiotemporal, and it interacts with the spatiotemporal as shown in part 3.4.12.1 about the free will power negation and brain observation experiments.

If (2), that is, if the perception is not correlated with or influenced by any spatiotemporal change, then what is this perception which is beyond the spatiotemporal change?

If the spatiotemporal and conscious were not related, then we would observe that things that are pleasant and unpleasant would continually and randomly happen, without us having any ability to change anything that we feel. In this respect, there are many questions that cannot be answered in a physicalist framework: Did the relationship develop through reductive evolution? At what point would it have arisen? How infinitesimal point-like instantiations of things in the group of the particles of the conscious agent would cause specific and related conscious experiences? How physical points would contain different conscious states as sorrow, joy, seeing...? How moving left or right would cause a conscious state or a “part” of a conscious state?

If our consciousness was reducible to the spatiotemporal, then there would not be any ought not to be, since, everything that happened, would be that which ought to be. For example, we see that there are sometimes tensions between what happens spatiotemporally, and what has to happen according to our consciousness; an addict distinguishes between the effect of the subject of his addiction, and of other things to which he is not addicted.

On the other hand, either the spatiotemporal has a property of consciousness; or it interacts with a substance of consciousness, wherefore, again it has a property of consciousness.

Hence both mental and physical are dimensions/elements of the same reality; they interact, and they are not essentially of separable nature. As they interact, physical entities and events “only within their physical dimension” cannot be predicted, since that which is only within the physical dimension will be only one part of a whole and hence it will be incomplete.

For the same reason, the mental also will be incomplete if considered as totally distinct from what we call the physical. They will be each a constituent of a whole.

In fact, the distinction of the physical and the mental, and seeing one superior to the other or more fundamental is unsubstantiated. As explained in part 3.5.6.4.2.6 about physicalism, the physical cannot be thought of separately from the mental. For some, the mental seems to be more fundamental, yet this also arises from a separatist approach.

The transcendent dimensions of both the physical and the mental are the dimensions of the same reality. Therefore, the physical has transcendent aspects of the transcendent reality of which it is just a dimension that we experience.

As this reality transcends ranges with equal encompassing capacity for entire ranges, to some extent there is no fully separable spatiotemporal ordering or sequencing for it. So, deterministic mechanisms and calculations are not fully applicable so as to presume the existence of absolute separations like the past and future, or here and there. It is like the non-locality observed within quantum phenomena.

Consciousness has its truth as anything else and this issues from the Truth of Allah which is also related to His unity. And some knowledge, freedom, and guidance are given to everything. The unity and transcendence of consciousness produce a meaning and reality for what it encompasses. Without it, that meaning and reality do not exist. The consciousness has an irreducible effect in this respect, and it is real.

The will power has a potential to produce a change in the world. It is expected to produce an act upon the will, otherwise, it is followed by zero 'work' as a physical term:

And that there is not for man except that [good] for which he strives

(Quran: 53/39)

The will power is important in this respect. It is tightly connected to the physical world and it should produce effects. Consciousness gets the data generally from the physical world. The will power exercises changes. The physical is like the extension of the mental regarding the effects of the mental. There is continuity between them.

Hence, objectivity, benchmarks, comparison, and interaction are key aspects of the physical. Consciousness is a single window. But it is the end point. The physical and the consciousness complete each other.

Some try to explain consciousness by complexity. However, there are single cell organisms which are not very different regarding their activities, than many animals we see around like dogs and cats. The paramecium which has no brain does almost all life functions of a bird. On the other hand, there is no reason to claim that a particle moving in a certain way does not produce consciousness, but many particles moving in a complex way would produce consciousness. A

person who weighs twice another person, does not report having two or more consciousness when heavy. When we gain or lose weight, or when we grow after a certain period, we do not notice any change in consciousness.

Yet, it is clear that consciousness and the physical interact: If one drinks tea which is too hot, he will feel pain; if one eats certain things, he can hallucinate...

One may posit that shape evolved to show that reaction; however, if that shape evolved like that to produce behaviors necessary for survival, then consciousness would be redundant and unnecessary. Yet, we observe that we have consciousness. Why a redundant attribute would evolve if reductive evolution is true? If it correlates with certain structures of a human being, then the human beings who would evolve to accommodate more useful functions than consciousness would survive better, hence, the consciousness would disappear. There is no reason to claim that structures more compliant with useful functions would overlap with development of consciousness as well. Hence, we can conclude that if evolution is true, then consciousness would be an effective additional capacity.

But if reductive evolution is false, then, consciousness is a distinct capacity which has not evolved through physical interactions of particles. Again, if reductive evolution is false, then consciousness is not supervenient upon the physical components, and it is an additional thing which gives the organism some additional input.

So, the considerations on evolution demonstrate that no matter whether it is true or false, consciousness has a distinct effect no matter what structure or substance is responsible for it.

If consciousness corresponds to the physical in a random way, then we would not expect an animal eaten alive feel pain, it might feel joy

in that situation if it was coincidental or it might be indifferent. So, the animal is real, and its consciousness is real and functional. If it felt joy when it was being eaten, then animals would not survive. So, some physical/ biological states correspond to some conscious states. Therefore, conscious states have distinct implications. A physical state does not randomly correspond to a certain conscious state. This also leads us to non-reductionism: An animal has different implications, not only physical implications. It has a tendency to survive, unlike the movements of atoms. On the other hand, this tendency is not instantiated at the level of atoms or electrons... We cannot say either that a living organism is like rocks rolling from a high place of a mountain. Rounder rocks roll more and become rounder and roll more... But there is no reason to claim that while the rock becomes rounder a consciousness will develop so that when it loses some parts and becomes less round, that consciousness will feel pain.

See part 3.4.12.1 about the negation experiments and brain observation experiments which also demonstrate the contradictions of considering consciousness reducible to the physical.

Question 115.

How can God make another being have consciousness?

Answer 115.

That things have consciousness is an empirical truth. God's existence does not depend upon conscious beings. And it is observed that there are conscious beings; and as explained in part 2.2.1, they are created and sustained by God. It is possible that we do not know how God gives consciousness to other beings, while we know that He makes them conscious.

Can consciousness appear if things are organized spatiotemporally in a certain way? This cannot happen unless we recognize that they can be encompassed and combined in a unitary dimension, since consciousness is unitary.

Question 116.

Are not the will power and any other power relative and like imaginary? Is the only existent just consciousness equal to a passive observation capacity?

Answer 116.

Relativeness of things does not mean that they are not real and effective. Rejection of God, would reduce them to a kind of an illusory, relative whole without any basis. But with the necessary God who is obvious, then everything has a basis. Their relative values which allow usage of units, show their consistency. And, as they have a sound basis, they are effective.

Moreover, as there is objectively observable change, even if the change was just in the form of qualia, there would be a power underlying it. So, even if it or what we experience of it is small, there is no limit to its nature based on the unity of God. So, when we feel the thunder it is not imaginary. Even an illusion is real as an illusion and it requires concrete energy.

3.6.1.4 Transcendence of Consciousness Through Space

Have an object in front of you, maybe a table, or a mug, or another one, and look at it. As you may notice, that object extends through space. Now let us suppose that parts of the object are instantiated within different neurons in our brain, and within different atoms... If this is the case, and if the spatiotemporal is as the physicalist claims, then each point of our brain being defined separately than

the others would contain something different; hence, as such, they could not produce a unitary whole of that object. Yet no matter what is the number of these neurons, or atoms..., it is not multiple particles wherein each part of the object is instantiated separately; our consciousness transcends all of those instantiations. This exemplary object might be replaced by the milky way, or by a set of numbers, or by an equation... What we are conscious of might be a sound, a smell, a novel, an equation, a number, a letter, a point in a space... The same applies to feelings, such as pain or joy: We transcend the waves and their parts from a burning finger, or from a delicious food.

The created consciousness may be related to the physical structure in that the physical provides some data that the consciousness needs. Yet this does not mean that the created consciousness is limited to a certain structure of a universe, it may have access to any kind of universes but it cannot be like the consciousness of God who is necessarily one and can create real things thanks to His necessary unity as reality relates to this necessary unity.

These are important because they show with what kind of inputs our will modules deal, and in what ways. On the other hand, they are also important in better understanding the multipotential causality of the agent in terms of his will.

3.6.1.5 Transcendence of Consciousness Through Time

Similar to the previous section, watch a falling object, or a flying bird... Do you transcend multiple moments of the process? Or is each second of the act confined separately to what happens within each process of each second in your brain? Is your consciousness divided for each time slice? If you think that these have been gathered within the memory sections of your brain, do you transcend only what happens in zero-width time brackets in your memory cells? Or

do you transcend in a continuous way what is going on through an extended bracket of time?

We can also reproduce an act that we did through time. This imitation also shows that our consciousness transcends time.

We obviously transcend events through time, though time is not very distinct from a structured set of relationships within space.

Consciousness is not limited with time, other than in degree in accordance with the designed limitations. We feel we are now. Actually, the continuity of our personality and consciousness in time and our transcendence even though the atoms or smaller parts of our bodies are replaced continuously give us an idea about the time transcendent nature of consciousness.

The above correspond to the question on “how the spatiotemporal parts of the brain produce the transcendent, subjective, and unitary experience of consciousness” which is coined as the hard problem of consciousness by Chalmers (1995)¹⁴². He underlines his point as follows: “Why is the performance of these (brain) functions accompanied by experience”. The easy problem is claimed to be finding the correlates of the brain that correspond to specific cognitive functions. This underestimates the easy problem, and overlooks the facts that the allegedly hard problem depends on the unity of the agent, and that this unity is at the core of the easy problem as the basis of the relationships within the correlates, within cognitive functions, and between the two groups. It also overlooks the fact that the existence of the cup is not less than the agent’s subjective conscious experience about the cup. It represents this aspect of consciousness that relates to the allegedly hard problem as something exceptional in the universe. But in fact, what is going on under what is called the easy problem is more fundamental and

¹⁴² (Chalmers 1995)

difficult; and the solution of the allegedly hard problem depends upon a satisfactorily complete solution of the easy problem. Once the allegedly easy problem is solved, the allegedly hard problem will be easily solved. Chalmers' formulation assumes that what is going on in the physical brain in terms of physics and the related relationships are relatively easy. It is easy to find out in detail which neurons are activated when we see a bird, or try to remember a friend's name. Yet, it is easy if we overlook its unitary aspects that overlap with the hard problem. Also, if we "question" what is time and what is space, and why there are real brains and objects of the consciousness, then we will see that the unitary aspect of time, and existence of the brains are not easier than the allegedly hard problem. Even if we take the easy problem to be concerned with the mere relationships between the physical brain and cognitive functions, explaining a mere synapse in the brain is not easier than the allegedly hard problem. The unity and the lively content of the consciousness are common and at the center for each problem. Once we can address the issue of transcendence and unity, both the easy and hard problems will be understood; if we cannot address these, then none of these problems will be understood.

3.6.1.6 Consciousness Has Unity.

Consciousness encompasses a range of things in a unity. The alternatives are encompassed within their unities as well. The final will is also encompassed as a will within a unity. The unity of the essence of the agent is reflected within the unity of the consciousness. The agent coordinates the elements of the whole of the agent in his unity.

3.6.1.6.1 Split-Brain Patients

Experiments show unity in consciousness even though there are split brains. Some further details on this have been given in part 3.5.1.1.2.

3.6.1.6.2 Consciousness in Dreams

If the essence is taken away in sleep as said in the Quran, how do we dream? Are there multiple consciousnesses within one agent?

As we explained earlier, we have sub-modules. These sub-modules may even have their distinct consciousnesses and free will powers. It is also clear that these modules communicate with the essence and whole of the agent.

There are different types of dreams. Some of them are special and relate to the essence who is shown certain real things sometimes in metaphors in a different realm. Dreams of Prophet Joseph (PBUH) explained in part 3.8.1.4.4.3 are examples in this respect. There are also dreams that may be the outcome of the inner workings of the sub-modules which are written to the memory. These may be accessed by the essence of the agent.

It is likely that the sub-modules or the essence exercise some free will power in the dreams.

These do not mean that the agent or his sovereign whole has multiplicity.

3.6.1.6.3 Unity of Consciousness and Differentiation

If consciousness has unity, and if it encompasses many things or ranges, then how can a differentiated thing be instantiated in a non-differentiated thing?

Creation has aspects involving unity and multiplicity simultaneously: A dog has legs, tail, mouth... But it is one animal. Its leg is also one organ. The cell of his leg is also a whole. So, what we see as multiplicity is in fact overlapping unities which are united in a unity.

Absolutely separate and multiple things cannot produce unity since they would not be within the same space, same time, and they would not be surrounded by any common thing. But unity can produce unities. If I have a kind of a unitary power of relating to two points, I can imagine a space.

Any differentiation, requires the definition of the differentiation, its unit, the definition of one thing in terms of other things. Hence, all those things constitute a unity. So, differentiation originates from unity.

Therefore, the differentiations within consciousness are unitary.

For further details see part 3.5.3.1 and 2.2.1.3.

Question 117.

If the essence is also differentiated, then where will be the transcendent power in unity? If we have a transcendent power in unity, as we are many, and as God also has a transcendent power in unity, then does not this mean that ultimately there are more than one decider on what happens, then how can there be only one God? If there is no room for another God, then how can we have distinct power to will things? Does not this limit the will power of God?

Answer 117.

Even if there is differentiation in the essence, there is also transcendent unity. We have a difficulty to reconcile multiplicity with unity. Because we generally see what we see, and we do not see our own essence. We see also the creation, and we do not see the Creator. When we see the tail of the dog, we see that it is not two meters ahead of the dog, we see it in a unity. Although our consciousness encompasses its entire parts, the parts are limited. And whatever we encompass is limited with distances. But if we do a careful

introspection, we will notice that the unity of our consciousness not only is reconcilable, but also necessarily constitutes a unity with the multiplicity of the parts of the dog. Had we not had our unity that produces our consciousness power, then we could not be conscious of the dog, since we could not bring together his tail and leg and mouth... and their components within each organ's unity. They would be instantiated ultimately within separate parts of our brains.

If we focus on the Creator and the creation, we will also conclude that not only multiplicity and unity are reconcilable, but also, that multiplicity requires unity: The distances that we observe are not other than unities overlapping upon unities. In accordance with the thinking of Parmenides: That which is, is; that which is not, is not. Hence, there is no nothingness that may be a distance between things so that we can talk of a real multiplicity.

Let us go into some further details. Let us examine "differentiation":

If the soul is differentiated within itself, how can it have a distinct and permanent identity if its internal relationships are changed? These differentiations are not absolute differentiations, they are just differentiations when we look from a limited perspective through our eyeballs, not through our unbiased minds. The soul's unity while it has differentiations, is like the unity of our consciousness which contains differentiations of its object. As explained above, actually they are overlapping unities encompassed with the overall unity of our consciousness. Similarly, the differentiation covered by the soul and the unity of the soul are consistent.

The contents of the conscious experience cannot be reduced to the spatiotemporal. Because the spatiotemporal has a total quantity Q_1 of states and sub-states of its own. Now, let us say that the agent A_1 has a quantity Q_2 of states of qualia as the feeling of "redness" and let us suppose that that feeling and qualia of perceiving the color red is an element of the spatiotemporal and will come on top of Q_1 of

the agent. If this is true, then the spatiotemporal components of the agent consisting of Q1 states and sub-states, will have to contain Q1+Q2 states which is contradictory. So, the qualia cannot be reduced to the spatiotemporal. Adding more spatiotemporal universes or dimensions will not end the contradiction since the same will apply in any case for that which is added. This shows clearly that there is also the dimension related to the consciousness.

To put it in a simpler way, let us suppose that all else being the same, if a particle moves to the right in the brain of the agent, this corresponds to consciousness of seeing the “red”. Now, the agent observes that the particle moves to the right and the agent is conscious of “red” + “seeing that the particle moves to the right”. The observations contain the qualia and the total physical states; but the observations in a realm of qualia is denied by the physicalist. Hence, they must be observed in the realm of the spatiotemporal. So, the spatiotemporal is inconsistently overburdened.

Our distinct power to will things does not happen in the realm of the divinity. It happens in the realm of the creation. For example, if I imagine a book, this has its distinct reality as an imagination. But it does not reduce the room of my imagination.

For further details see parts about God.

Question 118.

If God is One and His unity is essential for the creation and sustaining of anything, and everything is necessarily connected to His unity, then how are things identified and limited as distinct things? If even distances are elements of unity, then how can things own their distinct existence?

Answer 118.

We can conceive of a number of sheets of paper that is more than the neurons in our brains, or even we can easily conceive as if every electron in the universe is expanded into sheets of paper. Obviously, these sheets are not instantiated each within a specific neuron, they are connected within the unity of our consciousness, yet they are distinct.

On the other hand, no matter how we explain and conceive of the distinction of objects or other things, we will necessarily fill them within a kind of unity. So, the unity itself is what makes things defined, hence distinguished.

The existence of distinct things depends on the power of God. We empirically observe that beings who have distinct will powers have been created. When we try to create in our imagination a being who has his distinct will power, or subjective conscious experience, we will not succeed in imagining a sovereign whole who behaves perfectly on its own. But, when we imagine just a being like this, we seem to be able to make something distinct than us: It is not me, yet it had its eternal place in the existence as an imagination. It is not me; it is an imagination. Yet, it is real as an imagination. And, I made it although by the power given and sustained by God. It did not create itself, but it has its own distinct existence, its own nature. I exercised the power to make such a thing as opposed to another thing. Actually, we do such things every time we exercise our free will power. This is a simple example which shows that at least some distinct features of a distinct thing may be produced by another agent. But creating beings who have sovereign free will power and subjective consciousness is something much bigger.

Further details about this unity are given in part 2.2.1.

3.6.1.7 Consciousness and Responsibility

Consciousness is closely related to responsibility, though it is not a sufficient condition for responsibility. If a person is unconscious, we do not think that punishing or rewarding him in this state will be an exercise of responsibility. If a person does an act without being conscious, then we normally do not hold this person responsible.

Here, by consciousness I mean the consciousness about what an agent wills or does not will; hence the consciousness of the whole of the agent, not of his sub-modules.

Someone may forget to make an important phone call at a certain time. He may be busy doing something else. This is irrelevant with the aspect of consciousness I am talking about in this sub-section. This specific situation rather relates to the action side, and the ability to do a certain will: The agent might write somewhere, he could set up an alarm, he could ask someone to remind the phone call.

On the other hand, some things that relate to consciousness may influence the will power through the sub-modules. A specific type of car may cause someone drive fast, though the agent is not aware of this influence. These are of secondary importance in respect to consciousness that I am talking about in this sub-section.

3.6.1.8 Consciousness and The Freedom of Will

3.6.1.8.1 Is Consciousness Necessary for The Free Will Power?

Consciousness is our power to receive the reflection of states within our self and unity in a way which is meaningful, communicable, and usable for us. Qualia are what we perceive as the representation of states. Consciousness is also a power that provides input for the will power. Qualia are also recorded in memory. When we form a will,

this memory is used as input. Another usage of consciousness is at the moment of the will. Sometimes, at the moment of the will, consciousness may not be present except as a control. For example, when we drive and take a wrong exit because of focusing in another activity, our consciousness about driving may become active again. Or, when we focus on talking with the friend while driving, if there is an abrupt accident in front of us, our consciousness may be directed through free will power, to the accident and activate related areas of skills and memory in our brain. Consciousness may cause a will, for example when we perceive an earthquake happening, it may initiate specific wills in order to be safe.

Consciousness often affects our wills. Without evaluating alternatives through our consciousness, the alternatives are not sufficiently defined. We often do deep evaluations about the influences a specific will may have on our conscious experiences in the future.

If I go to a certain event as opposed to another, I may try to find answers to the following: Is it likely that I will meet someone I enjoy, shall I have hard time in the traffic while returning home?

Sometimes, an event which happened years ago and which had a big conscious impact at that time, may have been forgotten. However, it may be influencing our present wills even though we do not have an apparent conscious remembrance about that event. Psychologists try sometimes to discover such past conscious events. So, that we do not remember a consciousness related past event does not mean that it is not an input on what we will years later. It may have a conscious experience aspect that influences a current will, however, we may be unaware of it now.

Likewise, as we see in the following verse, there have been some events that we experienced in some parts of our existence, yet, we do not remember those events as of now:

And when your Lord brought forth from the children of Adam, from their backs, their descendants, and made them bear witness against their own souls: Am I not your Lord? They said: Yes! we bear witness. Lest you should say on the day of resurrection: Surely, we were heedless of this.

(Quran: 7/172)

Yet, they may have positive or negative contribution in the formation of our wills. But if they have implications, this means that their contribution is realized within our subconscious to some extent even though we are not aware of them. Hence some unconscious processes must be undergoing, triggering certain things, and producing results.

However, an important thing in the above verse is that the recognition of the God is something inherent in the soul and nature of human beings, since, although there is no invitation, evidence, or teaching about God, at that point, we merely gave a positive answer to a question. Hence, as also underlined in the following verse, some wills occur directly based on our nature:

Therefore, you shall devote yourself to the religion of strict monotheism. Such is the natural instinct placed into the people by GOD. Such creation of GOD will never change. This is the perfect religion, but most people do not know.

(Quran: 30/30)

Indeed, in what form can an average person be conscious of the tendency of the pure depth of his self, while it is buried under the noise of all kinds of structured messages?

Although the above verses show some positive influences, as noted in the following verse, responsibility requires a certain degree of vivid consciousness:

And never would We punish until We sent a messenger.

(Quran: 17/15)

A key aspect of responsibility is the ability to assess “what happens if I will this”, and “what I will feel if my will happens”. Therefore, the conscious perception of the result and agency is an indispensable ingredient of the responsibility. But these are not necessary for the existence of the free will power. If at the agent level there is consciousness about the fact that one alternative is different than the other, this is sufficient in terms of consciousness for the existence of the free will power.

When we experience an object of consciousness, we record that object, that feeling, that qualia in a kind of memory, so that the next time we can use it when necessary. Yet, often we may need to spend some efforts to retrieve the relevant record of conscious experiences from the memory. So, sometimes, even if we will something without related consciousness, we can blame ourselves for not being able to use it, to remember it. For example, if we miss an exit while driving toward a destination, and we feel unhappy and regret for not being careful enough, this may have an effect the next time we drive to the same destination. It is an element of learning process. A memory of hidden conscious experience is not non-existent; it may often grow by consciously experiencing similar events.

And sometimes, we forget that we were conscious, but later we remember that we were conscious where the necessary event happened.

There may be conditions which harm the processing of consciousness-related inputs by the will power, in the subconscious. This may be due to a health problem, drug usage, and so on.

Sometimes consciousness or recalling it may come after we declared the will or completed the related act. In these situations, we may correct that will or that act if possible.

The will as an act of the agent is complete with the consciousness power.

Consciousness is necessary for free will power. Consciousness is not a sufficient element of free will power. And freedom of will is not a necessary or sufficient element of consciousness.

Consciousness is necessary for responsibility in having sufficient comprehension about the object/ alternatives and implications of the will. Consciousness helps form the content of what one is free about.

Question 119.

Is not it possible that the agent is not conscious of what he wills but that there is freedom in inner modules of the agent?

Answer 119.

Inner modules may have freedom but it will be their freedom. Agent is another whole. To be free it has to transcend the alternatives. If lower modules have freedom then they should be responsible as well if they can satisfy the conditions of responsibility; but if they are responsible, their responsibility will be limited to their specific domain. One module may be coming dominantly to the land of the whole of the agent. Other modules and their alternatives being suppressed. Yet the module of the whole of the agent has the power to suppress the dominant one under normal conditions. This is because the whole of the agent can transcend those alternatives. The transcending module which covers all alternatives encompasses the conscious implications of those accessible alternatives.

Even if sub-modules are considered to have some kind of will, in a reductionist approach, they may compete until one of them suppresses others, since there will be only one alternative that will be willed. Hence, if the whole of the agent is rejected, there will be a

winner alternative that cannot be changed by the whole of the agent, since there is no effective whole of the agent.

3.6.1.8.2 Libet Experiments and Follow-Up Experiments

Often times, the opponents of free will power propose the Libet and Libet-type experiments as an argument against free will power.

3.6.1.8.2.1 The Experiments

A summary of the Libet and Libet-type¹⁴³ experiments is as follows:

The test subject is asked to do simple acts like moving his finger at times he decides within some time brackets of like 10 seconds. He is also asked to identify at what moment he was conscious of his related wills. A mechanism like a fast running clock is used for this. On the other hand, the brain activity of the agent is measured in order to find out whether there was any electric activity in his brain prior to the conscious will which correlated with the will and the consciousness about it, whether the brain activity would enable the prediction of the will of the test subject before the agent was aware of it. In more sophisticated experiments, the test subject is required to press either the right or the left button on a keyboard, and which parts of his brain becomes active is detected.

Furthermore, in some experiments it is measured whether the agent could veto his will before it was executed or stop during the execution.

The findings are as follows:

There is an electrical activity which is called “readiness potential” which starts to build up approximately 500 milliseconds before the

¹⁴³ Benjamin Libet did some of the early forms of these experiments.

agent consciously wills the related act. In some kinds of experiments, before 10 seconds it is possible to predict what button the agent will press with in 60% of the cases. The test subject is able to veto the will predicted based on his brain activity if he is informed to veto, until 200 milliseconds before the act.

3.6.1.8.2.2 Interpretation of The Experiments in Respect to Free Will

When I willed something, did my brain form that will even before I was aware of it, and did I just become conscious of it after it was finalized, without having any additional effect of my own on that will, but thinking that I have produced it?

This fundamental question has been very important regarding free will power.

Many opponents of free will power, strongly argue that Libet-type experiments empirically and convincingly support that the answer to the above question is positive: If before the agent is conscious of any will to move his hand a physical activity builds in the brain, and if only afterwards he feels that he wills to move his hand and then he moves his hand, this shows that the consciousness is a product of that unconscious physical activity. Or, if before ten seconds we can predict based on the physical activity in some parts of brain, with 60% accuracy that the agent will press the red or black button, this means that the consciousness depends on such physical activity. These show that the will is based on and reducible to the physical and deterministic processes. They argue that when there will be more sophisticated means, we will be able to increase the accuracy.

In the following sub-sections, we will see the flaws of such interpretations of Libet Experiments against free will.

3.6.1.8.2.3 The Flaws of The Interpretations of Libet Experiments Against Free Will (ILEF)

Note that the following flaws are in the context of using the Libet experiments against free will.

These experiments may prove consistent or useful in studying the functioning of the brain and its modules. This latter point is not analyzed here, since it is beyond the scope of this work.

Also note that the following considerations are based on the free will power as defined in part 3.1.2. So, they may be inapplicable in the context of some other definitions of free will.

3.6.1.8.2.3.1 Libet Experiments' Design Which Makes These Experiments Irrelevant for the Existence of Free Will Power

It may occur to a lady to will to cook meat-balls for dinner. But suddenly she may remember that there is no meat at home, but there is fish. Such are routine willing mechanisms. Our sub-modules propose draft wills. When our whole, or our essence which is the leader of our whole gets such a draft, it evaluates it by probing other sub-modules which may be relevant. Furthermore, it may get external data, such as checking if there is meat in the fridge if the memory does not return something certain. Or a motherhood module may say that the smallest of the children does not like meat so much, and that he did not eat anything at school.

In this respect, Libet experiments correspond to asking the subject "will to cook fish at non-periodical intervals". That is, the subject is required to use her sub-modules, not the free will power of the essence of her sovereign whole. And ILEF concludes that the agent does not have free will power. So, Libet experiments as such are

totally irrelevant to free will power, they cannot be used for or against the free will of the agent. Therefore, trying to use Libet experiments against free will is trying to disprove the existence of a thing by using an event which cannot contain that thing.

ILEF assumes that the outcome of the sub-module's free will power is equal to the outcome of the agent's free will power.

However, the whole of the agent and his essence assesses the draft will by its consciousness and the other powers. The default work of free will power is like this. We do not do whatever comes to our mind. But Libet experiments ask the subject to do whatever comes to his mind; hence, they ask the subject to do a behavior which is not a normal exercise of free will power.

If the accounting department of a company prepares a fraudulent tax declaration, and if it does not become effective before the top authority in the company approves and files it, then the company and that authority cannot be said to have no freedom just because it was prepared prior to the awareness and approval of that authority. They had the freedom, but of course not about something that did not reach them. So, unless Libet experiments prove that the will power at the agent level is executed, even before the agent is aware of it, they are not relevant to the free will power. If they claim that the conscious involvement of the agent is not effective on the will just because the will became predictable to some extent before the agent became conscious of it, this is false since veto tests demonstrate the opposite.

Can the experiment be redesigned so as to test the existence of a real and normal free will power? Of course, it can be. But, when it is redesigned so as to test a normal free will power, then there will not be any need to conduct the test, since the outcome of the test will be clear before it is run:

For example, to test really the free will power, in each round, the test subject must be informed of the prediction of the readiness potential, and he must be required to assess the variable implications of the outcome and finalize his will about moving his hand or not according to those implications. Such a realistic test recognizes that the willing process normally includes (1) an awareness about the draft will, (2) its control and assessment according to other modules and external data, and (3) approval or rejection stages.

The free will power of the sub-module observed in the readiness potential is not a coercive thing upon the free will power of the essence of the agent. It is not even at the level of the overall free will power. It is just one of the inputs. It may be accepted or rejected.

Question 120.

After being conscious of the first will, I may have a second will to change the first will; however, that second will may also have been prepared by my brain before I have been conscious of this second will. So, why would my ability to reject be an argument against ILEF?

Answer 120.

The second will will necessarily process the consciousness aspect of the first will and related alternatives. But as the unity of the consciousness and of the whole of the agent is logically and empirically substantiated, and as there cannot be an upward infinite regress, we can say that once the draft will is encompassed by the whole of the agent and presented to other available modules, and assessed by them, then the whole of the agent has encompassed all that is possible to encompass. The second will encompasses the first will's consciousness aspects and implications. Consequently, we cannot say that the brain produced the will deterministically or indeterministically, without the conscious involvement of the agent.

3.6.1.8.2.3.2 The Test Subject Is Aware of The Wills Since the Beginning and Before the Readiness Potentials.

ILEF do not consider the will of the test subject at the start of the test. If the test subject was told to injure each person in the test room at different intervals, probably he would not do it. So, when he agrees to proceed with the test, he is conscious already of what he will do, and he gives the relevant command to his brain at the start. He wills what to do, and he just left to a module the timing of the hand movements. He has also commanded to the relevant modules any restrictions. Therefore, he encompasses almost all things in terms of consciousness at the beginning. If a new thing occurs during the test, this will be incorporated within things to be willed and done. Otherwise, everything is settled in his consciousness in the beginning. If someone shouts during the test “Stop! Do not move your hand any more!” then the readiness potentials will change according to the conscious will of the test subject.

3.6.1.8.2.3.3 Libet Experiments Prevent the Test Subject from Using His Consciousness.

These experiments are structured so that the consciousness of the test subject is excluded from the tests at the beginning as well.

When we plan a will, we say “I will do it next week”, or “I will do it when an event happens”, or “I will not do it”... Then when conditions appear, we develop more specific wills.

The test subject is not allowed in his main will when starting the experiment to form his secondary wills for each movement based upon certain patterns. For example, he cannot will to move his hand precisely at the end of five seconds intervals. Or he cannot decide in

his main will, to move his hand upon hearing a noise. The experiment tries to artificially separate the will from the consciousness. Then the subject cannot do anything other than “hiring” a sub-module which maybe sets up a certain timing such as each 20 seconds plus minus 5 seconds.

It is clear that his secondary wills of each movement are tied to his main will. There is no possibility to say that the agent cannot incorporate his consciousness in his main will while determining the passage of time, or the noise as the thing upon which his secondary wills would depend. If instead of moving his hand, he was required to move a table from one side of the room to the other side, he would determine a different timing, and he would obviously have time to change his mind until he reached one side. So, his consciousness is active to some extent in the formation of his readiness potentials.

If the test subject was told to will anything freely, and if he decides to move his hand every 5 seconds, what will be the position of readiness potentials? Was he not conscious of each will at the onset of the experiment? Did he have free will power when he is set free? So, if he is not forced, he can be free and independent of readiness potentials.

Hence, when interpreted against free will, the Libet tests do not allow the test subject to incorporate his consciousness in his wills, so as to conclude that the test subject wills without consciousness. It does not look any different than putting a bird in front of the test subject and telling him to move his hand each time the bird moves, and then concluding that his conscious will was dependent on the movements of the bird, since the movements of the bird were detected to be some milliseconds before his conscious will to move his hand.

Obviously, some wills may be organized so as they depend on an external or random factor. However, this does not mean that all wills are like this.

Therefore, ILEF are not scientific and objective.

Anyway, Libet experiments which measure the vetoing ability of the test subject confirm to a limited extent the obvious effects of free will power observed in our daily lives.

3.6.1.8.2.3.4 Insufficient Precision

Let us imagine a test subject who is laying on his right, awake on the bed. We can predict that he will will to change his position. Because if he stays like that for too long, he may feel uncomfortable or even pain. Does this mean that he does not have any free will regarding his position on the bed? As explained in part 3.4.10, a minimal difference in will may make a big difference in the outcomes. And this big amplification power combined with reasoning may produce all that the agent needs in order to be effective on his own.

Likewise, if the test subject had the urge to move his hand at a certain moment in correlation with the readiness potential, does this mean that he could not delay or cancel it? Actually, the tests show that the test subject can cancel or delay these wills.

Readiness potential does not produce high predictability. The predictability is slightly over the random. For example, in the lateral experiments in the form of willing a or b, only 60% of the predictions is true. An unqualified guess would give 50% already.

On the other hand, the more the readiness potential makes the will predictable, the more obvious will the negation of the test subject be. The stronger the prediction on readiness potential, the stronger will

be the argument in the negation tests in part 3.4.12.1¹⁴⁴. The weird implications of 100% predictability explained in that part shows that a sufficient predictability to support ILEF cannot be obtained in Libet type experiments objectively structured in order to identify the reducibility of free will power to unconscious brain processes.

Can a prediction based on readiness potential have 100% accuracy? According to quantum physics and Heisenberg uncertainty, this is impossible. About this impossibility there are two approaches: One of them claims that even if we had full knowledge about a previous state, we cannot predict the future state. The other one claims that we cannot predict, but this is due to the impossibility of having full knowledge about the previous state, because any measurement changes that which is measured. Both ways, the impossibility of 100% predictability of a future state is agreed upon as a well-established principle, by almost all physicists. Anything less than 100% predictability in Libet experiments will be insufficient to support ILEF.

Question 121.

Even if there is no 100% accuracy the prediction, but there is 99% accuracy. Is not the impossibility of full unpredictability trivial in this context? In other words, maybe in very exceptional cases the agent can override the physical, hence it may be possible that often the agent cannot overcome what readiness potential entails.

¹⁴⁴ Note that the negation thought experiments in part 3.4.12.1 are different than veto in Libet experiments in that the negation experiments in that part refute the full determinism as well. Veto experiments would be trivial in that veto power of the agent might be considered within determinism according to the determinist.

Answer 121.

As long as there is no 100% predictability, free will claim will not be weakened. Because in terms of our tests in part 3.4.12.1, it is kind of a matter of black and white for the opponent of free will: If the agent is told that he will will the blue candy, and if he can will the red candy once in a million, this means that he can do this negation always, and this one test will show that he has the free will power in principle. Anything less than 100% predictability will not be proof for deterministic processes.

3.6.1.8.2.3.5 The Ability to Veto Shows That Consciousness Is Effective in Wills.

And [by] the soul and He who proportioned it

And inspired it [with discernment of] its wickedness and its righteousness,

He has succeeded who purifies it,

And he has failed who buries it [in corruption].

(Quran: 91/7-10)

And We have already created man and know what his soul whispers to him, and We are closer to him than [his] jugular vein

(Quran: 50/16)

The readiness potential is not a coercive factor. It is a part of the agent and it produces an inspiration to the essence of the agent. Yet, essentially the agent may negate it.

Even in the simplest wills, the time bracket of milliseconds allows the tests subject to veto what the readiness potential entailed. So, whether it is a will about timing of a movement, or whether it is a will involving lateral development of multiple readiness potentials, the agent has the capacity to veto the product of the readiness potentials. Hence, if within milliseconds an agent has this ability, then regarding issues where freedom of will can be exercised within minutes or hours or even years, the agent almost always incorporates his consciousness.

On the other hand, it should be noted that even after an act is committed, the agent may revisit it, and change himself or the act.

But whoever repents after his wrongdoing and reforms, indeed, Allah will turn to him in forgiveness. Indeed, Allah is Forgiving and Merciful.

(Quran: 5/39)

3.6.1.8.2.3.6 Conscious Experience in The Form of Memory Can Interact with The Will Power.

ILEF takes into account only the real-time consciousness: Even if we assume readiness potential builds with no real-time consciousness, it certainly interacts with the conscious experiences accumulated in the form of memory. For example, in many cases, psychologists find out some events of childhood which influence wills decades later even though the agent does not have vivid consciousness about that event. So, in the initiation and build-up of the readiness potential the wholeness of the agent may have some influence.

3.6.2 Agent's Ought to Be Truth (OTBT)

And Allah eliminates falsehood and establishes the truth by His words.

(Quran: 42/24)

That He should establish the truth and abolish falsehood, even if the criminals disliked it.

(Quran: 8/8)

This then is Allah, your true Lord; and what is there after the truth but error; how are you then turned back?

(Quran: 10/32)

And say: 'The truth has come, and falsehood has vanished away; surely falsehood is ever certain to vanish.'

(Quran: 17/81)

We have a specific being, truth, and structure. According to these some states ought to be: We have to drink water; we have to eat something. Many other states ought to be truly and objectively according to our truth. These states can be in different degrees, and there are optimal states within the combinations of these ought to be truths (OTBT). Our free will power does not only assess what we are conscious of as to the alternatives in the external world, but also transcends and navigates freely upon the OTBTs. In this respect our free will power works closely with our consciousness whom it constitutes a unity since the runner of both is the essence of the agent. It also transcends and navigates through reasons and knowledge.

When free will power transcends and navigates through two alternatives, it can also transcend and navigate through OTBTs which are inputs for free will power.

In the negation experiments and brain observation experiments, we saw that free will power has sovereignty in willing to touch the white or red candy. Likewise, free will power has sovereignty to stop processing any OTBT or to stop at any stage of the processing.

OTBT is not an overall coercive input or cause. As demonstrated in the free will power negation experiments, the agent can override even the spatiotemporal states of his brain; so, he can override such states that relate to the OTBT or ought not to be truth.

To be successful, the will of our essence is to be in harmony with the OTBT. There are objective OTBTs.

A human being's acts may be in harmony with its nature, or not in harmony with it. We can test that: We can ask thousands of people their preferences for jumping into the fire, or in the middle of ocean in extremely cold weather. And we will get significant and definite results which will show that there are intrinsic tendencies of human beings in harmony with their design.

Some may consider living in luxurious houses, having delicious food; going to beautiful places, and so on as the OTBTs. According to Islam, these are comprised within the OTBTs also as things that will be had in the paradise. However, there are bigger OTBTs as loving God and invoking His love and satisfaction, complying with divine values, submitting to Him for the ultimate truth and goals.

Through evidence and help of the All-Knower, Wise Allah, we can reach a relevant true knowledge which will help us be successful:

Surely with Allah's remembrance are hearts satisfied.

(Quran: 13/28)

The following verse contains the elements of the biggest success:

Allah will say, "This is the Day when the truthful will benefit from their truthfulness." For them are gardens [in Paradise] beneath which rivers flow, wherein they will abide forever, Allah being pleased with them, and they with Him. That is the great success.

(Quran: 5/119)

On the other hand, we all wish by default the permanent and best for ourselves, for the ones we love, and for whatever is good. There necessarily is a best for us. We will to will wills that we will ultimately approve and not regret.

However, though the will of the objectively best is intrinsically good for us, we are not always forced to will it.

Question 122.

A person generally does not know why he thinks what he thinks. So, how can he have any power over what he thinks and what he wills?

Answer 122.

There are some who know why they think what they think, and there are some who do not. We have the ability to know why we think what we think.

The question assumes that the agent is in a reactive position. However, there are objective truths: An agent must will what is good for him. "What is good for him" can be defined as "that which he will not regret", or "that which a specific agent ultimately wills". Or it can be defined in any other way according to the understanding of the "objective" of the definer. Everybody since childhood experiences

good and better, bad and worse. So, by default he has to look for the better if he is not low in effort and seriousness.

The agent has his own truth in accordance with his design and circumstances. There is a list of things that he has to think about, and an objective priority within what he thinks.

Since there are objective truths, the agent has to think about certain things. He must be proactive and since we are all vulnerable, there is always an open channel to be proactive. If he thinks about the optimal things that will be useful, then he will not regret that in any case. If he thinks about small or wrong things, then he will regret; but he can change what he thinks for the better.

So, the agent may know why he thinks what he thinks: He is vulnerable, so he has to find out the optimal truth for himself. The life will make him face lots of bifurcations. If he is proactive, then he will assess according to his objective truths the implications of going through each road. And he will know that he thinks those things because he is vulnerable as taught by many event and conditions each day. If he is reactive, and arrogant, and he overlooks his vulnerability, then he will not know why he took a certain road, he will not know why he thinks what he thinks. But if he is proactive, he will notice that there is a truth of himself, and that he has to think and perform according to his truth because of his vulnerabilities.

Hence, recognition of truth is important so as an agent may know why he thinks what he thinks.

Question 123.

You said: “Through evidence and help of the All-Knower, Wise Allah, we can reach a relevant true knowledge which will help us be successful.” But can we really reach such a true knowledge?

Answer 123.

According to Islam, the truth that is relevant for us is obvious. We are part of this universe; we know that we have not created ourselves. We are conscious, we know what is transcendence, and its elements. We design and make things, and we know the elements of design and production. We are part of the causal chains; we know what is necessary, what is contingent, what is sufficient. The knowledge given by Allah is consistent with our experience and supported by our experience.

When we observe the universe and reason, we can conclude about the Creator and Sustainer of the creation. We conclude about His attributes. We can conclude that He may have given us His guidance.

The knowledge of Allah is important in that it shows that there is an ultimate truth, and that we must be sincere in our search for the truth.

Some elements of this knowledge of Allah have been communicated to the human beings. This communication contains certain guidances as values such as justice, humility, truthfulness, thankfulness with which we need to comply. Allah also set the stage by saying that everything in our limited universe is the creation of Allah. Hence, we have to respect all things in the appropriate measures that Allah set.

Furthermore, Allah determined our attitude toward the human beings as an important benchmark of compliance with the truth and with the divine values. Human beings have been given an important status as noted earlier in that they have been given a potential to encompass the truth to a great extent. They have been given the potential to invoke the love of Allah to a great extent. Allah has even called the human beings “the viceroys” of Allah. They have been given a distinct capacity to know.

There is no reason related to the contents of the claimed guidance from God to reject them.

Our observations upon the universe, our achievements confirm these.

Hence, we have the capacity to know, there is the truth to be known, there is the Knower of the ultimate truth, there is the intention of the Knower to share it with those who need it. There is no reason for the impossibility to reach the knowledge of the relevant important truth.

3.6.2.1 The Necessity to use Free Will Power to Reach OTBT

O you who have believed, fear Allah and believe in His Messenger; He will [then] give you a double portion of His mercy and make for you a light by which you will walk and forgive you; and Allah is Forgiving and Merciful.

(Quran: 57/28)

Free will power is a power that we necessarily use because of OTBT. We cannot be indifferent in using the will power or not. There are some obvious reasons for this:

Firstly, there are best states that we conceive of. There may also be best states that we cannot conceive of. And our default will without even knowing them, is to be in this best state. Also, there are worst states that we conceive of, and worst states that we cannot conceive of. We want by default to be saved from the worst, and get to the best. We want to be successful:

Whoever is saved far from the Fire and admitted to the Paradise has succeeded.

(Quran: 3/185)

Free will power enables us to move within a region, or among alternatives. This region may be a region of geography, or good and evil... If we suppose for example that determinism is true and we do not have any free will power, we will be in a certain limited point. With free will power, instead of being condemned to what happens outside of ourselves, we consider the alternative points that we encompass, and we determine where we want to be. Thanks to free will power, we transcend and navigate through means that may be helpful to assess the truth, and we may navigate through alternative truths to have an idea about what our OTBT is and which region complies with this OTBT. States of things limit us to certain regions, and free will power enables us to choose between them. Hence, using our free will power to the maximum possible extent will be useful in any case; and not using it will limit our success.

Secondly, some wills are the opposite of others, and sometimes we regret some wills seeing that they have not been in harmony with our OTBT. Hence, there are situations where we have to exercise our will power, since if we do not, the likelihood of regret will be higher.

Thirdly, we also need to use it in order to reach the truth: Knowing the truth may increase the utility of the free will power. If we know the truth, we can find out which alternative will be better in order to be more successful. Free Will Power does not just move freely through alternatives to be chosen, but also through knowledge, and through the means to get knowledge. For example, if we do not know well the way to our destination, we can enter a wrong road and miss our appointment. But using our free will power, we can use a navigation instrument and go through the correct road. Hence, an appropriate usage of free will power will enable us to be successful in our actions.

Fourthly, many wills are related in a hierarchy. Some are higher level; some are relatively of lower layer. Some must be given priority

against others. We may want to be in destination D1. But if the wills are not harmonized, then we may be unable to exercise an ideal will power. If a will leads to D1, but another will leads to destination D2, then the freedom in willing D1 will be reduced. To maximize success, we need to harmonize the wills. But to harmonize, we cannot just turn all wills in the same direction, because, we may redirect a correctly oriented will in a wrong way just to harmonize. We have to harmonize them taking into account the OTBT.

Indeed, those who have believed and done righteous deeds they will have the Gardens of Paradise as a lodging,

Wherein they abide eternally. They will not desire from it any transfer.

(Quran: 18/107-108)

At some points, the free power to will an alternative must be stopped so that a better will may happen in a later situation.

As explained in the following verses, we need to purify ourselves from unbalanced low-level wills, and evils so that our wills that relate to our essence may be free. We have a whole that contains both this essence and our other desires. In any case, we have our free will power. But if our other worldly desires are dominant, then our whole will be diverted from the right path by our low-level wills, and we will regret the path we took:

And [by] the soul and He who proportioned it

And inspired it [with discernment of] its wickedness and its righteousness,

He has succeeded who purifies it,

And he has failed who instills it [with corruption].

(Quran: 91/7-10)

[Iblees (Satan)] said, "My Lord, because You have put me in error, I will surely make [disobedience] attractive to them on earth, and I will mislead them all.

Except Your servants from among them, the purified ones.

(Quran: 15/39-40)

Have you then considered him who takes his low desire for his god, and Allah has made him err having knowledge and has set a seal upon his ear and his heart and put a covering upon his eye. Who can then guide him after Allah? Will you not then be mindful?

(Quran: 45/23)

3.6.2.2 OTBT And Related Concepts

The truth is from your Lord, so never be among the doubters.

(Quran: 2/147)

In this section, OTBT and related key concepts will be briefly explained.

3.6.2.2.1 Ought to Be Truth

He sends down from the sky, rain, and valleys flow according to their capacity, and the torrent carries a rising foam. And from that [ore] which they heat in the fire, desiring adornments and utensils, is a foam like it.

Thus, Allah presents [the example of] truth and falsehood.

As for the foam, it vanishes, [being] cast off; but as for that which benefits the people, it remains on the earth.

Thus, does Allah present examples.

(Quran: 13/17)

Ought to be truth (OTBT) represents the objectively and truly optimal state that ought to be, in accordance with the structure, design, benefits, and implications of the agent. For example, to have food within appropriate measures is an OTBT of an agent.

An important expression closely related to OTBT is the “ought to be subjective state” (OTBS). OTBS is the state that ought to be according to the subjective considerations of the agent.

Some OTBSs may overlap with OTBTs. But it is unlikely that all OTBSs overlap with OTBTs. Yet, a diligent agent should try to get his OTBSs closer to OTBTs. This requires efforts to find out the OTBTs.

The agent has lots of inputs to be processed by the free will power.

Compliance of the alternative with OTBT means that the willed alternative is “ultimately” preferable for the agent regarding all of its benefits’ extent and permanence.

The distinct reality of the agent entails OTBTs for the agent that are distinct than and free from the OTBTs of parts and of other things.

If we reject the OTBT, then all there is “that which happens”. That which “ought to be” or “must be” and that which “must not be” become useless and ineffective. However, that which ought to be is an indispensable part of our lives and of our actions.

An important input is the existence of the OTBT of the agent. With OTBT, the agent’s alternatives get a truth value. And with OTBT,

the free will may be productive and efficient. Without assigning this kind of value to the present alternatives, the free will power is like having no input. Therefore, to make good use of free will power, the agent must assign truth values to the available alternatives by assessing them by his OTBTs. Also, based on his truth framework, he has to try to find out whether he has a good set of alternatives. Some OTBTs may be unknown by the agent, some can be approximately known. Some OTBTs may be used to find other OTBTs. An agent may determine his OTBT as “To have maximum possible utility for myself and for the good.” This can be a general but useful OTBT; it can be useful in determining more specific OTBTs.

OTBT appears because of our transcendence, existence, power, consciousness, and the existence of multiple states that are transcended: At the root level, even if there are multiple states which are equal, to experience one or more makes a difference. When we transcend a positive region consisting of different elements or sub-regions, there are alternatives and necessarily a will potential. Even experiencing all possible situations is just one alternative. So, the pure existence of transcendence and power on a region produces a room for OTBT upon which we can exercise our free will power. Compared to these, the design of our being in a specific way and its implications are secondary: Whether we are designed so as to live under the water, or on another kind of planet, or as vulnerable to health, or not is secondary. So, at its very origin, OTBT is the outcome of our very existence and fundamental attributes. So, fundamentally, that we have power and that we can transcend any extended region which contains any differentiation, hence, our will power, is at the origin of OTBT.

OTBT comprises the ultimately beneficial goals in harmony with the design of the agent. OTBT of the agent, are those OTBTs that the agent must try to find out and aim in harmony with his capacity.

The agent is expected to cause things not because of absolutely coercive attributes, but by exercising his free will power. He has been shown certain goals. To reach these goals, he has been given the free will power as well.

If the agent has powers, effects, goals, and needs of his own, then these are not reducible to other things. This means that the agent does certain things that his parts or past are unable to do.

In some situations, we may be indifferent regarding the alternatives upon which we exercise our free will power. We may be indifferent to eating the red candy or white candy. Or as in the “indifference curve” studied in economics, theoretically in choosing between alternatives we may have almost infinite numbers of sets of alternatives any of which is not different than others regarding the net benefit we get from them. A person may be indifferent between having a car C1 plus an apartment A1 and having a motorcycle M1 plus a villa V1. In cases where the agent wills between alternatives to which he is indifferent, he evaluates the OTBT as well.

Note that the evaluation about indifference also takes into account the OTBT.

What ought to be is relatively to available alternatives. If the alternatives are 5 apples and 10 oranges, the agent may choose 10 oranges. But if the alternatives are 10 oranges and 40 pears, the agent may choose the pears.

Say: "Everyone acts according to his own disposition: But your Lord knows best who it is that is best guided on the Way."

(Quran: 17/84)

3.6.2.2.1.1 Accessible OTBT

So do not let one avert you from it who does not believe in it and follows his desire, for you [then] would perish.

(Quran: 20/16)

Accessible OTBT is the OTBT related to the will that the agent can access with reasonable efforts.

Under normal conditions, there is no barrier between the agent and some OTBTs of the agent. For example, the agent has access to his need of safety.

Responsibility requires that the relevant OTBT is accessible to the agent.

There are optimal decisions from an objective point of view. The optimal may be either normally knowable, or not. If it is knowable, and if one diverges from it, then there is a situation that will cause negative consequences where someone may be held responsible.

3.6.2.2.1.2 General OTBTs

And not equal are the blind and the seeing, nor are those who believe and do righteous deeds and the evildoer. Little do you think.

(Quran: 40/58)

And it is He who placed for you the stars that you may be guided by them through the darknesses of the land and sea. We have detailed the signs for a people who know.

(Quran: 6/97)

And there is no creature on [or within] the earth or bird that flies with its wings except [that they are] communities like you. We have not neglected in the book a thing. Then unto their Lord they will be gathered.

(Quran: 6/38)

There are certain ought to be truths (OTBT) that relate specifically to the well-being of the agent. There are also general OTBTs that relate to other agents and other beings and things. According to the design of Allah, other beings are also His servants, and also should live and serve certain purposes. Furthermore, there are values which are important in respect to OTBT.

Some OTBTs relate to the objective goals according to the nature of the subject: The person who smokes and becomes cancer, will suffer because of cancer, his children will be orphan, his wife will be widow earlier, and he will suffer because of these. The nature of the subject requires to maximize the positive feelings, and to minimize negative feelings.

On the other hand, as the entire universe is the creation of the same God, to consider just one subject would be a shortsighted approach. A person who commits a crime may enjoy sometimes the consequences of this crime from an individual point of view. However, there is also a reality of the whole nature of the creation of God. And some of these are related to the act of an agent. Hence, the agent must appropriately care for other things as well.

There may be things bigger than the agent's personal OTBTs. The agent may sacrifice himself for a good which is bigger than his own benefit. However, the agent's OTBT is also related to all other goods that the agent considers good. For example, if the agent is in a position to sacrifice his own life for his country, or for his religion, or for his family, then these are considered by the agent bigger goods than the agent's own survival. In Islam, the highest truths of the

agent are in compliance with the guidance of Allah. If the agent dies as a member of mafia in order to save his drug trader boss, this obviously is not in harmony with the benefit of the society, or generation, or religion.

Here, “Ought to be” relates to the mission of the human beings who are assigned as the viceroys of Allah on earth to establish the good. Things that “ought to be” in this respect are called in Islam as “The Objectives of Islamic Law” (Maqasid-i Sharia’ah). These objectives consist of enhancing 5 elements: Religion, life, offspring, wealth, and intellect.

There are also ought to be truths that relate to the position of Allah: Allah must be respected, thanked, obeyed... These are non-personal truths since Allah does not need anything. These are also closely related to the OTBT of the agent and divine values.

Also, there may be other things who are loosely related to the OTBT of the agent. However, these also may be related to the OTBT of the agent under certain circumstances.

There are values that Allah promotes, and there are qualifications that Allah warns against as noted in the following verses:

Allah loves the good-doers.

(Quran: 2/195)

Surely Allah loves those who turn much (to Him), and He loves those who purify themselves.

(Quran: 2/222)

Allah loves the righteous.

(Quran: 3/76)

Allah loves the patient¹⁴⁵.

(Quran: 3/146)

Surely Allah loves those who trust [in Him].

(Quran: 3/159)

Indeed, Allah loves those who act justly.

(Quran: 5/42)

Surely Allah loves not the aggressors.

(Quran: 2/190)

Indeed, Allah does not love everyone treacherous and ungrateful.

(Quran: 22/38)

Allah does not love the corrupters.

(Quran: 28/77)

Indeed, He does not love the arrogant.

(Quran: 16/23)

Allah does not love the evildoers.

(Quran: 3/57)

For each [religious following] is a direction toward which it faces. So, race towards good deeds. Wherever you may be,

¹⁴⁵ Or steadfast

Allah will bring you forth [for judgement] all together. Indeed, Allah is over all things competent.

(Quran: 2/148)

An agent who knows suffering is not good, would need to defend the fact that making someone suffer unjustly must be prevented. If he says, “in case I am the victim, I defend this rule, but if I am not the victim, I am indifferent; if I gain by making someone suffer unjustly, then I am against that rule”, then he does not recognize objective truth. However, if someone believes in his vulnerability or in the eternal justice, he cannot defend such a statement.

There are such rules that extend beyond the agent, that may be applicable for other things in specific or general situations, or realms. For example, similar rules may be applicable in the world of animals, or other planets. Good and evil exist, they are real, and not equal.

According to Islam, the agent should recognize this truth, and general OTBT. These are connected to the OTBT of the agent. The agent should behave in harmony with both.

The agent’s OTBT and general OTBTs generally overlap. For example, if individuals act in harmony with moral principles, then there will be a good and safe society which in turn will help the well-being of individuals.

However, in this world they do not always overlap. For example, it is possible that a person who adopts justice may get little worldly goods, while a person who uses unjust means may be much richer. But on the judgment day and in the following life, the person who adopts justice will be in better position than the other one who will end up in the hell who will pay for his injustice, and suffer for his rebellion against his Creator.

3.6.2.2.2 OTBT And the Nature of The Agent

Say: "Everyone acts according to his own disposition: But your Lord knows best who it is that is best guided on the Way."

(Quran: 17/84)

That is because Allah would not change a favor which He had bestowed upon a people until they change what is within themselves. And indeed, Allah is Hearing and Knowing.

(Quran: 8/53)

Many OTBTs relate to the being and nature of the agent. We might have been created as beings who naturally lived under the sea. In this situation for example some of our OTBTs would be different. Hence, it is important to recognize our being. This will be explained further in the following sections.

3.6.2.2.3 Ought Not to Be Truth

Those who disbelieve and repel from the path of GOD, He nullifies their works.

And those who believe and do righteous deeds and believe in what has been sent down upon Muhammad and it is the truth from their Lord He will remove from them their misdeeds and amend their condition.

That is because those who disbelieve follow falsehood, and those who believe follow the truth from their Lord. Thus, does Allah present to the people their comparisons.

(Quran: 47/1-3)

There are also “ought not to be truths” of the agent, which are the opposite of OTBTs. But this is essentially a matter of wording. For example, we may say the OTBT of the agent is “not to burn alive” instead of saying the “ought not to be truth” of the agent is “to burn alive”.

3.6.2.2.4 Ought to Be Subjective State (OTBS)

And those who are constant, seeking the pleasure of their Lord, and keep up prayer and spend (benevolently) out of what We have given them secretly and openly and repel evil with good; as for those, they shall have the (happy) issue of the abode

(Quran: 13/22)

The agent may determine anything as his ought to be subjective state (OTBS), even though that OTBS is the outcome of factors that are not related to the essence and reality of the agent and even though that OTBS is the outcome of factors external to the essence of the agent.

For example, smoking originates generally as an addiction from the lack of balance and bad functioning of the agent’s brain. It may also be an outcome of bad reasoning or smoking friends. Hence, it is not the outcome of his healthy, balanced, and pure state. It also harms his well-being in the future. However, as smoking as an alternative is different than non-smoking and the agent knows this and wills smoking as opposed to not smoking, he exercises his free will power while smoking. However, OTBS can also overlap with OTBT on many occasions.

OTBS should be considered also as it relates to responsibility: If there is difference of opinion as to the OTBS, then there may be some responsibility in broad terms. For example, if the agent who is a mafia member does not (will to) deliver the drug, he may be blamed and

expelled by other mafia members or mafia leader. However, as OTBS is only subjective, this cannot be an ultimate basis for a really deserved blame or praise.

All wills are not equal in terms of truth. According to Islam, there are ultimately some truths. Using and selling drugs which harms the intellect, is according to Islam not an OTBT, it is against the objectives of the Shari'ah and of the Quran; it is an OTBT. Ultimately it will be apparent for the drug dealers that selling drugs is an evil act.

The direction of the pure essence of any human being as an agent and the pure essence of the society indicates the evilness of selling drugs. Hence, if some temporary benefits move an agent into a direction of selling drugs, then the pure essence of this agent and his optimal well-being has lost its direction and is dominated by external influencers which pull toward less than the optimal. The essence of the human being is enabled with a power to get closer to the truth. By letting those which do not have such an ability govern him, the agent is diverted from its pure, and inherent path. He has gone astray from the path that he has to follow. He left the rope extended to him to save him from falling from the cliff just to get and smell a small flower in a small rock, and he has fallen from the cliff.

Hence, when we talk about responsibility, we do not talk about the subjective responsibility that is based on OTBS.

OTBTs should not be generally considered on a line but on a road with a certain width regarding our responsibility evaluations: It may be discussed whether to marry a girl at 17. But it is clear that someone cannot marry a person who is just 5 years old.

3.6.2.2.5 Optimality in OTBT

And for all are degrees from what they have done. And your Lord is not unaware of what they do.

(Quran: 6/132)

The ones who have believed, emigrated and striven in the cause of Allah with their wealth and their lives are greater in rank in the sight of Allah. And it is those who are the successful.

(Quran: 9/20)

There are degrees within OTBTs, all of them are not same. Some of them are more important. These are the ones that will give the agent the best and most permanent well-being and success according to divine values, his design and conditions. Some OTBTs may be less important: For example, the agent may have to drink water at a certain time; yet, if he drinks later it will not be a big problem.

There is a nature of the agent, and some wills which are truly and causally related to the results. Some results are objectively better and more beneficial for the agent than other results.

If different OTBTs may produce different benefits for the agent, then there is room for optimization in the composition of those OTBTs. Let us take a simple example: The agent needs to drink something. According to his circumstances, he can drink water or he can drink orange juice. If he has already excessively taken the ingredients of the orange juice other than its water, then drinking water will be the OTBT. However, the agent may will to drink orange juice even though there is no objective benefit in it because of some physiological disorder or just to enjoy it for the moment. Here, note that the OTBT is the objectively optimal one. That the agent prefers orange juice does not mean that it is the OTBT. We assume here that

continuing to behave like that in total may cause health problems, and at the end he may regret what he once preferred. Yet, we cannot discard the subjective evaluation. Because the OTBT is expected to give the agent the optimal subjective experience when all benefits and harms are considered. The agent may have considered his ought to be subjective state (OTBS) as his OTBT and he may be wrong. If he did his best to use his free will power and other resources, then he may not be responsible. But if he did not use them, then he will be responsible. As the agent has free will power, he can will to will according to the OTBT or against the OTBT.

OTBT exists almost within any will situations. The agent should get closer to this. However, in practice, it is generally impossible to know all data related to the optimal composition of OTBTs. Also, the agent may not have enough processing time to determine it and act accordingly. The agent is responsible only with a pragmatic approach to get what is within his capacity. Hence, unless otherwise noted, OTBT mentioned in this book means optimal OTBT within the capacity of the agent.

The divergence from the optimal, may be due to conflicting partial, low-level, or short-term goals of the agent. There may be choices in favor of such goals instead of long term and bigger goals. Generally wrong wills are due to the immediate and strong pressure of such low-level goals. In such cases, there is a will which is the result of wrong reasoning, wrong knowledge, and bad performance in using the free will power.

3.6.2.2.6 The Truth

Say, "Who provides for you from the heavens and the earth?"

Say, "Allah. And indeed, we or you are either upon guidance or in clear error."

(Quran: 34/24)

The Day they are thrust toward the fire of Hell with a [violent] thrust, [its angels will say],

"This is the Fire which you used to deny.

Then is this magic, or do you not see?

[Enter to] burn therein; then be patient or impatient it is all the same for you. You are only being recompensed [for] what you used to do."

(Quran: 52/13-16)

So, they will admit their sin, so [it is] alienation for the companions of the Blaze.

(Quran: 67/11)

The dictionary definition of truth is as follows: (1) The body of real things, events, and facts. (2) The state of being the case. True is defined as follows: Being in accordance with the actual state of affairs.¹⁴⁶

The distinction between truth and error is a very important concept in the context of free will and responsibility. Even if we have free will power, in case there is no true and false, it would be impossible to claim that someone did or willed a praiseworthy or blameworthy act. It would be impossible to say that someone benefited from his free will power.

If we do something good, it must be truly good. It must not be an error, or erroneous good. If someone kept his promise, the promise must be true as a promise. If it is nothing but only interactions of

¹⁴⁶ (Merriam-Webster.com 2020)

particles, then it is not a promise. If someone claims to have said the truth, believes that he is reducible to particles, then the truth he claims to have said is an error, since the contents of what he said as truth, do not exist as truth. Because, even if he said something about certain particles, they would be just epiphenomenal things.

Truth in regards to OTBT relates to the truth value contained within a statement, and the facts to which this truth value corresponds. As the mental and physical are not fully distinct from each other, the existence of truth that no human being stated, or truths that exist only as statements are also possible. Allah is Obvious Truth, and that which is created and sustained by Allah, that which exists within the transcendent unitary knowledge of the All-Knower is truth.

Truth is a key concept in the Quran, and is an important element thanks to which free will power¹⁴⁷ may exist and act regarding the truth. Going astray from the truth, is an important factor which causes negative responsibility. And to be in harmony with it is an important element for positive responsibility.

Truth is a core element of responsibility, a core reason to use free will power. It produces the possibility of being wrong, the possibility of having willed that which will be unwilled, regretted, the possibility of inconsistency.

A person may will to smoke, may choose to be wrong. And in some cases, at the end we cry that this had not to happen, which demonstrates a truth besides the physical truth, because according to physical there is no “had to be” or “had not to be”.

¹⁴⁷ As explained earlier, free will power requires at least that the agent is able to assess that one alternative is not the other alternative. That one alternative is not the other one is also an aspect of truth.

The truth may be a being, object, state, statement, or any other thing which complies with the knowledge of God. The most relevant attributes of God in this context are All-Knower, Designer, Creator, Sustainer, One, Obvious Truth. For example, if there is no dog in a specific room according to the knowledge of God, then that there is a dog in that room is false. If there is a dog in a specific room, then a statement that there is no dog in that specific room is false. In the latter case, a statement that there is a dog in a specific room is true.

Some elements of the agent are essentially changeable and contingent. For example, human beings might have been created in a form of fish, living under the water, dying outside if unaided, yet they might have current mental powers. Some changes may also be partial or temporal. For example, someone may develop a new allergy to a certain food. Some such changes may be done by the agent himself. OTBT of the agent also may depend on these changes, and change accordingly.

Some structural and partial changes may be necessary for the overall good of the agent. Sometimes, the partial aspects of the agent may negate the big goals of the agent. For example, if there is a tumor that caused the agent to be a pedophile, he may want it to be removed.

The agent must know well his vulnerability and seek refuge in the truth and hold fast to it at all times. If he finds a truth, this may be a strong link to the OTBT and correct will.

If there was an event by which the agent constructively experienced that the fire must be avoided, this pattern-like relationship will help the agent to exercise his free will power productively.

The subject may make use of the patterns, relationships, and attributes of things to find his way.

3.6.2.2.6.1 The Truth Exists

Guide us to the straight path.

The path of those upon whom You have bestowed favor, not of those who have evoked [Your] anger or of those who are astray.

(Quran: 1/6-7)

Would one of you like to have a garden of palm trees and grapevines underneath which rivers flow in which he has from every fruit? But he is afflicted with old age and has weak offspring, and it is hit by a whirlwind containing fire and is burned. Thus, does Allah make clear to you [His] verses that you might give thought.

(Quran: 2/266)

According to Islam, there is truth. The truth originates from the “Manifest Truth” who is Allah. Our claims are not reducible to or supervenient upon the spatiotemporal behavior of particles that exist within our bodies and brains. Likewise, our goals, feelings, the evil and the good are not epiphenomenal or reducible to those things either.

There are fears and hopes. There are objective truths in different layers. It is objectively true that there are subjective fears and hopes. And that at the end there may be a fearful or happy situation is also an objective truth. And the wills about an end depend on these. Even if someone claims that there are no objective truths, this is necessarily claimed as an objective truth: In other words, he means “the state of affairs, independent of me, is so that there are no objective truths”. If this is not claimed as an objective truth, then it would have been uttered merely as a noise, not as a noteworthy claim.

As each of us experience joys and pains, we can say that in any case there are objective truths in this respect.

Our consciousness or structure might be designed so as to be indifferent to anything. But there is truth and a specific direction: For example, our consciousness/ structure produce “unwilled states” as pain under certain circumstances. Thus, there is “must be” or “good” or “preferable” states and the opposites. Also, there are consistent and inconsistent statements related to the agent. These constitute the truth about our consciousness and structure regarding what is the good situation which is consistent with them.

But what if consciousness itself is an illusion?

Consciousness is directly related to OTBT.

If we had no consciousness, and whatever happened to an agent was like whatever happened to a rock, and if there was no agent who would distinguish a rock from a human body, then could we talk about any “ought to be” thing, any preference, any good, or any bad?

So, it is useful to revisit here the ontological status of consciousness as it relates to the truth. Does it have any causal effect, or is it just epiphenomenal? If it is just epiphenomenal, then, OTBT of the agent would also be epiphenomenal since it is tightly connected to the consciousness. But can consciousness be epiphenomenal and/or supervenient upon the physical?

Obviously, it cannot. Let us suppose that we advanced our technology so well that we found out that if objects/ particles are structured a certain way, they cause the qualia of a consciousness seeing the “red” color. Any time we form that structure with those objects, this feeling happens repeatably and testably. Let us suppose that we can access the feeling of that structure. Would this demonstrate that consciousness is supervenient upon the physical?

No. In this case, we would have only seen a correlation between the appearance of that qualia and the corresponding physical structure. However, then where would the qualia be located, in which regions of that structure? At what point in the change of the structure would it appear? Why would it not be another color? What would the “red” “thing” be? If the physical structure would have these qualifications, then instead of the consciousness being supervenient upon the physical, we would rather say that the physical is not distinct at all from the consciousness, because, then we would have to recognize and assign a transcendent unity to the physical, both as a qualia receiver and as a qualia producer. The spatiotemporal would have a nature of being a conscious receiver, and that would be inherently qualified with qualia instead of being propagators of qualia-free waves. In this situation we would be talking about a different nature which is neither physical nor conscious as understood by the physicalist. This shows us that consciousness is not epiphenomenal or supervenient upon the physical/ spatiotemporal. This would also show us that the spatiotemporal has unitary locality, transcendence, and unity. Hence, consciousness does not appear out of nowhere or out of nothingness. It has an origin which contains consciousness. So, OTBT which is related to consciousness must also be like this, it has an origin which can produce what “ought to be”. Such fundamental, non-epiphenomenal aspects or alleged substances cannot arise from nowhere. If they were not existent, then they could not produce themselves. And something that does not have an essence which encompasses consciousness cannot produce them. Therefore, the basis of “ought to be” exists eternally. Hence, the truth exists.

To recognize the truth within physicalism is impossible because there is no transcendent and real understanding of things in a separated framework of the spatiotemporal. The point-like things being instantiated on point-like things, and all being exclusively no more than such point-like interactions, there is no room for

“understanding” which requires integrating, transcending, conceiving, and unifying multiple facts. Bumping one onto another does not change its nature when more numerous and complex are the numbers of bumping. Chinese room example is relevant in this respect¹⁴⁸.

In physicalism, there cannot be any noteworthy claims either, since the agent is no more than a group of particles bumping one onto another. However, recognizing the existence of truth within a consistent system is important for the healthy functioning of free will.

Question 124.

Does Islam maintain the existence of truth based on any one of the correspondence, coherence, or pragmatism theories?

Answer 124.

Correspondence and coherence theories are reminiscent of dualism. Therefore, they raise some unnecessary problems as follows:

The correspondence theory, postulates that there are facts outside of the mind, and the exclusive tools of the mind are true as long as they correspond to those facts. This creates problems like the following: What is the truth of negative statements, or counterfactual statements such as “if you had come, you could have eaten the cake”?

Regarding coherence theory of truth, which postulates that the truth depends on the coherence of the related propositions, the problems are as follows: (1) There can be many coherent systems in the mind that are not true. (2) If coherence is contained only within the

¹⁴⁸ (Searle 1980)

mental, then how can we exit from the mental and check the external world, since in any case, the external world is a reflection in the mind.

In Islam, although the mental and the physical have some different aspects, they are yet the parts of the same system. Therefore, the problems within the correspondence framework are easily addressed as follows: The negative statements that do not exist have a truth within the transcendence of the mental. When we check that there is no moon in the car, or when we claim that there is a specific thing in the car, and nothing else, according to certain definitions, these claims form a whole with the physical; so, the mental and physical complete each other. The transcendence of the mental, and the physical are both real and they are not fundamentally separated. Likewise, counterfactuals are also real and can be taken together with the physical.

As to the coherence, there can be many mental conceptual systems which are coherent within themselves yet false. But, as the external and the mental constitute a whole, they can be checked by each other whenever there is a sign of inconsistency. On the other hand, the mental and its fundamental dynamics are not different than the fundamentals of the external/ physical. They are combined and constitute a unity. So, there is no need to differentiate fundamentally between the mental and physical in this context. The connection within each of them and between them requires a fundamental unitary basis/ power. This is God.

Therefore, if they are both elements of the same system, then there is no problem of deficiency when the allegedly deficient, incomplete, or false parts/ aspects within each of them can be amended or eliminated by the other.

Regarding the pragmatic approach which says in summary that something is true if it is useful, we can say that it is incomplete.

Because it has ambiguous elements, since usefulness is not general and impartial enough to define a broad concept as the truth. For example, the same statement may be useful for some and harmful for some, or may be useful at some time, and harmful at another time. Relatives of a patient who is about to die may hide from him what the doctors told, so as not to make him upset. Yet, in the last hour, the patient may hate that they lied, because he could not do some things that he could do had he known the truth.

Question 125.

Is not explaining truth by God moving the goal post? Is not it explaining something with another thing which is unexplainable?

Answer 125.

Without God, whatever explanation we make, will require a meta and God-like explanation in any case. Every relationship requires unity. Unity and transcendence cannot be explained by anything else. Explaining unity with multiplicity will be complicating it, without any added value. Explaining things is making them simpler in a consistent and reasonable way. For example, when we explain a machine, we disclose the connections between a part and another, a process and an outcome, so we display the unities. To explain it, means to make it simpler by presenting each relationship which embodies, connects, and causes many things and aspects. This way the student understands, transcends the connections and goals. So, if it does not work, he can determine what interrupts the unity in its working; or when necessary, he can shorten some of its processes and make it more efficient. Hence, the point-like interactions which look separable, are in fact encompassed within a unity. Then how can this unity be explained other than by recognizing this unity and recognizing its being more than what we can contain, since our

unities are also contained within a unity? The unity and transcendence of our consciousness is similar this.

Therefore, in any case, there will be a final explanation based on a transcendent unity, which cannot be rendered any simpler in terms of unity, which also encompasses all potentials and actuals.

Question 126.

Considering our deficiencies, if we claim that something is true then there will be a contradiction in our claim. Furthermore, we do not access all truth. So, if we say that we say the truth or know the truth, then what we say will be based on our incomplete and maybe inconsistent knowledge. So, how can we claim that something is true?

Answer 126.

We will show them Our signs in the horizons and within themselves until it becomes clear to them that it is the truth. But is it not sufficient concerning your Lord that He is, over all things, a Witness?

(Quran: 41/53)

"Read your record. Sufficient is yourself against you this Day as accountant."

(Quran: 17/14)

We are not outside of existence or reality. Our inner world is a part and a model of the entire universe and has similar properties. In it we can find unity, multiplicity, consistency, dependency... If they happen within our inner world, then there is no reason for claiming that it cannot be outside of us. We do not need to encompass the entire existence to know some all-encompassing fundamentals. Some

things can be rationally generalized with consistent, unbiased, and correct methods.

We have the power to transcend a premise and its opposite, formulated so that one of them must be true.

Say, "Who provides for you from the heavens and the earth?"
Say, "Allah. And indeed, we or you are either upon guidance or in clear error."

(Quran: 34/24)

Regarding such formulations, some group will be upon the truth, some will be upon the error. What we need to do is to try to do our best. Regarding all worldly matters we do like this. In big truths also we need to behave like this. Allah tells us that the truth which is relevant for us is findable thanks to the signs provided by Him. And He tells us that He will let us know the results and the truth, as underlined in the following verse:

So, vie one with another in good works. Unto Allah you will all return, and He will then inform you of that wherein you differ.

(Quran: 5/48)

As in a computer calculation we know that there is a truth beyond us even if we cannot jump outside of our self/ mind/ control/ power. We can make a computer do a very difficult calculation, that we may do manually may be within days. Yet, this computer which is different than us, does it. We can check whether it is real or not by many means. So, we know for sure that we are not dreaming of a computer, we know that it is true. Hence, truth and error are not equal, and we can distinguish to some extent.

Yet, the computer also has limitations. We can observe the unity and consistency within ourselves, and outside ourselves. We discover

certain relationships that are all-encompassing. We use them in our daily life successfully, and they have proven themselves successful. We use them consistently. We have to have a sound reason for not using them in a specific context. Our deepest being cannot be without that unity and consistency.

By using empirical evidence, our deepest features, and fundamental laws of thought, we can conclude about the unitary source of all, as explained in part 2.2.1.3. Then, based on this source, we can understand all things in a systematic way.

Allah says the truth, and He guides to the [right] way.

(Quran: 33/4)

Allah knows that indeed they are liars

(Quran: 9/42)

So, rely upon Allah; indeed, you are upon the clear truth.

(Quran: 27/79)

3.6.2.2.6.2 The Importance and Superiority of Truth

Have you not considered how Allah presents an example, [making] a good word like a good tree, whose root is firmly fixed and its branches [high] in the sky?

It produces its fruit all the time, by permission of its Lord. And Allah presents examples for the people that perhaps they will be reminded.

And the example of a bad word is like a bad tree, uprooted from the surface of the earth, not having any stability.

(Quran: 14/24-26)

True servants of the Compassionate (Allah) are those who walk on the earth in humility and when the ignorant people address them, they say: "Peace".

(Quran: 25/63)

Truth is dominant and superior. It adjusts things. If one changes the regions of his brain so that two plus two equals three, then three will mean four. And in the course of time that which corresponds to "two plus two equals three" will be something else.

Truth has infinite checkpoints. It unites everything within its unity. The common point of "existing" of all true and existing things will clarify all that does not exist: If "an ordinary elephant cannot be squeezed in an ordinary bottle", and if someone claims the opposite, either the first claim is true or the second. If the first is true, then we need to discard the second. If the second is true, then we need to redefine ordinary and other words in order to be able to reconstruct a unitary structure which complies with our empirical observations.

Imagine you inspect your brain and a certain state of neurons/atoms... correspond to $2+2=4$. You rearrange them so that they correspond to $2+2=3$. Shall it stay like that? And will you keep believing the latter? Or will they be restored to the previous state? Why? And if other factors or laws push them to the previous equation, why do these factors and laws comply with it? And why would the particles/ waves/ states comply and return to the first state? Note also that the need to explain truth and everything is contingent.

Some time later, there will arise inconsistencies within him, and he will be pushed to conclude that $2+2=4$.

The agent has inherent features/ criteria/ direction/ truth as in the above example on $2+2=4$, for the determination of the best alternative.

If free will power through its navigation finds such a truth, then this truth will help the agent to be free from the influences of non-coercive causes that may lead to error.

3.6.2.2.6.3 The Criteria to Distinguish the Truth from The Error

Say, "Who is Lord of the heavens and earth?" Say, "Allah."
Say, "Have you then taken besides Him allies not possessing [even] for themselves any benefit or any harm?" Say, "Is the blind equivalent to the seeing? Or is darkness equivalent to light? Or have they attributed to Allah partners who created like His creation so that the creation [of each] seemed similar to them?" Say, "Allah is the Creator of all things, and He is the One, the Prevailing."

(Quran: 13/16)

The agent needs to develop the criteria based upon the relevant truth that is accessible to himself in order to find out the OTBT. The unity and consistency of the existence based on the unity of the Creator is important in trusting the truth.

The Quranic teaching gives us lots of details about these benchmarks. Many of them are explained in this book as they relate to different aspects of free will. Some of them are unity, empirical and logical consistency, reasonability, completeness, objectivity, balance, being free from the emotional influences of our society and ancestors.

3.6.2.2.6.4 Objective Versus Subjective Truth

But those who disbelieved their deeds are like a mirage in a lowland which a thirsty one thinks is water until, when he comes to it, he finds it is not aught but finds Allah before Him, and He will pay him in full his due; and Allah is swift in account.

(Quran: 24/39)

They will say, "Our Lord, You made us lifeless twice and gave us life twice, and we have confessed our sins. So, is there to an exit any way?"

(Quran: 40/11)

Indeed, those who have believed and done righteous deeds they will have the Gardens of Paradise as a lodging,

Wherein they abide eternally. They will not desire from it any transfer.

(Quran: 18/107-108)

And Allah will establish the truth by His words, even if the criminals dislike it.

(Quran: 10/82)

According to the Quran, there is the truth according to the All-Knower Allah. Human beings also claim that they have some truths. And obviously, in some contexts there are differentiations between what Allah knows and what human beings know as truth. So, there are also errors. Actually, regarding the claims where the law of non-

contradiction applies, one claim is true; and the opposing claim is false, hence only subjectively true.¹⁴⁹

So, according to Islam efforts to comply with the objective truth are extremely important. In this respect, the free will power becomes very important and necessary.

According to the Quran there are objectively good and bad states. To be immersed into sea water for a certain fish is objectively good for that fish, while to be immersed into sea water for an unaided human being longer than a certain time is objectively bad for a human being under normal conditions. The goodness and badness are in accordance with the design of Allah: For example, there are angels assigned to hell. Yet, this is no problem for them.

3.6.2.3 Key Role of OTBT Regarding Responsibility

And recite to them, [O Muhammad], the news of him to whom we gave [knowledge of] Our signs, but he detached himself from them; so, Satan pursued him, and he became of the deviators.

And if We had willed, we could have elevated him thereby, but he adhered [instead] to the earth and followed his low desire. So, his example is like that of the dog: if you chase him, he pants, or if you leave him, he [still] pants. That is the example of the people who denied Our signs. So, relate the stories that perhaps they will give thought.

(Quran: 7/175-176)

¹⁴⁹ This sub-section deals with the types of effective truth claims that can diverge. There may be some subjective truth as the preference of a person for a certain color. This is a truth as a subjective preference, and it is not very relevant to this section.

Do not, then, follow your low desires, lest you swerve from justice: for if you distort [the truth], behold, God is indeed aware of all that you do!

(Quran: 4/135)

[We said], "O David, indeed We have made you a successor upon the earth, so judge between the people in truth and do not follow [your own] low desire, as it will lead you astray from the way of Allah. Indeed, those who go astray from the way of Allah will have a severe punishment for having forgotten the Day of Account.

(Quran: 38/26)

And as for him who fears to stand before his Lord and restrains himself from low desires,

The Garden is surely the abode.

(Quran: 79/40-41)

A person is not praised or blamed ultimately for being free, but for complying or not complying with optimal truth. This is the ultimate thing. Freedom relates to the causal connection between the related will and the agent. Freedom is more like a condition and a means, while the content of the act and its connection to the OTBT is the essence for praise or blame.

In the context of a will and existence of relevant truth, the agent is either going astray from the truth or not. If he does not go astray, then the OTBT requirement is satisfied.

If he is going astray, then, OTBT is either knowable/ achievable or not.

a. If it is knowable/ achievable, then,

- i. Either the person did not do his due diligence or
 - ii. He is assigning higher value to his subjective truth. And he is assuming responsibility.
- b. If it is unknowable/ inachievable, then he is not responsible.
- c. Or the cost of due diligence may be higher than expected benefit from optimisation. This may be an alternative cost. The alternative cost may be unknowable by the subject. For example, a disbeliever may be disliking a higher power, and even the fire may have little weight and implication for him compared to complying with or submitting to this power. If he changes his mind while in hell then he admits he was wrong in the beginning as well, the magnitude of the error, the magnitude of the obviousness of the truth, and the potential to access this truth are important elements to consider in this context.

For responsibility, it is necessary that the alternatives are defined or definable in terms of truth and have different truth values: Suppose that there are two boxes, and in one of them there is a good thing and in the other a bad thing. If I chose between the two without knowing what are inside them, did I exercise my free will? Assume I have free will power to choose one of them. But knowing simply only that there are different alternatives inside them, I am not having the object of my will, I cannot relate each box with the OTBT.

Question 127.

Why would I be blamed or praised for my wills that originate from my OTBT?

Answer 127.

Generally, OTBTs are the same for every human being. Freedom or responsibility is not applicable for why one has specific OTBTs. They

are applicable in the context of responsibility because of the potential deviations from them. The agent can exercise his free will power to stay on the track of OTBT or deviate from it. If he uses the free will power to stay on the track of OTBT, then he will be successful and praised; otherwise, he will fail and be blamed. Hence, OTBT, its accessibility, and knowing it are important for responsibility.

3.6.2.4 Key Role of OTBT As an Input of Free Will

And it is He who placed for you the stars that you may be guided by them through the darkneses of the land and sea. We have detailed the signs for a people who know.

(Quran: 6/97)

For those who recognize truth, free will power has real importance. Because then there will be true and false. And for them a will may be differentiated from an opposite will in a fundamental way.

The needs and main processes related to the OTBT to know, to be aware of and/ or to be run by a serious and diligent agent would be as follows:

1. The vulnerability of the agent,
2. The relevant OTBT,
3. To search for relevant alternatives,
4. To compare and evaluate relevant alternatives,
5. To will the best alternative.

The truth of the agent requires the above by default. None of the above is dubious and unknown; and all of them are practiced by the normal agent in many situations in the daily life.

Unmindfulness, low effort, and omission in any of the above steps will cause the influences of other and lower influencers be bigger than and prevail over the free will power of the agent.

So, if the agent wants to bring any excuse based on the influencers, he should take into account that the default and biggest influencers should be his OTBTs. Hence, statements as “his father was violent so he committed that crime” are not very rational. Because the closer truth and influencer is his own self which does not like to be subject to violence. This nearness and defaultness of the OTBT are what make the crime evil.

Some conditions related to OTBT may cancel the evilness of an act which under some conditions would be evil. Legitimate defense can be given as an example to this.

3.6.2.4.1 Need for Continuous Focus on The Fundamental OTBTs

This Book, there is no doubt in it, is a guide to those who guard (against evil).

(Quran: 2/2)

He has certainly succeeded who purifies himself.

(Quran: 87/14)

The default state for the agent is noticing his vulnerability and his need for searching for the relevant truth, and behaving according to it. If the agent overlooks his vulnerability and is arrogant, then this is an active position against the default state. And if the agent did not search for the OTBT and related alternatives, he would be responsible for not searching these. Because, in any case searching these or not searching these is also a choice. If the agent aborts his “operating system”, then this is a bad choice.

For example, it may occur to a student to call his friend and to have some chat. Without evaluating whether he should act upon this thought, he may call him; or he may consider whether he should call

him. If he keeps his focus on his vulnerabilities, and does the second, then he may find out for example that he has an exam next day, and he has not studied enough. So, he can delay the call. If he calls him, he may chat for a long time and may do something that he could equally do later.

This discipline is important for success in all areas and many people practice it. But there are layers about this. Do we exercise this discipline at the most important layer of vulnerabilities?

According to Islam, our biggest vulnerability is against God. He poses opportunities and threats to us which may be big and permanent. There are obvious and permanent reminders about these in the universe, and in His messages in this respect.

So, the initial and permanent focus for a human being should be, “what is the best I can do to make a big difference that will be in regards to God?”, “what should be the prime goal of my life so that my God and I can be satisfied to the maximum extent”, “Am I upon the biggest truth, or struggling toward it?” According to the Quran, these should be the main initiators of our life strategies, and main controls over the triggers that have the potential to divert us into less than optimal trajectories. The following verse sets the main OTBTs:

Allah says, “This is the Day when the truthful will benefit from their truthfulness. For them are gardens [in Paradise] beneath which rivers flow, wherein they will abide forever, Allah being pleased with them, and they with Him. That is the great success.”

(Quran: 5/116-119)

Question 128.

Every agent is presented with some alternatives, and through his nature and nurture, he makes a choice from among those limited alternatives. So, why would the agent's freedom among these alternatives be relevant for responsibility? Why would the agent search deeper within his nature and nurture a motivation for a straight path? He could be using his will according to his parent's teachings, and the alternatives available in his society. How could he see for his will an alternative journey beyond those things?

Answer 128.

So, when the Horn is blown, no relationship will there be among them that Day, nor will they ask about one another.

(Quran: 23/101)

There are alternatives, nature, and nurture. But within the nature of the agent, there are also the facts that he is vulnerable and that all alternatives do not lead to the same amount of good. And also, that there are things which can be understood to be obviously irrational when we reason about them and when we consider the evidence.

If one fails in a will and if it is seen that he failed because he did not access or use accessible knowledge then it is clear that it was the agent's fault. This may be the case for example if throughout his life he spent more time thinking about which trousers to wear instead of the big truths. Because it was true that more knowledge and better reasoning would make him get better results and that the truth had to have most influence. The main reasons for responsibility here, are low effort and arrogance. As the agent's vulnerability and OTBT pushes him to accessing the accessible knowledge, he stops and overrides this push by choosing to be arrogant instead of choosing to be careful.

If those who went astray blamed their leaders there will be infinite regress, because everybody can blame someone else. Yet, everybody has some responsibility of his own. Everybody has to accept that he is among the causes. It is likely that everybody is additionally a previous non-coercive cause for some other people's evil. OTBT breaks the connection between the previous causes and the present state of the agent, since they are not coercive causes; hence, it pushes the agent to restart himself. The Quran motivates a human being not to adopt the first alternative he meets. It shows that the predecessors might be wrong:

When he said to his father and his people, "What are these statues to which you are devoted?"

They said, "We found our fathers worshippers of them."

He said, "You were certainly, you and your fathers, in manifest error."

(Quran: 21/52-54)

Everybody on many occasions sets aside what a specific nature or nurture entails for another thing.

The Quran encourages the agent to transcend the alternatives. It encourages him to take the initiative since he will bear the consequences of his wills, not his fathers.

3.6.2.4.2 The Processes Between OTBT and Free Will Power

The agent continually receives, scans, and transcends the inputs related to the OTBT. The agent is alert about some threats against his OTBT. The range where free will power can move is also the range marking responsibility boundaries. Upon scanning alternatives, the agent may will to block some of them. So, to

transcend different alternatives is necessary in order to exercise free will power. Within these alternatives known or knowable by the agent there are those which are harmonious with the truth of the agent. These alternatives are in different degrees of importance.

The essence of the agent by using its free will power, also determines tasks for reasoning power, and some other related modules to consider all the time what 'is' and what 'ought to be'. And the agent is able to see alternatives that ought to be/ ought not to be, be indifferent to them, prioritize them, and make changes. If the player structures his strategy so as to focus on low-level targets then he will fail. The free will power, reasoning power, and consciousness are also functional together within the whole of the agent, to introspect and assess whether the internal structure is consistent within itself and with the external world. The free will power which determines a will, acts also as a task manager upon the other powers of the agent. However, it is a very interactive process since to act as a task manager, it also needs to get feedback from the related powers. The free will power in this context represents the freedom of the essence to redirect any ongoing process by returning when needed to the most important, instead of becoming the puppet of any flow of processes.

Free will power is also active in a reasoning process to determine the truth: For example, let us suppose that the agent made a conclusion as in the following syllogism: "(1) Pigeons are white (2) My bird is white (3) My bird is a pigeon." All parts of the syllogism are like wills. For example, he might have concluded that pigeons are not always white and use it in his reasoning. The reasoning process involves the use of knowledge and free will power at its roots. At any stage, the agent either accepts or rejects a premise. If he does this being supervenient upon particles which bump one onto other deterministically or indeterministically, then since the particles do not have any knowledge and transcendence, we cannot say that he

exercises any freedom of will. Hence, there will be no reason to conclude that his conclusions represent any transcendence, consistency, unity, and correspondence with OTBT or any other truth. But if the agent has a power to transcend colors and a default hypothesis that the pigeons may be of different colors, and he has the sole capacity to reject the proposal which came from a sub-module that the pigeons are white, then he may have the potential to determine that the pigeons are not always white. This determination corresponds to his “will” to use this premise in his reasoning, hence, is related to his free will power. While the agent can terminate an established premise thanks to his free will power, he can also keep it stable against other influences which may terminate an established premise, like particles bumping one onto other as claimed by the physicalist.

If the essence sees at a certain time that the agent is structured badly, like entailing $1+1=5$, looking at the internal and external world, it can see that the truth is in fact $1+1=2$. Then by free will power and other powers, it can rearrange its structure so that it corresponds to $1+1=2$. The agent, through his modules and confirmations, should notice that a truth reigns over all things.

According to Islam, the agent should see the origin of the truth which is based on unity, all-encompassing, and consistency; and he should and seek refuge in that Obvious Truth, who is also aware of the agent.

There are general truths, like for example that the fire burns; earth rotates; birds can fly... We learn these through our observations, and we learn how to learn since our childhood through our thousands of experiences. We can take into account the truth that we learnt. But also, we have the capacity to overlook the truth; we can say cheating is not good, and must not be done – especially when we experience it against ourselves –. Yet we may be tempted to cheat and then cheat while knowing that it is bad, must not be done.

3.6.2.4.3 Assessing the Alternatives' Relevance to the OTBT

Surely (as for) those whom the angels cause to die while they are unjust to their souls, they shall say: In what state were you? They shall say: We were weak in the earth. They shall say: Was not Allah's earth spacious, so that you should have migrated therein? So, these it is whose abode is hell, and it is an evil resort,

(Quran: 4/97)

If an agent does not have any power about which set of alternatives he will have, is not this a big limitation on free will? If the set of alternatives contains only bad alternatives, then what will be the use of the free will power? If there is no good and bad among the alternatives, if the good is not among the alternatives, or if the bad is not among the alternatives, then what may be the use of free will power? If the starting point is bad, how can the agent find the right, how can he be connected to the right, how can he have a fresh start? Why would not the agent say "If I am misled, it is God who misled", since He has caused the conditions that misled the agent? There may be the free will power, and the alternatives, but there may be no motivation, encouragement, requirement to find the right path, no urge to use the free will power. Should not God direct him, or some others direct and convince him onto the right path? Does not what we think come from outside? How we can choose what we think? So, if we do not have any power over what we think, how can the agent have any freedom to determine what alternatives to assess? Hence, how can we have any freedom?

The pagans invite you to the fire, but God invites you to Paradise and forgiveness through His will.

(Quran: 2/221)

There are different triggers which inspire different thoughts. Yet, they are inspirations, not generally coercive factors. Everyday and maybe every moment, there are the triggers of optimal OTBT. The problem is not that there are no triggers necessary to start an evaluation about them. The problem is that some pathways are suppressed, misinterpreted, and blocked.

If someone was given a precious item, he would ask where does it come from, and how he should use it. Likewise, everyone is given many precious things, such as eyes, ears, hearts, brains... Yet these may be suppressed or misinterpreted as triggers in the context of OTBT.

Furthermore, God gave messages through His messengers to clarify further what needs to be done. But these may be overlooked as well.

By using our abilities that relate to free will power we can control them. Normally, we should always be using our OTBTs as the starters and filters for what we think. This requires a discipline, energy, and effort. The easiest may be to be dragged in the current of the river instead of resisting it. We often fail to make the assessment of what is the most important.

Because of insufficient focus on this, lots of people determine low level tools or means as the main target, and their starting point. For example, a person may have determined “earning money” as his starting point. He starts every day, every hour by having “earning money” as his OTBT and main filter. Another person may have determined vaguely and unseriously having any kind of fun as his OTBT. However, there are always more alternatives since we have free will power. The first person discards many things that the second might think about, and vice versa.

Many of us do not deliberate on whether what we think about is comprehensive enough. We do not consider that there are many alternatives other than what just comes to our mind. Though there are many other alternatives, we limit them to what comes from some sub-modules of our minds. We process simply whatever occurs to us through the environment, people, hormones, irrational triggers... Of course, this does not mean that there are infinite alternatives. But it is clear that many just focus on having a temporary good time instead of searching the truth.

We lack sufficient awareness of the fact that we can make a difference for us and for the existence. We do not recognize that God wanted to use our service in some areas to give us degrees:

And I did not create the jinn and mankind except to serve Me.

I do not want from them any provision, nor do I want them to feed Me.

Indeed, it is Allah who is the Provider, the firm possessor of strength.

(Quran: 51/56-58)

We lack sufficient awareness of the fact that truly there are better potential states that we can actualize. So, we let ourselves to be driven by whatever trivial triggers that may come to mind.

The starting point should be the optimal OTBTs from different perspectives: What are they, how they can be used?

Through reasoning power and OTBT we can determine alternatives and their priorities. We can think in accordance with these or according to what comes to mind from anywhere. OTBT tells us the alternatives that we have to think about but we are free to take them

into account or not. We have the information that we can be healthy or not. And that to be healthy is preferable. And the time frame to be healthy may be limited and its extension in time is a function of certain variables. We can connect to these the information that smoking is harmful for health. An announcement against smoking may trigger such thinking. But also, we can keep alive our awareness against smoking, even though some hormones push to shut down this awareness and reduce its intensity.

Also, we can start to develop a lifestyle for better health on our own by initially seeing and feeling our needs. We may have experienced a respiratory problem or seen a friend have such a problem, which may trigger such thinking. We are continuously subject to such inputs from different angles, we can be indifferent to them, or we can put them into good use.

If we keep obeying our low desires as emphasized in the following verse, they will be blocks preventing us from perceiving the right path:

Have you then considered him who takes his low desire for his god, and Allah has made him err having knowledge and has set a seal upon his ear and his heart and put a covering upon his eye? Who can then guide him after Allah? Will you not then be mindful?

(Quran: 45/23)

3.6.2.4.4 Assessing an Alternative in Respect to the OTBT

So, give good tidings to My servants,

Who listen to speech and follow the best of it.

Those are the ones Allah has guided, and those are people of understanding.

(Quran: 39/17-18)

A will is cognitive in nature, and it is related to truth. For example, one may feel the need to smoke. But this feeling as a feeling does not have any truth value. The feeling cannot be right or wrong. However, the decision to smoke of an intelligent being can be right or wrong. Especially if there is sufficient accessible knowledge about its effects to health.

For example, a truth is that fire makes suffer if touched. If there was no truth, then it might be unjust to blame the agent if he jumped into the fire because of his hormones, brain structure, or his past. But the truth and together with it the OTBT frees the agent from hormones and so on. So, everybody other than the abnormal tries to not fall in a fire. But if a rational person jumps into the fire, then if he blames his past or his hormones for being burnt, then he will not be considered rational or honest. Because that knowledge and truth override all those influences.

In order to exercise free will power, the agent must know that the alternative A1 is different than the alternative A2. And it must be true that A1 is different than A2. If A1 is exactly equal to A2, and if they are the only alternatives for the agent, then in respect to this specific situation, the agent does not have free will power that may entail responsibility. If the agent is not able to distinguish that A1 is different than A2, then again in respect to this specific situation, he does not have free will. On the other hand, free will power is exercisable upon false alternatives.

The agent discovers knowledge and adopts/ internalizes it by learning, trial, and so on. There is some true knowledge that the agent adopts, and some true knowledge that the agent does not

adopt. There is some false knowledge that the agent adopts, and some false knowledge that he rejects.

True knowledge adds to the freedom of action of the agent whenever it helps the agent evaluate the alternatives, what they are, how they relate to the OTBT, and the ways to those alternatives correctly in accordance with the OTBT of the agent. With free will power and seeing which one works, we select the one that works and we are consistent.

And also, with our values we choose which one to adopt: An arrogant person may have difficulty in adopting the guidance of God, and bowing down in front of Him. But a person may discover that arrogance is not a good attribute. There are some objective truth and related knowledge that the agent may discover if he is good. Because, if he is good, he should know what is good through the immediate knowledge about what he wants to be done to him.

But if he admits being evil and he sees himself non-vulnerable, then, he can reject the true knowledge knowingly:

As for Aad, they were arrogant upon the earth without right and said, "Who is greater than us in strength?" Did they not consider that Allah who created them was greater than them in strength? But they were rejecting Our signs.

(Quran: 41/15)

(Muhammad), warn the people of the day when torment will approach them and the unjust will say, "Lord, give us respite for a little time so that we may answer your call and follow the Messengers." (The answer to their prayer will be), "Did you not swear before that you would never perish?"

(Quran: 14/44)

Some inherent knowledge exists for all. And some of this leads to useful will if not instilled with corruption, mostly willfully. The capacity to distinguish between the different alternatives in terms of their different OTBT values and each alternative's OTBT value is necessary for responsibility. If the agent is able to distinguish the alternatives but is objectively unable to distinguish which one has higher OTBT value, then the agent does not have responsibility. To have this distinction, there must be such knowledge in the first place.

There is struggle within the agent regarding the alternatives. Often OTBTs do not exist without opposition. A person must be healthy and not smoke. But if he is addicted, then he will feel a strong urge to smoke. Different urges have different strengths and weaknesses.

Rational side of the agent must struggle with different tools. Under certain circumstances, he can and should prevent himself from being alone in the same room with a specific woman. But if he does not do that, he may not be able to fight against his emotions. His inner side may stop the struggle once in the same room with that woman, and he can commit a sin.

But if the rational side knows this and prevents his self from being exposed to certain urges, then the self may choose to not search intensely for such urges under different circumstances. The emotional side of the self is shortsighted. But once the target is in its vicinity, the urge to commit a specific sin may become very strong. So, the rational side of the agent should study its self, its environment, and related relationships. The self also must be satisfied with legitimate means. The person needs both parts. And the rational side and the emotional side depend on each other.

Regarding some cases like whether to eat the white candy or blue candy, there may be no implications of the OTBT.

OTBT as basic attributes of a human being is not generally determined/ willed by the agent. For example, he does not determine that he should not be in fire. There are inputs that an agent can change with his free will power and there are inputs that he cannot. Therefore, to assess the alternatives, he can consider the inputs that he can change.

3.6.2.4.5 OTBT Is Not A Coercive Limitation on Our Free Will Power.

No! But you love the immediate

And leave the Hereafter.

(Quran: 75/20-21)

“O my people, this worldly life is only [temporary] enjoyment, and indeed, the Hereafter that is the home of [permanent] settlement.”

(Quran: 40/39)

Ought to be subjective state (OTBS) and ought to be truth (OTBT) do not always overlap. OTBT requires some effort. To determine his OTBT, the agent needs to look beyond, to consider many data, to engage many of his intellectual powers, sometimes to spend money, to resist the low and short-term desires, and to make many other efforts. But OTBS is almost always available with no effort. So, while the OTBT is an input that “should be” taken as an input, OTBS is almost always taken as an input. For example, an agent who smokes may need to search for learning some implications of smoking against health, may need to resist the urges to smoke regarding OTBT. But after each dinner his hand automatically grabs his cigarette and light it with no big effort.

Although the agent knows that there is the better and worse, and although he is often reminded of the need to search for the better that ought to be, it is up to him to search for it or not.

Fundamentally and by default, we will that which is better; and what we will is that which is better for the moment. But what we will for a moment, may entail what we do not will for many moments later; yet, if the agent does not consider his vulnerability and the implications of OTBT, then the OTBT will not be an input for the free will power. Consequently, it will not have any impact on the free will power; and it will not have any coercive effect.

On the other hand, the free will power determines whether OTBT will be taken as an input or not. Therefore, OTBT does not have a coercive effect upon the free will power.

Also, even though the agent sees OTBT and the negative implications of not complying with the OTBT, he is able to will the opposite of what it entails.

The definition of free will power does not contain an assessment of the alternatives' implications for the agent. Hence, the OTBT aspects of an alternative do not necessarily affect the exercise of free will power.

If the agent wants to exercise his free will power based on his OTBT, then the OTBT will have influence as an input as long as he keeps his intention. Likewise, if he wants to exercise his free will power based on his OTBS, then the relevant OTBS will influence as an input as long as he keeps his intention.

Furthermore, if the agent exercises his will based on his OTBT, then he will have a possibility of living more and having more potential to exercise his free will power on many more situations. From this point

of view, OTBT enhances rather than limits the free will power even though it blocks some of the alternatives.

Moreover, even though the OTBT causes the agent to not smoke at a certain moment, this is not a net added limitation. Because, in any case, the agent would be either in the region of smoking or not smoking at that moment by the exercise of his pure free will power. OTBT does not limit the exercise of free will power since it is exercised in any case, since, free will power is not reduced to the deterministic or indeterministic behavior of reducibility bases which coercively cause him to will a certain will. OTBT as an input enables the exercise of the free will power in a more beneficial way.

Additionally, OTBT issues from the very being of the agent. The free will power serves the very being of the agent. The being of the agent is the cause of free will power's existence. The range of the free will power is produced by the very being of the agent. Hence, the very being of the agent and his OTBT cannot be considered as ultimate limitations on the free will power. They are the causes of any positive range that the free will power may have. The free will power will is a tool given to the agent, a part of his disposition, so that he can reach his goals which should be in harmony with his own being, nature, values, and truth.

The implications of the nature of the agent are important inputs that will be processed by the free will power. Compared to a naturalist view, Islam makes a clear distinction between the whole of the agent and his parts. For a naturalist, the hormones, the neurons, and anything that relates to the nature are the same with, and equal to the agent, not less than the agent.

According to Islam, the agent has a reality and design of his own, and therefore, not all parts of the agent serve necessarily the agent. The agent must distinguish those that are essential and intrinsic to the agent and those that should be distinguished from the reality of

the agent. For example, some hormones of the agent which are considered as part of the nature of the agent may cause the agent to be addicted to a substance. This may cause the agent will a harmful act. According to naturalism it is difficult to make a fundamental distinction between this and the reality of the agent. However, Islam is not limited to the spatiotemporal, and according to Islam, there are essential "ought to be" states specific to the agent. The agent is not equal to his spatiotemporal body.

The free will power is at the service of the agent. It is to give the agent the freedom from going into wrong paths that his sub-modules inspire. So, using his free will power and OTBT as its input, he can change his wills or the causes of his wills so that he can enhance his well-being and reach his other goals.

3.6.2.5 Free Will Assisted with Truth

And We will have removed whatever is within their breasts of resentment, [while] flowing beneath them are rivers. And they will say, "Praise to Allah, who has guided us to this; and we would never have been guided if Allah had not guided us. Certainly, the messengers of our Lord had come with the truth." And they will be called, "This is Paradise, which you have been made to inherit for what you used to do."

(Quran: 7/43)

On that Day Allah will pay them the recompense of their deeds in full, and they will know that Allah, He is the Manifest Truth.

(Quran: 24/25)

And so those who were given knowledge may know that it is the truth from your Lord and [therefore] believe in it, and

their hearts may be humble to Him. And indeed, is Allah the Guide of those who have believed to a straight path.

(Quran: 22/54)

Allah as the source of all truth, and as the most obvious truth, is called the Manifest Truth. Allah also is the Guide. The agent may choose to ask for the guidance of the Guide and follow His guidance.

In order to be upon the OTBT, there is nothing wrong in asking for help. Asking for help and benefiting from the help does not abort freedom.

We as human beings have limited knowledge on some issues, though we can also have some reliable knowledge on some issues. No matter how smart we are, we have to make some decisions, we can make errors, and there is no return to the past. So, for all of us there is the risk of being very far from the optimal. However, the God who is the Obvious Truth gives us the hope to overcome this difficulty to reach the good by seeking refuge in Him:

And seek (Allah's) help through patience and prayer, and indeed, it is difficult except for the humble.

(Quran: 2/45)

It is legitimate to ask for help, and this supplication does not limit overall freedom including the freedom of action. Because, it is the agent who asks for help.

Someone who believes that there is no helper and who assumes that he has no free will power can theoretically claim lack of responsibility. But if in reality there is helper than he will have rejected truth and the free handle which can give freedom from error. The Obvious Truth, Allah, does not have the limitations of knowledge that we have. So, the agent who has free will power, by

choosing to follow the guidance of the Obvious Truth can also overcome some difficulties caused by his ignorance.

3.6.2.6 Ability to Know or Discover the Truth

Say, "Are those who know equal to those who do not know?"
Only the people who use reason take heed.

(Quran: 39/9)

Say, "Travel through the land; then observe how was the end
of the deniers."

(Quran: 6/11)

Whoever is guided is only guided for [the benefit of] his soul.
And whoever errs only errs against it. And no bearer of
burdens will bear the burden of another. And never would
We punish until We sent a messenger.

(Quran: 17/15)

And indeed, there is among them a party who alter the
Scripture with their tongues so you may think it is from the
Scripture, but it is not from the Scripture. And they say, "This
is from Allah," but it is not from Allah. And they speak
untruth about Allah while they know.

(Quran: 3/78)

The truth is knowable. For the truth that is not knowable, the agent is not responsible. Also, some people knowingly behave against it. They exercise their free will power against OTBT, and they suppress OTBT. Hence, they do not activate the power to know and the knowledge about OTBT. They follow their low desires.

For example, many people know that they are vulnerable, yet they behave as if they are the biggest, self-sufficient, and permanent. Many people know that making a person suffer unjustly is not a good act as a rule, since they do not want to be tortured. Yet, knowing this, they make people suffer unjustly. Instead of the truth, they choose to follow their emotions. In this respect, they can also distort different layers and priorities of truth.

Some even say, this is Allah who caused us be evil. Actually, this way they contradict themselves: If they comply with what Allah did, why would they blame Allah and say that Allah should not have caused them to be evil. If they did not comply and have the capacity to not comply with Allah and therefore with the evil that Allah caused them, why did they do that evil? In other words, if they have the power to go against God, why did not they oppose God; if they do not have the power to go against Allah, then why can they and do they blame Allah?

Actually, the reason they blame Allah, is because of the potential or actual existence of punishment. They just present an excuse because of punishment. Otherwise, they would not put forth such contradictory claims.

3.6.2.7 Immiscibility of Truth

Do not mix truth with falsehood and do not deliberately hide the truth.

(Quran: 2/42)

And hold firmly to the rope of Allah all together and do not become divided.

(Quran: 3/103)

Those who have gone astray will not harm you when you have been guided.

(Quran: 5/105)

Do they await except its result? The Day its result comes those who had ignored it before will say, “The messengers of our Lord had come with the truth, so are there [now] any intercessors to intercede for us or could we be sent back to do other than we used to do?” They will have lost themselves, and lost from them is what they used to invent.

(Quran: 7/53)

Say: The Truth has come, and falsehood neither originates, nor reproduces.

(Quran: 34/49)

The truth is immiscible ultimately. There may be lots of influences, but the truth, hence the OTBT can generally be distinguishable from the ones who lead to error. It is like an information written on a piece of paper which wavers in the wind. The atoms of the paper are influenced because of the wind. However, the writing on it is not influenced at all.

The true word is not influenced coercively by non-truth; if one holds fast to the truth, then he or she will be free from misleading influences. The truth and contents of optimal OTBT are like maps of truth containing good wills which are the connections between the agent and the ultimate success. How to bypass the things that may prevent success is also within this map. The existence of such a map is important.

Truth is like a strong rope or handle that free will power can find out together with knowledge and reason, and thanks to which the agent will not be badly influenced by random waves.

With being an agent there is initial guide and truth. Vulnerability is an important element of this guidance which is immiscible. Our daily experiences, reasoning, and realism enable us to perceive and be certain of our vulnerability. Arrogance and stopping some reasoning processes prevent us from perceiving our vulnerability.

Every rational and sane human being has the feeling and understanding of hope and fear. Other influences can never replace or overcome this guidance if the agent does not leave it. The default and the initial is this guidance. Neurons will not lead to entering fire. If they lead and the agent approves, he cannot blame others for being misled.

3.6.2.8 OTBT And Consciousness

Beautified for those who disbelieve is the life of this world, and they ridicule those who believe. But those who fear Allah are above them on the Day of Resurrection. And Allah gives provision to whom He wills without account.

(Quran: 2/212)

It is unlikely that what our consciousness finds enjoyable overlaps always with the truth. Sometimes it may be hard to find out the truth, sometimes, it may be hard to comply with it even if it is clear, sometimes both difficulties may be present.

Sometimes we see a road that leads to both truth and short-term pleasure, sometimes, we see two opposite roads, and that we can only go through one of them.

The Quran teaches that most of relevant truth is obvious and accessible. And it teaches us that we always have to give priority to finding the truth and being in harmony with it even if we have to give up short term pleasures.

3.6.3 Reason

Indeed, in the creation of the heavens and the earth and the alternation of the night and the day are signs for people who use reason.

Those who remember Allah standing and sitting and lying on their sides and reflect on the creation of the heavens and the earth: Our Lord! You have not created this in vain! Glory be to You; save us then from the chastisement of the fire.

(Quran: 3/190-191)

The likeness of this world's life is only as water which We send down from the cloud, then the herbage of the earth of which men and cattle eat grows luxuriantly thereby, until when the earth puts on its golden raiment and it becomes garnished, and its people think that they have power over it, Our command comes to it, by night or by day, so We render it as reaped seed; produce, as though it had not been in existence yesterday; thus do We make clear the communications for a people who reflect.

(Quran: 10/24)

Those who guard against evil, when a visitation from the devil afflicts them, they become mindful, then lo! they see.

But as for their brethren¹⁵⁰, they shall continue them in error; and afterwards they shall not preserve themselves therefrom.

(Quran: 7/201-202)

But when they are told, "Follow what God has bestowed from on high," some answer, "Nay, we shall follow [only] that which we found our forefathers believing in and doing." Even though their forefathers did not use their reason at all, and were devoid of all guidance?

(Quran: 2/170)

Dictionary definition of reason is as follows: The power of comprehending, inferring, or thinking especially in orderly rational ways: Intelligence¹⁵¹

Like the reality of truth and error, the human being and his reasoning power are also real. Reasoning power given to us by Allah based on the fundamental unity, enables us to transcend things, make comparisons, produce concepts and names, use chains of thought, reach conclusions, evaluate whether something is true or false.

Reason is an input for free will power.

3.6.3.1 Reasoning Power Is Irreducible.

In the previous part about the truth, we saw that regarding the goals of the agent, the agent is not reducible to his parts, his neurons, atoms, electrons, and so on. There are distinctly and truly good things and evil things for the agent.

¹⁵⁰ of the devils

¹⁵¹ (Merriam-Webster.com 2020)

The same applies for the agent's reasoning power. The reasoning power of the agent is not reducible to the parts of the agent, it is not reducible to neurons, atoms, electrons, and so on though they are interacted with by the reasoning power.

All things are grounded in and sustained by a unity wherein inconsistent things cannot fit permanently. As there is truth, there is also error. Truth and error are not epiphenomenal upon the spatiotemporal.

The spatiotemporal which allegedly behaves in point-like instantiations, cannot transcend multiple things within unity. The spatiotemporal represented as such, cannot encompass that which is and that which is not, that which is true and that which is false. This spatiotemporal cannot assess what must be and what must not be. It cannot transcend here and there, now and later within a unity.

We are not like computers unless they are assumed to have transcendent powers like us.

If reasoning power is reducible to the behavior of particles, then concepts, premises, conclusions, statements, what is true, what is false, operators, are not but at most epiphenomenal things. In other words, if they are reducible, they will be recognized as things which are like illusions, which have no intrinsic effects, causal power, and real implications. In this case, we will not be able to say any statement with truth value.

Chinese room example of John Searle¹⁵² illustrates this issue very well¹⁵³:

¹⁵² (Searle 1980)

¹⁵³ I changed the example slightly to make the point more understandable in our context.

In this example, there is a person in a room who speaks neither Chinese nor English. From one window a Chinese person gives him papers on which Chinese words are written. Outside, at another window, there is someone who speaks English. The Chinese and English persons can only communicate through the papers delivered through the intermediary person in the Chinese room. The intermediary person who receives Chinese words from the Chinese person, must give corresponding words from among the papers that contain English words he has in the room. He also has a correspondence table which shows which shapes (words) in Chinese correspond to which shapes (words) in English. The person in the room enables both persons understand what the other one meant. However, he understood nothing at all from the communication.

If for example the Chinese said and proved that there will be a big tsunami and that everybody must run away, the English person would run away thanks to the intermediary person. However, the intermediary person who saved the English-speaking person, would have understood nothing and would be drowned even though he saved the English-speaking person.

A computer is assumed to work like this intermediary person: Inputs go in the computer, pass through certain lines, and produce corresponding signals. It can translate any language without understanding any word. Because not even a letter is transcended in a unity by any part of the computer; yet, it can output the letters in the order that human beings want.

According to a physicalist approach, we cannot be more than that intermediary person: Signals come from the outer world, and corresponding effects are returned through the chains of atoms, electrons. There is supposed to be a point-like instantiation for each signal which comes to a separate point in our brain where there is no transcendent unification. In fact, even point by point instantiation

would also require some transcendence since point also is defined by many transcendent things including space.

And in this chain, there would be no agent, the concepts, the premises, and so on since none of them are instantiated within unity.

The reasoning module can use its own free will power and return conclusions to the agent, or it can be driven by the overall free will power of the agent.

In part 3.5.6.4.2 there are detailed explanations about why reductionism is false.

3.6.3.2 Reason Has the Unity as The Common Background with The Existence.

In the universe we observe a unity: Until the free-falling rock reaches the ground, the earth rotates a certain angle. *Ceteris paribus*, this is a strong pattern. Our reasoning power, has such a fundamental unity that has a wide coverage, and that is similar to the unity behind the working of the universe. Many things in the universe also have such a unity.

The unity of Allah covers all of His powers, and He creates and sustains things; this unitary power produces the implications of units, speed, size, and so on. We have been given it in a limited way and as sustained by Allah. In our logic we have been authorized to use it to a certain extent. Thanks to the unity aspect of our reasoning we detect the unities within the existence, and can distinguish that which does not display this unity and consistency.

We can transcend things. So, as we transcend the small and the big in unity, we can make a comparison to a certain extent. As we can transcend the true and its opposite, we can think about “what is” and “what is not”. This is a power given and sustained by God.

Thanks to the unitary essence of reasoning power, we notice the connections between the actually accessed truths, their consequences, possible alternatives, their consequences, and their truth values.

3.6.3.3 Relationship Between Consciousness, Reason, Will Power, And Responsibility

Reasoning power is not inferior to will power. They constitute a whole whenever they are present for an agent.

We can choose to use our reasoning power or not to use it. The Quran encourages us to use our reason.

There may be changes in the outcomes of reasoning processes. If an agent honestly finds out some problem in his reasoning, or knowledge that he had, then he can change his reasoning and the related will. Even if he has committed a bad thing, then he can repent sincerely. Allah may forgive this. However, sometimes, in the beginning he foresees the consequence and risks, and accepts the consequence by also assuming responsibility. For example, a criminal may kill an innocent person in order to rob something, knowing that it is a crime and that he would not want the same thing done to himself. However, when he gets caught, he may say “it was because of my past, so I am not evil”. But if his past is effective, and he is not effective, what is that which tries to prevent a punishment? What is the superiority of the past compared to the present in terms of effectiveness? And, although he knew at the time of the crime that his past was bad and his past might be causing a bad event, he did not try to prevent himself from committing a crime by applying to relevant institutions or experts; or tell the law enforcement that he could commit a crime. Actually, he would also try to prevent someone with a similar background who would try to do the same to him.

The agent determines his goal, it may be good or bad. The reasoning power can be used for good and bad ends.

And man supplicates for evil as he supplicates for good, and man is ever hasty.

(Quran: 17/11)

The reasoning power may show the consequences of a behavior. A person will be held responsible if he has the ability to reason. An objective lack of reasoning power removes responsibility in Islam.

The free will power, consciousness, and reasoning are some of the top-level powers of the agent:

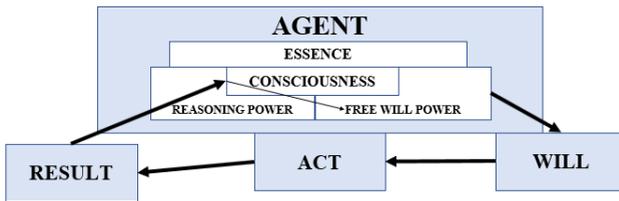


FIGURE-8:INDIRECT INFLUENCE OF THE WILL'S RESULTS ON THE FREE WILL POWER

As illustrated above, the results of wills are fed in consciousness, hence, in the essence which is the runner of free will power. The results of free will power is often fed back as input into free will power after the free will power is exercised.

This process is an important cause of the independence of the free will power from the OTBT to a certain extent, which enables the essence to expose how good or evil he is without being forced by the very personal implications of his will. Because of this, he also develops himself in a direction freely. Had the result been immediately present at the time of the will and act, the agent could not expose himself freely. The following verse underlines this point:

And let not those who disbelieve ever think that We extend their time it is better for them. We only extend it for them so that they may increase in sin, and for them is a humiliating punishment.

(Quran: 3/178)

The free will power interacts with the reasoning power. However, to use it or not or to what extent to use it depends on the free will power. When free will power interacts, it is the essence which runs it. Reasoning power has also its own free will power which runs on its own when necessary. The free will power can use and command the reasoning power to evaluate the alternatives and their relationships. Free will power can ask the memory to bring some information. So, we cannot say that the reasoning drives free will power. Free will power is not inferior to reasoning. Neither consciousness, nor reasoning power precontrol the free will power.

As the outcomes of the behavior of free will power returns to free will power as input and after some time elapses, we see people who spend knowingly more than their budgets, people who take risks independent of their implications...

3.6.4 The Very Being of The Agent

He is the One GOD; the Creator, the Initiator, the Designer. To Him belong the most beautiful names. Glorifying Him is everything in the heavens and the earth. He is the Almighty, Most Wise.

(Quran: 59/24)

The very being of the agent is one of the key ontological facts that should be processed by the free will power. Under his very being, his essence, powers, unity, transcendence, abilities, needs, weaknesses are important inputs for the will power. His very being includes the

physical, biological, mental, form, substance, feelings, preferences, values, sensual and other constituents of the agent.

The OTBT of the agent is founded on the structure and very being of the agent.

These may influence the will power or may be influenced by it.

There may be a tension between the OTBT of the agent and the goals of different elements of the very being of the agent. Since, these elements are part of the nature of the agent, there is a big risk of being misguided by them. Therefore, the agent must keep in mind that the elements of his structure do not equal his whole. He must keep in mind that these elements are essentially short-sighted, and it is his whole and distinct power which is responsible for doing a good management of the elements of his structure. In this sense, the recommendation for the agent to clean his self, requires that the agent does not enter under the sovereignty of the elements of his very being.

Therefore, he must prevent negative changes, and he must work to create positive changes.

The following statement in the Quran requires that the agent changes himself:

Allah does not guide the unjust people.

(Quran: 61/7)

If the agent does not do the changes that he can, then Allah will not help for the changes that he cannot.

And as explained in the following verse, one has to purify himself from law desires:

He has certainly succeeded who purifies himself.

(Quran: 87/14)

3.6.4.1 Enhancing the General Structure and OTBT

The agent should find out about his structure; accordingly, must determine his OTBT; and then accordingly reform his structure.

As explained in the Quran, the agent can change the elements of his structure:

Indeed, Allah will not change the condition of a people until they change what is in themselves.

(Quran: 13/11)

3.6.4.2 Controlling Emotions and Low Desires

In this life, no matter how well one changes himself, there will always be the threat from emotions and low desires to push the agent toward the evil. This is an expected result of the agent being a sovereign whole, and as such containing other wholes and sovereign wholes which are his parts. Therefore, the agent must always hold fast to the truth, and be alert against the low desires. These efforts will help improve the structure of the agent, and make him stronger if he is upon the right path.

The muslim is commanded by Allah to recite the following supplication in every daily prayer as long as he is alive:

Guide us in the right path.

(Quran: 1/6)

Those on the wrong path do not work on their structures, and do not hold fast to the OTBT. Hence, their free will power may go

between OTBT and low desires as if this agent is indifferent between the two. Then naturally there will be lots of inconsistencies: He will do big errors in this world that he will regret in the hereafter. This is not because of a difficulty to discern these errors, but because of insufficient analysis of himself, and because of this, letting the low desires to have sovereignty over the free will power and reason.

3.6.5 Alternatives

Blessed is He who has revealed the criteria (for discerning truth from falsehood) to His servant so that he could warn mankind.

(Quran: 25/1)

An alternative is defined as “one of two or more things, courses, or propositions to be chosen”¹⁵⁴.

In order to exercise the will power, there must be alternatives. And these alternatives must be distinct.

So, a mere freedom to determine an alternative as a choice is not even possible before alternatives are known. While they are not defined the will will not be free. As a requirement of mere free will power, the agent must know at least the difference between the alternatives. A blind person who is not aided does not have free will in willing red or white candy in front of him unless they are explained to him. Or a person who does not know right and left does not have freedom of will in willing the candy to the right or left.

The agent must determine the implications of the alternatives in respect to his OTBT so that he may be successful.

¹⁵⁴ (Merriam-Webster.com 2020)

The alternatives may be ready or may be developed by the agent. The agent may be indifferent about the alternatives, or he may have criteria for preference.

Free will power is an actual power to will a set of alternative(s) instead of other set(s) of alternative(s) within a range of at least more than one possible sets of alternatives. It corresponds to a power distinctly owned by the agent to make a change in the universe that is observable by that agent and sometimes by other agents. Constraints may diminish the number of alternatives.

If the agent is just a unipotential cause, if there is just one possibility, then he cannot have will power.

Every theoretical possibility may be the object of the will power. Someone may have a will to go to the edge of the spacetime. He may even start to do some necessary work. He may be wrong in his considerations. Yet, this may be a valid will.

The agent assigns values to alternatives. He may assign subjective values, or try to assign objective or optimal values. Nobody other than him is normally entitled to assign these values. He owns his power. But at the end, he will see the consequences.

Implications related to the chosen alternative will be explained in part 3.7.

3.6.6 Knowledge About Other Things

The people who truly reverence GOD are those who are knowledgeable.

(Quran: 35/28)

Follow not the way of those who do not know.

(Quran: 10/89)

And when it is said to them, "Come to what Allah has revealed and to the Messenger," they say, "Sufficient for us is that upon which we found our fathers." Even though their fathers knew nothing, nor were they guided?

O you who have believed, upon you is [responsibility for] yourselves. Those who have gone astray will not harm you when you have been guided. To Allah is your return all together; then He will inform you of what you used to do.

(Quran: 5/104-105)

Knowledge is very similar to conscious experience. Some of the dictionary definitions of knowledge are: (1) "the fact or condition of being aware of something", (2) "the fact or condition of knowing something with familiarity gained through experience or association", (3) "the circumstance or condition of apprehending truth or fact through reasoning"¹⁵⁵.

Hence, many things said in the context of consciousness apply to knowledge as well as input. Especially its relationship to its being encompassed within the unity of the agent is very important regarding the free will power.

The 3rd definition above shows that it is also closely related to reasoning.

In this respect, all of the other inputs above have aspects relate to knowledge, because in any case, they become an element of knowledge processes.

¹⁵⁵ (Merriam-Webster.com 2020)

Because of the importance of knowledge, it is also useful to manage knowledge as a value distinctly from its contents.

According to the Quran, knowledge is a very special asset of human beings. In the beginning verses of the Quran, Allah underlines the superiority of human beings upon the angels in their knowledge potential:

And He taught Adam the names all of them. Then He showed them to the angels and said, "Inform Me of the names of these, if you are truthful."

They said, "Exalted are You; we have no knowledge except what You have taught us. Indeed, it is You who is the Knowing, the Wise."

He said, "O Adam, inform them of their names." And when he had informed them of their names, He said, "Did I not tell you that I know the unseen [aspects] of the heavens and the earth? And I know what you reveal and what you have concealed."

(Quran: 2/31-33)

Hence, seeking knowledge and engaging in related intellectual activities is of top importance in Islam as long as it is done within appropriate prioritization: A supplication of the Prophet Muhammad (PBUH) was "O Allah, I seek refuge in You from knowledge which does not benefit, from a heart that does not entertain the fear (of Allah), from a soul that is not satisfied, and the supplication that is not answered".¹⁵⁶ Also, ignorance is not a desirable thing as the Prophet Muhammad (PBUH) supplicates to Allah: "My Lord, forgive

¹⁵⁶ (Saheeh-i-Muslim .)

me my errors and my ignorance, forgive excess in my actions and those things You know better than me.”¹⁵⁷

Knowledge power is transcendent. A computer does not know anything if it does not transcend within its unity concepts, qualia, relationships... If an image's parts are separately instantiated in infinitesimally small parts of brain, then there would be no awareness and knowledge about the whole image. For details, see the about Chinese room example in part 3.6.3.1.

The above things about knowledge are also applicable to “information” to a great extent, since, information cannot be formed either without unity.

Regarding responsibility, ability to know is as important as knowledge. An agent is required to search for knowledge if he does not have it, as clarified in the above verses and in the following verse:

So, ask the people of the message if you do not know.

(Quran: 16/43)

Regarding free will, knowledge is important in that without it, it will not be possible to comprehend and assess the alternatives. However, to know the evilness of something does not mean that the person will necessarily refrain from doing or willing that evil. The knowledge about the alternatives or means does not determine deterministically what the agent will will.

That the knowledge is accessible to the agent is sufficient to consider the agent responsible in terms of knowledge, as shown in the following verse:

¹⁵⁷ (Bukhari .)

Those who have gone before them belied, yet they did not reach a tenth of what We gave them.

(Quran: 34/45)

There is some necessary knowledge, such as the knowledge to distinguish one alternative from another, and one means from another. And some further minimum necessary knowledge has been given by default to most of agents: At least the agent knows that he is vulnerable and that he must reach something that he will be satisfied with, objectively or subjectively.

Some knowledge accessible by the agent may be an actual or potential input, including things that relate to the agent's structure, other properties, constituents, and powers.

If the agent did not have a minimum transcendent knowledge encompassing more than one point then he could not have free will power. This power is non-separable from the free will power. For success, it is necessary that the knowledge resources are well accessed and efficiently used.

3.7 Outputs Related to the Free Will Power

In this section we will examine the outputs of the will power, which are closely related to the definition of free will power.

3.7.1 The Alternative That Will Be Actualized

The ones who prefer the worldly life over the hereafter and avert [people] from the way of Allah, seeking to make it (seem) deviant. Those are in extreme error.

(Quran: 14/3)

Alternatives as inputs of free will power are explained in part 3.6.5. In this section, we will examine an alternative as an output of exercising the free will power and its implications.

Alternatives may have different features. They and their results may be knowable, unknowable, their results may be foreseeable, unforeseeable, acceptable, unacceptable, achievable, inachievable, compliant or non-compliant with the OTBT of the agent.

In the following diagram, note the difference between the general alternatives and knowable alternatives:

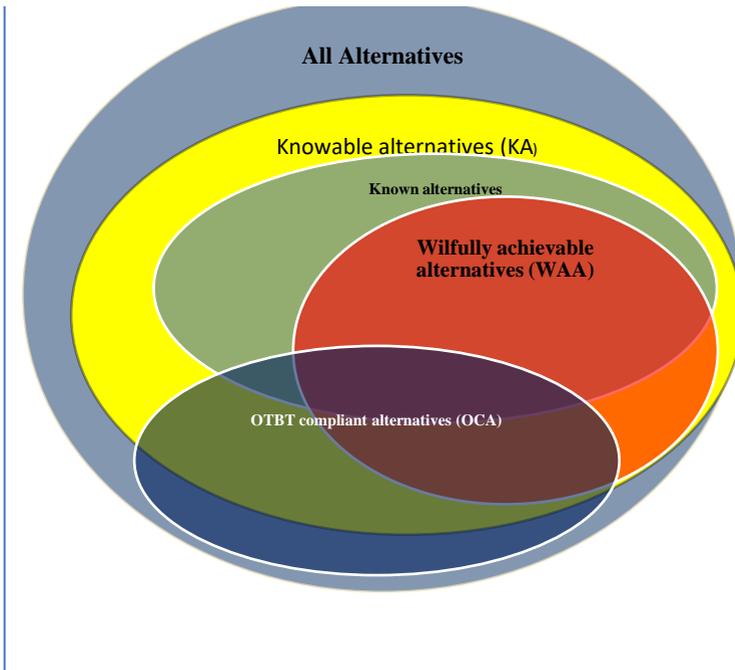


FIGURE-9: ACCESSIBILITY AND ACHIEVABILITY OF THE KNOWLEDGE AND MEANS RELATED TO FREE WILL POWER AND RESPONSIBILITY

The OTBT is essentially objective, though sometimes unknown before or from a partial point of view. A smoking person might not know some centuries ago whether he would be cancer because of smoking. However, as of today, he knows that there is such a risk. Some decades ago, the risk might be totally unknown and unknowable. So, in those times, if he had cancer because of smoking, he might not be blamed for being cancer. However, if he keeps smoking while the risk is known, then he is responsible for being cancer. And such truth and knowledge are essentially immiscible with biological urges; for example, if he has a strong urge so smoke, his knowledge about this risk is not deleted.

Knowability here means the knowability about some indicators and accessibility of information through reasonable effort. For example, a person who just slightly coughed from time to time in old times because of smoking, and who could have learnt by travelling to a far country that smoking is seriously harmful may not be considered as responsible if he has health problems related to smoking, because the harms of smoking is rather unknowable for him.

In the above diagram the intersection of willfully achievable alternatives (WAA), and OTBT compliant alternatives (OCA) gives us the set of alternatives which if achieved will entail a positive responsibility and praise for the agent. Note that in this figure and its explanations, the achievable alternatives and the willable alternatives are considered under WAA.

The region within WAA but outside OCA are wills that require a negative responsibility, and blame for the agent. In this region, the agent also generally produces a contradiction: He regrets what he willed upon seeing the bigger negative consequences if this happens. In worldly terms, this may not happen always though. For example, a smoker may die in an accident and does not see the big negative

health problems of smoking. So, his subjective positive feelings he got from smoking may be bigger.

Yet, according to Islam, all evil deeds (wasting in the case of smoking) and all good deeds will produce their consequences for the respective agent. So, everybody will regret the evil they did on the judgment day and afterwards.

So, besides this regret, the second inconsistency is in having done an evil act.

3.7.2 Action by The Agent

And they said, "No matter what sign you bring us with which to bewitch us, we will not be believers in you."

So, We sent upon them the flood and locusts and lice and frogs and blood as distinct signs, but they were arrogant and were a criminal people.

(Quran: 7/132-133)

The will power causes a change in the universe. The first change will be in the agent. This may be a decision, an act of the agent. For example, the agent who willed to apply for a job may send the application letter and his CV, take the necessary exams and interviews.

Then there is change in terms of expected end results. We will see them in the following parts.

3.7.3 Change in The Universe

When the agent performs an act as the result of his will, then there are certain changes in the universe. For example, the company who receives the job application invites the applicant to an exam or an

interview. In this example, act of the agent and of the hiring company interact as a consequence of the will of the agent.

3.7.4 Mental Outputs

The free will power which works together with reasoning power produces outputs such as ought to be states: Free will power is also a driver of reasoning power in its navigation through its resources and when it reaches certain conclusions. So, the free will power may settle upon a conclusion that his parents must be given priority. So, even though it does not become a specific will related to a specific action, it is a determination of free will power and reasoning power as an ought to be subjective state.

3.7.5 Results as Achieved and Not Achieved Goals

The changes produced as the outcome of the act of the agent are expected to end up in certain changes that have been targeted by the agent. These may have happened or not.

On the other hand, seldom do the targeted results contain only positive elements; alternatives are generally packages which contain positive and negative aspects for an agent. The agent considers all of them for each alternative.

Also, willing and acting for one alternative, entails mostly giving up other alternatives' positive implications. So, one package of an alternative contains the negative value of these missed alternatives as alternative cost.

Sometimes, the alternatives contain inherent risks. For example, the agent may get the job or not, although he had many exams and interviews. In the case of a crime, a criminal must see the enforceable sanctions as part of the alternative of committing that crime, because of which, if caught, he cannot blame the judge for condemning him.

Because he willed the package of that crime, if he does not want the sanction aspect afterwards, he will be contradicting himself. Another example of risks is that the initial conditions related to an alternative may change during or after the willing process.

3.7.6 Responsibility, Confirmation, Praise, Regret, Punishment, and Reward

Indeed, they are to be questioned.

(Quran: 37/24)

And from [part of] the night, pray with it as additional [worship] for you; it is expected that your Lord will resurrect you to a praised station.

(Quran: 17/79)

And I swear by the soul which is (self-)blaming.

(Quran: 75/2)

So, We took him and his soldiers and cast them into the sea, and he was blameworthy.

(Quran: 51/40)

In this part and generally in this book, the word responsibility is used to mean retrospective responsibility.

The word “responsible” originates from “responderere”, “to respond” related to accountability for one’s actions. It also has meanings as

reliable, trustworthy, answerable. It also relates to the meaning of obligation.¹⁵⁸

Dictionary definitions of responsible are as follows: (1) Liable to be called on to answer, (2) Liable to be called to account as the primary cause, motive, or agent, (3) Liable to legal review or in case of fault to penalties, (4) Able to answer for one's conduct and obligations.¹⁵⁹

Responsibility or accountability means that the responsible being has a causal role and that upon an act, a trust, contract or promise, he can have a duty, or he may be subject to praise, blame, reward, and punishment.

Free will and responsibility are different things. And responsibility necessitates free will; free will does not necessarily entail responsibility.

Responsibility is not a matter of free will alone. Force majeure, self-defense, and other issues may remove responsibility. However, we will not get into the action side and other additional details of these since we take responsibility as much as it relates to free will.

In the earlier parts, physicalism, reductionism, determinism, and indeterminism are explained in detail. All of those remove the possibility of responsibility. If agents are reduced to spatiotemporal relationships and entities which can have no truth, goodness, evilness value and no sovereign freedom, we cannot talk of responsibility. All of these isms are also non-compliant with the Islamic system, since in Islam truth and sovereignty of God and of the agents have a fundamental place. As those isms are explained in detail, they will not be given a separate place in this section.

¹⁵⁸ (Etymonline.com 2020)

¹⁵⁹ (Merriam-Webster.com 2020)

If the agent is unable to discover the consequences of his will, or compare them, then there is no responsibility.

When the will produces a result, the agent may be ultimately confirming and happy about it. Or, he may regret it. He may blame himself for not heading for another alternative. He may be inconsistent in having willed that alternative in the beginning, and in regretting his will at the end. He may think at the end that he underestimated the negatives and overestimated the positives of the willed alternative. Or he may think that he did a good job in assessing the alternatives throughout the willing process.

He may continue the following steps of the will, or he may want to cancel or change it. The agent may find out that his boss is a very harsh person, so, he may regret that he has not opted for the other position in another company.

On the other hand, people may applaud him, praise him, or blame him as well. Or if it is a crime, he may be punished; if it is a rewardable will and act, he may be rewarded. They may be indifferent about the will as well. All these relate to the responsibility.

Most of these relate essentially to the agent himself though they look targeted to the related will or act. The will or the act are not aware of the blame, praise, or reward. It is the agent who did them, and it is the agent who is responsible for them, and it is the agent who can be aware of the praises, blames, rewards, and punishments. It is the agent who is expected to continue such successes, and end such failures if applicable. It is the agent who has the necessary consciousness, reasoning power, knowledge power, performance power that can process the praises and blames. Hence, recognizing the distinctness and irreducibility of the agent is very important regarding responsibility.

3.7.6.1 Consistency of The Agent About the Responsibility

The main thing that influences will is the expected result as long as the agent can foresee it or its probability. And the expected result is only owned by the agent. If he wills something in the beginning and does not will it at the end after executing it, then there is nothing which will give priority to the final will in terms of responsibility, other than exceptions such as forgiveness. Actualized will will have priority.

The will after the result fully or partially occurs is another will if the agent changes his will. Because, otherwise the will will be having contradictory contents which would make the first stage will inconsistent with its continuation.

At a later stage the will will be different in its constituents: For example, a person may have bought an option, and then there was a development which made the exercise of the option impossible. Thus he cannot say I changed my mind so I do not want to pay the price of the option, or I am willing to buy it now for less. When the will has been finalized, then the consequences become within the region of responsibility of the subject.

Likewise, if a disbeliever while entering hell regrets what he did, this will be invalid. Because as of then, if he goes back or in front of the hell if he behaves well it is not possible to know whether he sincerely regretted what he did and whether he became grateful and just, or he just wants to protect himself from the punishment.

3.7.6.2 Ownership of Will and Responsibility

Ownership of the will is an important issue regarding responsibility. If a person who willingly jumps from the 3rd floor says “it was not

my will since determinism is true, so I ask for compensation for my bones being broken”, he will be inconsistent. Because he willed to jump, and he asserts that his bones being broken is not something good, and he had not to jump in the first place. If the outcome is foreseeable, there is inconsistency. And the ability to foresee the outcome removes the possibility to blame something else, and requires the agent own his will.

The agent takes into account the negative aspects, positive aspects, and risks. If there is something that objectively he cannot see, then he is not responsible about it. Regarding the things he sees, he is responsible. So, he buys these things altogether. As he is only responsible for what he can foresee, if he changes his mind in the hereafter about his wills whose implications were foreseeable, this constitutes a dishonesty. Because all is equal except for his having received the benefits, and the remaining things being the negatives and risks.

Let us go through an example to see some inconsistencies of a criminal blaming others for a crime:

A criminal plans before the crime, what he will say if he is caught, as: “If someone blames me at that time, then I will say that it was because of my parents and neurons!”. This means that he is doing that evil because he thinks that his neurons and his past with his parents are coercive causes. If he recognizes the evil at the time of the crime, he has to find a way to balance and remove the effects of those causes. Or at the time of the crime, he should be making sure that nobody will say in the future that it is a bad behavior. But to make sure that this is not a bad behavior, he must know that if that act is done against him, he would not be opposing to it. And he knows that he would oppose to it if he is the victim, if it is a bad behavior. Therefore, this is a matter of objectivity, balance, and consistency. If he opposes the punishment, then he is inconsistent

within himself, since the judges are not responsible either as they also have parents and neurons.

Again, if that crime is bad and he blames someone else for it and other than that he cannot reject its evilness, why does he commit it in the first place, and blame someone else? If he had the power to recognize that it is a bad act, then why did he commit it at the beginning? If he did not have the power to recognize that it is a bad act, then why would he consider the punishment or the blame of the blamer as a bad act? And if it is a bad act, why would he reject responsibility in that future?

In responsibility the results become actual. And the wills are finalized and the agent may show reactions either by confirming earlier will or negating it. Under normal conditions, if he says that he regrets his will which he might not will, then either he admits his error and blames himself; or he contradicts himself. If the laws of nature caused him to choose that will, then it is likely that the laws cause him to blame something else.

It is like a tradesman who took the delivery of the goods he bought, and when it is his turn to pay, he refuses to pay. It is like asking a thief while he is stealing something do you want to be a thief, he says no I want to be a good person, and he continues his stealing action. The reason he changes his mind is that he already got the benefits, and he wants to avoid the negative consequences.

Pharaoh seems to have regretted his previous will just before dying according to the following verses:

And We took the Children of Israel across the sea, and Pharaoh and his soldiers pursued them in tyranny and enmity until, when drowning overtook him, he said, "I believe that

there is no deity except that in whom the Children of Israel believe, and I am of the Muslims."

"Now? And you had disobeyed [Him] before and were of the corrupters?"

(Quran: 10/90-91)

The change in the will of Pharaoh was not due to a change in his personality; it changed just because of the conditions he was in. He was dishonest, inconsistent. He had given priority to his low desires rather than his reasoning.

After the will process has been completed and results have been produced, benefits reaped, and costs occurred his words have little value.

In a normal situation where blame/praise has been finalized, can the agent say based on coercive causes¹⁶⁰: I did not have free will power when I committed that crime? If he says this, then he means that at that instant he has free will, he means that he has the ability to "do or will otherwise". If he has free will at that instant, then what is the cause of the absence of free will at the time of the blamed or praised will?

And whoever desires the reward of this world We will give him thereof; and whoever desires the reward of the Hereafter We will give him thereof. And we will reward the thankful.

(Quran: 3/145)

Someone who gives priority to his low desires instead of his reasoning power, and fires the gun toward himself cannot blame

¹⁶⁰ In this section, it is assumed that the situations that may remove responsibility are not present.

anything else for getting injured. Likewise, if he injures another person, he cannot blame anything else because of the negative results against himself. Each alternative is a package containing also its potential implications. When someone gets a benefit for having willed and done something, he does not donate them in the names of their ancestors or for their neurons; he owns them.

In cases where the result of a certain act is determined, the person acts as in a contract; that is, he willed the result at the beginning, he is assumed to be ready to accept the probable consequences of his will.

The judgment about the goodness or evilness of a specific act, must be made on a typical act, not based on the agent who committed the crime nor according to who the victim is. As in the example of the following verse, the biased opinions constitute no reason to shift the blame between the sides of a behavior:

When you voice an opinion, be just, even though it be [against] one near of kin.

(Quran: 6/152)

3.7.6.3 Hereafter

O mankind! If you should be in doubt about the Resurrection, then [consider that] indeed, We created you from dust, then from a sperm-drop, then from a clinging clot, and then from a lump of flesh, formed and unformed that We may show you. And We settle in the wombs whom We will for a specified term, then We bring you out as a child, and then [We develop you] that you may reach your [time of] maturity. And among you is he who is taken in [early] death, and among you is he who is returned to the most decrepit [old] age so that he knows, after [once having]

knowledge, nothing. And you see the earth barren, but when We send down upon it rain, it quivers and swells and grows [something] of every beautiful kind.

(Quran: 22/5)

These are the verses of Allah. We recite them to you, [O Muhammad], in truth; and Allah wants no injustice to the worlds.

(Quran: 3/108)

The hereafter is relevant for many important questions: Will our beings and identities end when we die? Were we created for a reason? Will the good and evil end up in the same way? Is the universe for nothing? Is there any price for what we have been given in this world? Is this world an opportunity to grow? Shall we disappear forever without having learnt the truth, the error, and with so many questions? Are all our efforts just to end up in being dust?

According to Islam, this life is not in vain. There is no reason that Allah gives just temporary favors. Allah will establish the truth, and inform us about it and its implications.

O mankind, your injustice is only against yourselves, [being merely] the enjoyment of worldly life. Then to Us is your return, and We will inform you of what you used to do.

(Quran: 10/23)

Shall We make the righteous as the criminal?

(Quran: 38/28)

We live in this world, and we get a qualification about how close we get to the truth, how sincere we are, what values we adopt. And

accordingly, on the judgment day we are judged and transferred to the place that we deserve.

We shall own what we did. To this end, we have been given the free will power. We can use it however we want. We can do best things; we can do worst evils.

Allah is not unjust to them, but they are unjust to themselves.

(Quran: 3/117)

Verily, We showed him the way, whether he be grateful or ungrateful.

(Quran: 76/3)

In this world, we can keep ourselves pure or we can bury ourselves under corruption. And we end up as a whole which is good or which is evil or in between.

And for all are degrees from what they have done. And your Lord is not unaware of what they do.

(Quran: 6/132)

At one point, Allah seals what we are. So, our unity has a degree. We are changeable, but the matter will not be open forever.

Question 129.

Is not it unfair that the disbeliever servant who is informed about God and hereafter faces the hell as an eternal punishment?

Answer 129.

There are 7 points to be emphasized regarding this question:

Firstly, our behaviors are important in being indicators about who we are, but the very important thing is that they are indicators about our attributes and how we would behave if we had been given bigger responsibility. Our positions in the hereafter are determined based on who we are, at what degree we are.

Acts in this limited world are in any case small by themselves, they are temporary. But they are indicators about how we would behave if our free will power was not constrained.

The actual pains caused by a criminal do not reflect the entire degree of the evilness of that criminal. It is possible that the criminal is so evil that if he could live forever, he would do evil forever under some conditions. Maybe he is ready to make suffer the innocent, good, defenseless people forever if this crime benefits him. That he keeps doing this evil all his actual life although he is rich, is an objective indicator of the level of evilness in him. Allah knows his degree of evilness and he will judge accordingly and justly.

A person who had billions of dollars and tried yet to suck unjustly the single loaf of the poor, or who tries to declare war to them cannot be said to stop his evil if he had hundreds of trillions of dollars.

The following verse explains this issue properly:

For this reason, We made it a law for the children of Israel that the killing of a person for reasons other than legal retaliation or for stopping corruption in the land is as great a sin as murdering all of mankind. However, to save a life would be as great a virtue as to save all of mankind. Our Messengers had come to them with clear authoritative evidence but many of them thereafter started doing wrong in the land.

(Quran: 5/32)

In worldly punishments also we consider the identity and continuity of the criminal. Otherwise, what would be the reason to produce a consequence to an act that has happened in the past?

Secondly, the problem with the foundations of evil people is more dramatic: Some people lack the basis of goodness. They do not believe in responsibility, they do not believe in truth, they do not believe in reason, they do not believe in efficiency of consciousness and reality of pain and joy... How can a person who rejects the conscious truthful basis of existence have a sound foundation about being good? How can a person who believes that he and other beings are not but particles bumping one onto another have a sound connection to the truth? Can a person who rejects a precise responsibility be careful about the justice? Can a person who is not thankful to his Creator who deserves the biggest of thanks be thankful to another one? Can a person who is arrogant against his Creator be humble to the creation?

Some like the above may claim to have their foundations for morals and responsibility; however, according to the knowledge of the author, there is no convincing sound basis for morals and responsibility without the hereafter and God.

The third point is about the nature of the punishment of God: There are in our context two types of punishments: (1) There may be punishments declared in the beginning, and (2) punishments not declared in the beginning.

If the punishment is declared in the beginning, then the act of the criminal becomes a decision which belongs fully to the criminal, and whose consequences must be fully owned by the criminal. He takes the risks of his act. It is like entering a road marked as “dangerous”, to reach a nice recreational area. The implications are all set and declared, and the will to enter it, or to be careful on it or not, belongs entirely to the agent who enters that road. That the government did

not build a nice road to every nice recreational area will not make the government responsible in case an accident happens on one of the dangerous roads where there are many warning signs.

But, if the punishment is decided after an act whose consequences were not declared previously has been done, then the punisher enters the scene as another willer. Depending on the specific conditions of the situation, the one who commits the act may be responsible or not.

They do not wait aught but that the angels should come to them or that the commandment of your Lord should come to pass. Thus, did those before them; and Allah was not unjust to them, but they were unjust to themselves.

(Quran: 16/33)

In the case of God, He exactly clarifies what will of the agent will lead to what personal consequences for the agent. Hence, the judgment of the servant about the fairness or unfairness of the God is irrelevant.

If a person chooses to smoke knowing its harms, or without searching its implications though he can search and find, it is also a similar choice. If he becomes cancer, he cannot say “why did Allah create tobacco?”, “He should not have created it, so He is responsible for my being cancer.” Allah creates it for many reasons that may be relevant to the agent or irrelevant to the agent. Allah’s will is in a totally different context.

Indeed, those who disbelieve spend their wealth to avert [people] from the way of Allah. So, they will spend it; then it will be for them a [source of] regret; then they will be overcome. And those who have disbelieved unto Hell they will be gathered.

That Allah might separate the impure from the good, and put the impure, some of it upon the other, and pile it up together, then cast it into hell; these it is that are the losers.

(Quran: 8/36-37)

And they shall say: Had we but listened or pondered, we should not have been among the inmates of the burning fire.

Thus, they confessed their sins. Woe to the dwellers of Hell.

(Quran: 67/10-11)

So, they were able to conceive of what else could have happened. They are of the same nature then, and in the present life.

The fourth point is this: If there is an eternal reward for a person who meets certain requirements, this is like an eternal punishment for the one who missed that reward by not meeting those possible requirements. Likewise, to be protected from the hell for eternity is another favor that the good person received. So, the possibility of a kind of eternal punishment is indispensable in any case, if there is eternal reward for the good.

The fifth point is that if a disbeliever claims that Allah will have behaved unjustly against him in the hereafter, this means that he accepts the existence of the just, unjust, good, evil. If there is just, unjust, good and evil which are not epiphenomenal and which can transcend the material, then he will be inconsistent in a detailed analysis in himself. Because, he indirectly accepts something that transcends the material that should lead to the recognition of God. If he claims injustice or evil as merely epiphenomenal things, then blaming God on these, will be just a claim with no substance.

The sixth point is this: A person transcends time, extends in his time span with no limit. So, any limited pain or any punishment within

infinity would be zero. But the person would be evil in infinity. Hence a temporary punishment within infinity would be relatively like zero punishment. We perceive the eternal punishment within our temporary life, so we perceive it as too much. We have to conceive it within an eternal life.

The seventh point is that Allah gives the guarantee that there will be no injustice on the judgment day. We may be limited in evaluating the level of an evil act; for example, if we have not been victim of a specific crime which causes lots of pain due to specific conditions, we will never evaluate it sufficiently. But Allah evaluates perfectly.

3.7.7 Changes Following the Results

But perhaps you hate a thing and it is good for you; and perhaps you love a thing and it is bad for you. And Allah Knows, while you know not.

(Quran: 2/216)

The wills may produce expected results, and also unexpected results. A person may have got the job. Having the job produces some expected goals, and unforeseeable further results. The person may be receiving a good salary as he has foreseen. He may meet in his new office the woman who will be his wife with whom he will have a happy life. Or, he may have an accident while going to work which may cause him to be disabled all his life.

Therefore, whatever a muslim wills, he must do a good job in considering all of its aspects, yet, he should ask God for making it a will that produces good results.

3.8 Means and Influencers in The Formation of Free Will

Say, "It is He who has produced you and made for you hearing and vision and hearts; little are you grateful."

(Quran: 67/23)

And it is He who placed for you the stars that you may be guided by them through the darknesses of the land and sea. We have detailed the signs for a people who know.

(Quran: 6/97)

And those who disbelieve say, “We will never believe in this Quran nor in that before it.” But if you could see when the wrongdoers are made to stand before their Lord, refuting each other's words. Those who were oppressed will say to those who were arrogant, “If not for you, we would have been believers.”

Those who were arrogant will say to those who were oppressed, “Did we avert you from guidance after it had come to you? Rather, you were criminals.”

Those who were oppressed will say to those who were arrogant, “Rather, [it was your] conspiracy of night and day when you were ordering us to disbelieve in Allah and attribute to Him equals.” But they will [all] confide regret when they see the punishment; and We will put shackles on the necks of those who disbelieved. Will they be recompensed except for what they used to do?

(Quran: 34/31-33)

“And you were not covering yourselves, lest your hearing testify against you or your sight or your skins, but you assumed that Allah does not know much of what you do.

And that was your assumption which you assumed about your Lord. It has brought you to ruin, and you have become among the losers.”

(Quran: 41/22-23)

Under the part about “inputs of free will”, we examined some inputs which are directly related to the agent. These are generally processed as inputs by the agent. In this part, we will examine the influencers that can be effective in the formation of wills. Note that there is no sharp distinction between the inputs and the influencers that we will examine here: For example, the very being, structure, design of the agent can be processed as an input by the agent; but also it may influence the will of the agent even if the agent does not take it as an input within his will process. Therefore, an input can be an influencer, or both an input and an influencer regarding a will; also, an influencer may be an input, or both an influencer and an input regarding a will.

There are also other influencers such as memory, observing power, guidance of God. In this section, we will examine some of these influencers.

An obese person may feel strongly for food but may take for example surgical or psychological steps to lose weight. A person who feels happy because of others being tortured may take necessary steps to find the cause and be cured by removing that cause.

Past causes or other causes are not necessarily coercive causes. If a bad behavior is caused by an agent’s past, as long as the badness of that behavior is knowable, that cause will be only a non-coercive influencer except if there is an impossibility in terms of action which prevents the removal of the effect of that cause. Because the accessible OTBT is immiscible with error, and if the cause may be removed, the agent should remove it or its effects.

As long as there is an influencer the free will rejecter may trace the will back to the influencer. But is it a non-coercive influencer or a coercive cause? The answer will be found with the following question: If the agent is informed about the influencer and its influence can he negate it? If objectively he cannot negate it, then it is a coercive cause. If he can objectively negate it at least with some accessible help, then it is a non-coercive influencer. The influencers may affect the free will power as coercive causes as well.

3.8.1 Allah

And whoever Allah guides for him there is no misleader. Is not Allah Exalted in Might and Owner of Retribution?

(Quran: 39/37)

And seek help through patience and prayer, and indeed, it is difficult except for the humbly submissive [to Allah]

(Quran: 2/45)

Indeed, Allah [alone] has knowledge of the Hour and sends down the rain and knows what is in the wombs. And no soul perceives what it will earn tomorrow, and no soul perceives in what land it will die. Indeed, Allah is Knower and Aware.

(Quran: 31/34)

We created the human from a liquid mixture, from two parents, in order to test him. Thus, we made him a hearer and a seer.

Indeed, We guided him to the way, be he grateful or be he ungrateful.

(Quran: 76/2-3)

Allah is the biggest influencer. He set up the framework we are in. He gave us the alternatives. He gave us a mission of being either on the side of the rectitude or on the side of error. He showed us the paths and where they lead. He may be pleased with us, reward us, and save us from punishment; or He may punish us, be displeased with us, and block us from reaching His favors. He enabled us to own our wills and their results, however, all of them are with His permission. He may help us and he may block us from truth in accordance with our behaviors, values, and our basic approach. He wants us to be good. Yet, He does not force us to be good.

3.8.1.1 No Act Finalizes Without the Approval of Allah.

No disaster strikes except by permission of Allah. And whoever believes in Allah He will guide his heart. And Allah is Knowing of all things.

(Quran: 64/11)

And if Allah should touch you with adversity, there is no remover of it except Him. And if He touches you with good then He is over all things competent.

And He is the subjugator over His servants. And He is the Wise, the Aware.

(Quran: 6/17-18)

We produce wills so as to put them into action and then receive some results. The relationship between the action and result is based generally on some patterns that Allah has created. These patterns are generally contingent. Without those patterns, our wills would not have much use. Hence, Allah is active on our wills from this angle as well.

Allah sustains the universe, our energy, our consciousness... On the other hand, Allah says the last words over what happens finally. But the agent is given freedom to will anything. What happens ultimately is with the approval of Allah.

According to Islam, our wills are very important in that even if they and our related acts do not produce the results we expect, we can reach positive consequences if it is a good will. If it is a bad will and we put it into action but cannot produce the related result, we can again be responsible. As the Prophet Muhammad (PBUH) said: "Actions are according to intentions."¹⁶¹

On the other hand, the following verse implies the distinct importance of wills:

To Allah belongs whatever is in the heavens and whatever is in the earth. Whether you show what is within yourselves or conceal it, Allah will bring you to account for it. Then He will forgive whom He wills and punish whom He wills, and Allah is over all things competent.

(Quran: 2/284)

So, in cases where the action or result does not overlap with the will, there may be responsibility or forgiveness by Allah. Yet, note that this responsibility relates mostly to the hereafter or sanctions executed by Allah. Because, in worldly terms we are not able to have access to such details. An important implication of the verse is that we must be careful about keeping our inner world clean. We must try to produce good wills and stop any bad wills from growing within us. Even if we cannot do the act or the result in parallel with our will, there is responsibility about good or evil wills even if they have not been acted upon.

¹⁶¹ (Bukhari .)

The following verses emphasize also the purity of our inner world:

On the Day of Judgment when neither wealth nor children
will be of any benefit

But only one who comes to Allah with a pure heart.

(Quran: 26/88-89)

Question 130.

Does God ultimately learn things on us like we learn through tests
in laboratories?

Answer 130.

God is All-Knower. He knows whatever happened and whatever that
will happen. He also knows all potential wills, acts, events, probable
combinations of chains of events that are probable to result based
upon any actualized wills, settings, and conditions. Of course, He
determines what He will do upon certain conditions.

God asks many questions on many occasions in the Quran. For
example, He asks Moses (PBUH):

And what is that in your right hand, O Moses?

(Quran: 20/17)

And He sometimes asks for help:

O you who believe! If you help (in the cause of) Allah, He
will help you, and make your foothold firm.

(Quran: 47/7)

Allah as God interacts with His servants in many layers. Sometimes
He gives the opportunity to His servant to have a dialogue with his
Lord; sometimes, He gives the opportunity to His servants the

opportunity to collaborate with their Lord. Sometimes He asks questions to encourage them to thinking, and so on. Of course, if we do not have free will, His asking for help would not be meaningful.

Yet, He does not learn anything from us. Further details on this will be given in the following parts.

3.8.1.2 Our Will Power, and the Power of Allah

And you do not will except that Allah wills. Indeed, Allah is ever Knowing and Wise.

He admits whom He wills into His mercy; but the wrongdoers He has prepared for them a painful punishment.

(Quran: 76/29-31)

Allah does not guide the wrongdoing people

(Quran: 2/258)

Would not the will power of God be limited if we have free will power? How can we have free will power if God has full control over whatever happens?

These concerns are at the basis of origination of the marginal sect called Jabriyyah which rejects the free will power of the human being.

According to the Quran, Allah has power over all things. Everything happens within the permission of Allah. So, whatever He does not permit cannot happen. Yet, we have a freedom within the circle surrounded by the permission of Allah. Our wills are also surrounded by the permission of Allah. Our acts also are surrounded by the limitations of the permissions of Allah. For example, in a specific situation, we may be allowed to will a certain will, but we may not be allowed to do the relevant act. Or we may do the relevant act, but

its result may not happen because God has not planned for it to happen. So, there is also an interaction between our wills and God's wills.

Though not always, God's wills may be as a reaction to our wills. He also knows all alternatives he opened to us and their implications¹⁶². And our wills may be as a reaction to God's wills.

We will within the limitations set by God. Our wills may or may not happen. But we are responsible for our wills. The will of God always happens.

And Allah is predominant over His affair, but most of the people do not know.

(Quran: 12/21)

Wills of people may also produce opposite results. We may want result R1 to happen but result R2 may happen because of the circumstances outside of our control. So, if our wills are real this does not prevent God from making and executing his plans. Even our wills may cause the opposite of what they are intended for. God has control over all of the alternatives. The agent cannot choose any alternative that Allah did not make available/ possible.

If the universe was deterministic, then it would mean that Allah has fixed every event in the past, and we would not have any freedom. However, patterns are like limited commands, and the default is the multipotential causal power of creation. Hence, deterministic predictability is not part of nature, and Allah interacts with the creation while patterns enable us to see our paths in a balanced way.

¹⁶² Allah ever knows the future as if it has happened. He also knows all the probabilities from different points of view.

All potentials and all related feelings are known to Allah. So, He is not surprised with anything.

God may on certain occasions intervene with the wills. Such examples will be explained in the following parts.

Nothing that Allah does not approve can happen. Allah is Powerful.

Question 131.

Does not the following verse mean that we do not have freedom as to whether evil or good things come to us?

(Muhammad), if God afflicts you with hardship, no one besides Him can save you. If God grants you a favor, no one can prevent you from receiving His favors. God bestows His favors upon whichever of His servants He wants. God is All-forgiving and All-merciful.

(Quran: 10/107)

Answer 131.

The above verse starts with “If”. Of course, if “Allah” intends a hardship upon one of His servants, then nobody can prevent this. But the ultimate evil comes from the servant: If a hardship comes to the agent as a punishment, then this was caused by the agent. If a hardship comes as a test, or in accordance with the expiration of the resources assigned to the agent, and the agent is patient, and manages how to behave upon this hardship, then this hardship is not evil. But if the agent rebels against it, then it becomes ultimately evil. Allah is never unjust; so, any event becomes evil because of the action or reaction of the agent. For example, Allah may cause one to enter hell; or He may cause one be disbeliever because of his arrogance, these are ultimate evils. Yet, if Allah causes such things, this means that

the servant acted wrongly in the first place to deserve these troubles. And “if” Allah causes those hardships, nobody can remove these hardships if He does not allow their removal or remove them. In the Quran, Allah shows the solution: The agent must transform himself for good; and he has to seek refuge in God.

Question 132.

Is Islam fatalist? If not, what are the differences between fatalism and the teachings of Islam?

Answer 132.

As explained above, according to Islam, there are certain events that we cannot change. And there are certain events that we can change.

Regarding this question, I will use the definition of fatalism as the subjugation of all events and actions to the predestination.

There are definitions of fatalism so as “some” instead of “all” events and actions are subjugated. However, this would not be a relevant definition in this context, since, hardly anybody believes that he can change all events or actions.

So, regarding the definition of fatalism that we use, Islam is not fatalist. Islam is based on freedom of will as explained up to here in this book. Also, in the following parts, I will explain further aspects of Islam that emphasizes the freedom of will. We will also examine the omniscience of God in detail in this respect.

Question 133.

If God is powerful, then can He do evil? If He cannot, then how can He have free will?

Answer 133.

Say, "To whom belongs whatever is in the heavens and earth?" Say, "To Allah."

He has decreed upon Himself mercy.

He will surely assemble you for the Day of Resurrection, about which there is no doubt. Those who will lose themselves [that Day] do not believe.

(Quran: 6/12)

Allah is Able to do all things.

(Quran: 29/20)

God is able to do all things. Yet, being able to do all things is not equal to or does not necessitate actually doing all things. He may will not to will and not to do the evil things even though He is able to will or to do them.

Would someone who is not able to do anything except the good things be considered as a good being, without having the freedom of will and action?

Many people may subjectively assess some actions of God as evil. However, Allah is the one who defines the evil and the good.

For some, even the very fact of the existence of God is evil and unfair: How can a Being have so much power over other beings? However, such arrogant evaluations and low desires have no weight over the truth:

And should the truth follow their low desires, surely the heavens and the earth and all those who are therein would

have perished. Nay! We have brought to them their reminder, but from their reminder they turn aside.

(Quran: 23/71)

To produce a result, Allah does not need to force someone to be evil. Had not Adam (PBUH) slipped, Allah might create another human being who has free will besides him, or a third one. So, in any case God could execute His will while giving full freedom and responsibility. Allah is able to do what He wills without being evil.

Had Allah willed, everybody on earth would believe. This does not mean that He makes people disbelieve. He gives freedom and does not need to interfere with it.

For example, the agent A1 happens to be good and the agent A2 happens to be evil. They may be within the universe of potentials or within their childhood. Allah may make one survive and the other one die. And both are free. God cancels one and allows the other. This does not make the evil caused by God as long as God does not push them. That God creates a being without coercing it to evil, with an unbiased nature does not make God the coercive source of evil. Hence, He may produce good or evil deeds by just permitting the existence of one of them, without Himself forcing anyone to be good or evil.

Allah is the ultimate cause of all things. Some things will be superior, some things will be inferior. That some things are sad for being inferior is not evil, since in any case, they had some net positive experiences.

Allah is the giver of all well-being. So, if He takes back what He gave, He cannot be considered evil for taking back what He gave.

3.8.1.3 Allah's Guidance and Misleading

I will turn away from My signs those who are arrogant upon the earth without right; and if they should see every sign, they will not believe in it.

And if they see the way of rectitude, they will not adopt it as a way; but if they see the way of error, they will adopt it as a way.

That is because they have denied Our signs and they were heedless of them.

(Quran: 7/146)

O you who have believed, fear Allah and believe in His Messenger; He will [then] give you a double portion of His mercy and make for you a light by which you will walk and forgive you; and Allah is Forgiving and Merciful.

(Quran: 57/28)

He misleads many thereby and guides many thereby. And He misleads not except the defiantly disobedient.

(Quran: 2/26)

By which Allah guides those who pursue His pleasure to the ways of peace and brings them out from darkneses into the light, by His permission, and guides them to a straight path.

(Quran: 5/16)

Indeed, Allah does not guide one who is a transgressor and a liar.

(Quran: 40/28)

Allah wants no injustice for [His] servants.

(Quran: 40/31)

Allah thus sends astray those who are transgressors, doubtful.

(Quran: 40/34)

As we see clearly in the above verses, Allah does not interact through acts only, but also, He is active in interfering with our wills. God leads to certain behaviors, wills, based on certain wills and attributes of His servants.

Some attributes of Allah are reactive. If He did everything and we did not have free will, then He would not be interacting with His creation. He is Forgiver, Thankful, Helper, Lover, Judge, Lord. These and other names of Allah demonstrate that He interacts with His creation. Hence, He creates sovereign beings. Actually, all of His attributes require the reality of what He creates. Though He interacts, whatever He creates do not constitute a limitation on Him as explained above.

Allah helps the ones who ask for His help appropriately. However, the servant has to do certain acts in any case. For example, Moses (PBUH) needed to hit the sea with his stick.

In some situations, Allah creates tests which will influence the wills in an unbiased way. For example, a hardship may befall a person. If the person is good, he can be patient and increase his degrees in the sight of God. If he is impatient and rebels, then he may get away from God.

Question 134.

How can Allah influence wills? If He knows that a certain will will happen, then it has to happen because of the omniscience of God, and if it will not happen according to His knowledge, then it must not happen.

Answer 134.

Allah observes the agent who has potentials. Allah may want to interact with the wills. So, if the developing will is a will Allah does not allow then something that prevents the formation of that will may happen. If he tends toward one of the wills Allah would allow then it will not be prevented. If Allah wants the agent will a specific will, or a will from within a specific set of wills, then a situation which will force the agent toward that will or toward that set of wills may happen.

On the other hand, the omniscience of Allah encompasses Allah's acts as well. So, if the agent is about to will the will W1 and Allah will block it with a certain event, this event is also contained within the knowledge of Allah.

By doing evil permanently one gets used to it so that he sees it good. So, there are patterns like this as well so that we can foresee and manage and have responsibility on these. But this does not mean that they are outside of Allah. Allah may mislead through these patterns as well those who keep repeating their bad deeds. Satan also misleads by manipulating and using such patterns.

Other issues related to this question will be explained in the following parts in detail.

Question 135.

Why would God care about us or what we do, since we are very small within the entire universe, let aside the entire existence?

Answer 135.

Allah is not limited like us. When we zoom out to see the universe, we lose focus on smaller things. However, this is not the case for Allah. He encompasses each atom as fully as He encompasses the entire existence.

When we conceive the entire universe, we feel that the human beings or some other things are small. This relative smallness or insignificance is due to the limitations of what our perception can contain: When we conceive more and more things, their relative sizes or values become smaller, because, we cannot contain all of them keeping same levels of detail, because we are limited in what we can contain. If we see something small from far this is the shortcoming of our limitedness in knowledge and perception. For God, when He conceives an infinite number of things, this does not force Him to have less detail for each thing.

3.8.1.4 Divine Knowledge

But if they intend to deceive you then sufficient for you is Allah. It is He who supported you with His help and with the believers.

(Quran: 8/62)

3.8.1.4.1 Allah Knows Our Future

Certainly, the Romans will be defeated.

In the nearest land. But they, after their defeat, will overcome.

Within a few years. With Allah is the Decision, in the past and in the Future: on that Day shall the Believers rejoice-

(Quran: 30/2-4)

Only God has the knowledge of the coming of the Hour of Doom. He sends down the rain and knows what is in the wombs. No soul is aware of what it will achieve tomorrow and no soul knows in which land it will die. God is Knower and Aware.

(Quran: 31/34)

Allah knows all things

(Quran: 64/11)

And there is no creature on earth but that upon Allah is its provision, and He knows its place of dwelling and place of storage. All is in a clear register.

(Quran: 11/6)

The above verses demonstrate that according to the Quran, Allah knows the future. He does not know only the possibilities about the future, He knows all the specifics as well.

When we say “Allah knows the future”, this is used to mean that He knows “our” future. Since for Him, there is no absolute time which is limiting Him, or which is confining Him outside of future, or which is a barrier for Him. Time is no distance for God. He surrounds all.

Our depictions in the graphs of physics that contain time are misleading. When we see time 't' as an axis, we use an assumption that time exists by itself and serves as a basis to other events by itself as if it is self-sufficient, we also assume that time is in this way

superior to other things. But if we depict it as second hand, ticks it would help us not to be so misled. Because we would use a more realistic depiction where the event that we actually use as time measure, is of the same nature as that which is measured. Same applies for space. Hence, neither the space nor the time are higher in kind than other sovereign wholes, entities, events; and they do not have any causal power and superiority over things so as to absolutely separate them. And this way we would understand that there is One Power sustaining all these relationships, and we understand the need for this power.

Question 136.

Molinism says that God knows whatever a person would will under any specific circumstances. Does this work according to the Quran?

Answer 136.

It does not work. Because if there is a specific will for each set of circumstances, then the person does not have free will. In this case, he cannot do but what the specific circumstances necessitate. The knowledge of God about the wills of an agent is as a knowledge about a will that has been willed; not as a knowledge about a will that has not been willed yet in accordance with an allegedly absolute time.

Question 137.

If God knows all, how can He change anything He knows? If He cannot change anything He knows, how can He be Omnipotent?

Answer 137.

Knowing power of God is not separate from doing power of God. God is an essence, knowing and doing powers are His attributes.

There is no necessity to consider the Power and Knowledge of God as separable attributes, or separately exercised powers.

Is infinite bigger than two times infinite? God's infinite knowledge and His infinite power overlap. When we do something, sometimes we regret. Because there is change in us or in what we know. But the knowledge of Allah is ever full.

God knows the future as something that happened, He knows our future wills as willed. These are like historical knowledge for Him, except for things that He plans to do or limit in any case by His sovereign power. About things that overlap with His plan, He knows them and makes them happen. Regarding other things, He makes feasible or willable only those that He approves. He also has full knowledge about the conditions that will enable any will, and conditions that will prevent any kind of will. He has full power over those conditions. He also knows the outcomes of potential wills.

Question 138.

It is possible to know some future events based on the nature of beings. Does not this remove free will? For example, I may know that Hatice will not jump onto the street without looking around. Does not this knowledge entail that Hatice does not have free will power regarding jumping into the street without looking around?

Answer 138.

Free will "power" is considered in respect to the person. As explained earlier, as a normal person Hatice has free will power. She also has her reasoning power. So, I know that it is likely that she will consider her OTBT and normally will not jump into the street without looking around. Free will power does not entail to be free to will or do everything.

On the other hand, supposing that her OTBT requires that she does not jump onto the street, then if she jumps onto the street, there will be a room to blame her, because she will be considered to have free will power under normal conditions. In this situation, if she does not jump, we do not praise her, but this is not because she does not have free will power, but because complying with that OTBT is quite easy. However, if for example there was a kitten on the street and she carefully jumped to save it and was successful then she might deserve praise.

Additionally, as explained in part 3.6.3.3 the will power is indirectly and non-coercively influenced by the implications on the consciousness of the essence of the agent.

Question 139.

Open theism claims that if we have free will, the future is undecided. So, God cannot know what is undecided. Why would not this be true?

Answer 139.

There have been many approaches which claimed this in many religions. The Quran as we explained above claims otherwise.

The distinction between the past, present, and future is just based on our subjective limited experience and feelings. In reality, if we ask what past is, we will define it as “what has passed according to now”; but if we ask what is now, we will say it is what we perceive now. And now is “now” as of “now”. It is past as of the future. It is future as of the past. What about if everything stops? So, will there also be a flowing time?

Furthermore, is “now” a time bracket with zero thickness of time? If it was so, then there would not be a time direction. So, obviously,

“now” is not like that. It contains elements of future in any case. We notice an event happening now, we make a projection about the future based on what is happening now, and based on this future, we adjust our behavior now. The future has an influence on our present behavior. We just have a limitation to encompass the future because of our nature.

Hence, it is obvious that time is not as we perceive.

In the following parts more details will be given on this point.

Question 140.

If God made all changes at once and knew them, can He add new changes, new states to that?

Answer 140.

There can be no change that God does not know. Because what God did was with His full knowledge and included all changes we can conceive of. God is not limited within an instant. We conceive an instant, because we perceive that our powers are limited in moments. So, we tend to think that God is also limited within moments; but there is no reason for this. We assume our time concept as absolute, and we assume that wherever we go in time or in space in our imagination, there must be something more beyond our reach. In our time concept, because of our limitations, there is a future which is beyond us. We feel that there are moments in which we are, and there are moments which are beyond our grasp. Therefore, when we did something, we see a potential thing to do because we are surrounded by and limited in time. We conceive that infinity truly exists but we cannot locate it, we cannot reach it. But for God infinity is not as something He cannot reach. Allah is “who ever is”. And “that which is not”, is not. Allah is more than infinite; He creates the

infinities. Hence, there is no infinity beyond His reach. He encompasses eternally whatever is new for us, from our perspective.

And Our command is but one, like a glance of the eye.

(Quran: 54/50)

And [He promises] other [victories] that you were [so far] unable to [realize] which Allah has already encompassed. And ever is Allah, over all things, competent.

(Quran: 48/21)

It is Allah who has created seven heavens and of the earth, the like of them. [His] command descends among them so you may know that Allah is over all things competent and that Allah has encompassed all things in knowledge.

(Quran: 65/12)

3.8.1.4.2 The Future Exists Within the Sight of Allah

If Allah knows the future, if determinism is false, and if free will is true, then the future must be existent as an actual reality.

If determinism was true, then Allah might know the future based on any state in the past and based on the allegedly permanent laws even though the future does not exist.

If determinism was false, but there was no free will and Allah had specifically determined everything without deterministic processes, then again, the future might not be present while Allah knows it. However, if there are even partially sovereign and free will based events, and if Allah knows the future, then the future must be existent for Allah.

The question “does the future or past exist as of now?” is like saying “does the universe exist in the earth?” Past, present, and future events are one and non-separable in terms of time used as a measure and a relation. Past, present, and future exist within this time’s whole and unity. But as I am limited, within my limited actual extension into time, only a limited time frame can fit and exist. That is why I cannot fit the future in me and I cannot feel its existence in my mind. So, I tend to think that the future and the past events do not exist. Because that something exists would mean that I have some control on or some interaction with it. However, my bracket of extent is quite limited. But within the extent of God all exists.

Hence, the A theory of time is not acceptable. Yet, the existence of the future is not exactly like in a deterministic B theory of time where the future is fixed and where there is no free will: In the Islamic teaching, the agent is active at any related stage. Though not exactly the same, a similitude of a block time running all simultaneously or in a synchronised way from the perspective of God resembles the teaching of the Quran. However, the B theory of time is not acceptable either, since according to the Islamic teaching, things and events are real and laws are not necessary and binding on God. C theory is not possible as well, since design is not limited by any design element or order.

Hence, the future is accessible to God wherein both God and we are active. But we as parts of the creation do not have direct access to it. For further details on the activeness through time, see part 3.5.6.7.

Question 141.

If the future exists, then, while time passes, do we go into the future?

Answer 141.

We are active only once within each moment as explained in part 3.5.6.7. If we would go into the existent future, then we would be changing it. We are part of some future. We do not move within time. We act on and observe each future moment within the future when it is formed first, we have a unitary existence throughout time as explained in the part about transcendence indicated above.

The agent who dies as a disbeliever is disbeliever as of now as well, though now his apparent aspect may look like a believer. Because he has a unitary being throughout time. Yet, his action in the future is real. The following verse is related to this point:

Indeed, those who disbelieve it is all the same for them whether you warn them or do not warn them, they will not believe.

(Quran: 2/6)

His future and present state are one with like their head being their future, and feet in now. But his end point defines what he is all along essentially.

When the agent undergoes a meaningful event in time t_2 , it influences the backbone of the agent all along.

Any sovereign agent produces his effects on the points of time through which his active life extends. However, the access of our effective agency and consciousness present at time t_1 is specific to t_1 and does not extend to the events at point t_2 . Likewise, the access of our effective agency and consciousness present at time t_2 is specific to t_2 and does not extend to the events at point t_1 . Yet, our soul or the backbone which is the essential actor is the same and active at both t_1 and t_2 . This is like the different wheels of the same car

touching different points on the same road. Further details of this point are in part 3.5.6.7.

Question 142.

If the future exists, it exists for how long?

Answer 142.

A thing cannot be located in time relatively to Allah. Because in this case Allah would also be relative. If we say this happened because Allah willed at time t_1 , then Allah would be locked inside a time bracket relatively to Allah, which is absurd.

When an object is created, it is created with its space. Can we think of an object which does not have its inside and outside space? Like the surrounding space is part of something, surrounding time toward past and future is part of an object or of an event. When two objects or events are combined, their spaces and times are also combined. Therefore, the times and spaces of things or their combinations are not absolute. They are relative¹⁶³ and specific to their contexts. They are never binding or limiting God. There are spatial relationships between things like big, small, far near. Likewise, there are time relationships between events. And they are originated by and visible within a unity that surrounds all.

Therefore, we should not try to assign an absolute location in time to an object or an event or a bundle of events which already contain their time, while these times are relative.

¹⁶³ The word relative is used in this context because neither space, nor anything else can be an absolute limitation for God; and God is like nothing.

Question 143.

If the future exists now, then what does God create?

Answer 143.

Future exists because God creates it. There is no absolute time outside the power of God with an absolute beginning. God's creation is relatively to the stages within the existence. God is not bound with those stages.

The future does not exist within "our now according to our perception". Every future range has its own nows; our perception of now reflects our subjective and limited perception of now. It is not possible to fit the future within our limited now or within our limited past. Every moment and its sovereign elements have their dynamics. We cannot expect the future to fit within our limited now. Future exists in its "nows". However, the unitary knowledge of God encompasses the future as He encompasses its nows, as in something which looks for us like a metatime.

Also, there are in fact interwoven chains of slices of time which contain each now, its own past present and future. This is like our selves which have unity with our immediate past and future.

Furthermore, we should think about what the future is? Is not today also future relatively to yesterday? Will the future be yesterday? Was not yesterday also future? We define the future from the limited perspective of human beings. But if what we experience is real, then it cannot be only subjective. It has to have an objective reality. And this reality is sustained and known by the One God.

There is no absolute frame of reference for time. If we suppose that everything goes billion years backwards in terms of time, we cannot define or distinguish that.

Question 144.

God uses in the Quran the present tense and future tense regarding certain things that will happen. Does not this mean that God will do certain things which do not yet exist?

Answer 144.

God communicates with us as human beings. We have a limited perspective and we are within the limitations of our relative time perception. Therefore, God uses our language to deliver us understandable messages. Time-like relationships are within created things. However, God sometimes uses words from His perspective as well. In such cases, we see that He uses the past or present tense for future events. The following verse is an example to this:

And Hell was displayed for the wrongdoers.

And it was said to them: "Where is what you used to worship?"

(Quran: 26/91-92)

There are many verses like this in the Quran. However, note that such verses are mostly translated in future tense by the translators. This may be because their general reader is not expected to be well-acquainted with the philosophical or scientific implications of such specific usage.

3.8.1.4.3 Allah's Knowledge of The Future Does Not Abort Free Will

He is the First and the Last, and the Outward and the Inward;
and He is Knower of all things.

(Quran: 57/3)

If God knows what I will will tomorrow, then how can I have any free will, how can I will something other than what Allah knows? This question relates to God as an influencer upon wills. In fact, the question alludes to a claim that if God knows the future, then His knowledge is a coercive cause upon our wills.

Let us address this question. Suppose that next Sunday Maryam will eat chocolote ice cream. Yesterday Allah knew that next Sunday she will eat it, and that she will will to eat it. So, next Sunday, can she will to eat vanilla icecream instead of chocolate ice cream? Obviously, if Allah knows this, then she cannot eat vanilla ice cream, otherwise, the knowledge of Allah will be false, and we cannot say that Allah is all-Knower. But if she cannot have vanilla ice cream because of a causal effect of the knowledge of Allah, this means that she does not have free will, hence, she cannot be responsible for anything while the Quranic teaching says that she is responsible for certain things.

Here the difficulty arises because of the presumption that the knowledge of Allah causes Maryam to eat chocolate ice cream. However, whenever Maryam has been given free will power, it is the will of Maryam which causes the knowledge of Allah that she will eat chocolate ice cream. Suppose that there was a video recording time machine which video recorded Maryam on next Sunday and traveled back to yesterday and Cemal saw this video recording. Would the knowledge of Cemal yesterday cause or force Maryam to eat chocolate ice cream next Sunday? Obviously, here the knowledge of Cemal as of yesterday would be caused by the will of Maryam on Sunday, not the other way round. So, as we see in this example, the mere knowledge of Allah does not cause Maryam to will to eat the chocolate ice cream.

But can she choose to eat vanilla ice cream while yesterday there was that video recording? Here according to the Quran, we need to take the issue in two scenarios: The first scenario is where she does not

know anything about the specific knowledge of Allah about her choice, and the second scenario is where she knows about this knowledge of Allah. The following verses indicate the possibility of these scenarios:

Knower (He) of the Unseen, and He discloses not His Unseen to anyone,

Except whom He has approved of messengers, and indeed, He sends before each messenger and behind him observers,

That he may know that they have conveyed the messages of their Lord; and He has encompassed whatever is with them and has enumerated all things in number.

(Quran: 72/26-28)

In the first scenario where she does not know the specific knowledge of Allah about her will, the knowledge of Allah has no presence as an input in her will since she does not have any access to the knowledge of Allah. So, the result of her specific free will constitutes the knowledge of Allah. (Note that in this example we analyze the range of freedom of Maryam, not things she cannot do in accordance with the boundaries set by Allah; here Allah permits her to be in a situation to be able to choose between these two types of ice cream, and He does not put her into a situation where she could choose tens of other types of ice cream.) In this respect, if she wants to exercise her free will power upon the knowledge of Allah by negating the knowledge of Allah to see whether this knowledge limits her will, she will be negating what she actually and freely wills on next Sunday. Clearly, if “she” negates what “she” wills, this will to negate, will also be her will depending on herself, and Allah will not be limiting her will. So, if she does not know the specific will of Allah, no matter what she wills, and no matter what will she negates, her ultimate will constitutes the knowledge of Allah. She has only one actual will and

the knowledge of Allah depends on this will, the knowledge of Allah does not limit her will. Allah exercises His power in putting her in a specific situation; He might give her only one choice and give her no possibility to exercise or actualize her free will in a specific situation as well. But here we consider a situation where she has been given a range of freedom.

Now let us see the scenario indicated in the above verses where the knowledge of Allah limits the free will power of Maryam: Let us suppose that the knowledge of Allah that she will choose to eat chocolate ice cream is communicated to Maryam. In this case, the trade-off between the knowledge of Allah and the free will power of Maryam arises: if Allah communicates to Maryam specifically that she will eat chocolate ice cream, then she will not be able to negate this communication. In this situation, the knowledge of Allah will prevail. In this scenario, there is a specific knowledge of Allah about what will Maryam will. There is or there may also be a specific and direct “will” of Allah concerning the specific will of Maryam, and the specific knowledge and/or will of Allah has a coercive and causal effect since it overlaps with the knowledge of Allah. So, He may cause her to will a specific alternative or He may cause circumstances so that she wills a specific alternative. We will see further details of this in respect to the life of Prophet Joseph (PBUH) who saw in his dream certain things which will happen in the future: in the related events, we will see a combination of chains of events where he, his family members, exercise their free wills in certain ranges of freedom, but at the end, the ultimate will of Allah happens in accordance with the prophesy He gives to Prophet Joseph (PBUH). So, since the disclosure of the will and the relevant knowledge of Allah about a certain situation annihilates the free will power, as noted in the above verses, Allah does not disclose His knowledge to His creation; this lack of disclosure removes the alleged contradiction between the knowledge of Allah and our free wills.

The above question may also be extended to the free will of God. So, a second question may be asked: If He knows the future, then how can He freely will or do something other than what He knows? These issues are brought in under the alleged “omniscience-free will” and “omniscience-omnipotence” paradoxes. This question is simpler compared to the above question where there are two agents: Allah and the servant. Because in this second question, Allah is the knower, the willer, and the doer. There is no need to separate between the knowing, willing, and doing of Allah. Hence, if He wills to do something and since He has the power to do it, then there is no reason to presume that His knowing, willing, and doing must or may be contradictory. Hence, there is no reason either to presume that His knowledge would limit His wills or acts; there is no reason to presume that He has to be able to will or to do something other than what He knows.

Let us address the above questions in further details.

We feel that our direct power, experience, and knowledge are confined within a moment, not within a duration or time bracket. A similar feeling applies to space regarding which we have difficulty even to imagine how we can equally focus on two or more locations at the same time. Even if we feel that we have an actual power over a time bracket, we feel that it is very short. Therefore, we automatically tend to expect God to be like us. And we see the time as an absolute barrier. And we conceive of the time sequence so that God would be in a time bracket, and the future would be in a different time bracket. So, because of this wrong framework we do not understand how God can know an event which is not yet within our time bracket, except if God preordains it.

As we are not able to actively encompass, access, and interact with what is beyond our moment, we conclude that the entire reality must be like this, and we assume that God is like us as well. So, we assume

that God can only know the future if He creates a structure and causal links which will connect His knowledge in His “past” time bracket coercively with His entire “future”. We feel that this way He may foreknow “His future”, that if there is no such link, then He may not know “His future”. And then we think that if there is such causal link, we cannot be free.

Also, as our knowledge and scope are limited, and as we are used to consider that “we are, while the future is not”, we have difficulty in understanding how God's knowledge about our future may exist while the future event did not yet exist. Consequently, the only apparent solution which seems plausible to us is this: God must have a plan which contains our wills, and the power to execute that plan.

It is true that a future event cannot be known by default by an agent who is limited and confined like us within a previous time bracket TB1. To have such knowledge requires full determinism, full power, and knowledge over all things within that TB1 or over the future event. In this case, if that future event is an act of willing of a creation, then this will cannot be other than what TB1 entails, hence, it cannot be free. However, that future event can be known as an event which has happened without causing inconsistency with the freedom of will. But if it can be known as an event which has happened, then would not the knower be within the future of that event? Not necessarily, if that being does not need to be confined within any time bracket.

Let us explain this with a simple example:

Let us suppose that Jane will go to a car dealer tomorrow (Tuesday) and buy a car.

Does God know today what car will Jane buy, and have on Wednesday?

If yes, then there are two possibilities: (1) God knows it today because He will cause Jane and other circumstances -for example He will make sure that she will not be sick tomorrow- so as she will go and buy the car that God knows today. (2) God knows it because God created someone called Zayd who exists tomorrow and on Wednesday with a time machine, and after he video-recorded what happened on Tuesday and Wednesday, has traveled to today, and gave that recording to God. Zayd does not have any power to do anything else.

In both scenarios, God knows what Jane will will. In the scenario (1), Jane cannot have free will. Because she cannot overcome God's power. In the scenario (2), today's knowledge of God does not necessitate that she does not have free will. Because, the knowledge of God depends on the will of Jane. This dependence is a logical dependence. In actuality, God knows all information about all events as if they are historical/ past events as well. So, God ever knows all about Jane, in His unity as a God who surrounds all things.

Now, let us suppose that Jane's decision also has some important aspects for God, for example, it is possible that she buys a cheaper car to save some money which she may give to her poor neighbor, or she may not think about this and buy the best car she can. In this case, let us suppose that God wants to test Jane. He arranged so that today someone brings his car to the car shop so that there is a nice but cheaper car tomorrow in the car shop, and a poor person will pass by Jane so that she remembers her neighbor. And it will occur to Jane an opportunity to think about this while another person will come and keep the car dealer busy so that Jane may think sufficiently about his neighbor. But buying the more expensive car is better for Jane in worldly terms.

This arrangement is necessary for seeing the actual reaction of Jane to the situation. Without it, it is impossible to expose and judge

objectively enough her true reaction to such a situation. As free will is true, and as Jane has not yet made clear definitely how good or evil, she is, it is unfair to behave as if she would buy the expensive car, or as if she would buy the cheaper one. In any case, the actual situation and the actual reaction of Jane will constitute an objective data about her degree of goodness at least for her, but also for God. This is about the logical dependence of the knowledge of God about the attitude of Jane in such a situation, even though He knows what will happen as if it has happened since He encompasses the future.

The following verse is an example about this logical necessity:

We sent Our Messengers with clear evidence (to support their truthfulness), and sent with them the Book and the Balance so that people would maintain justice, and We sent down iron - in which there is strong power and benefit for the people - so that Allah would know who would help Him and His messengers without seeing the unseen. Allah is All-powerful and Majestic.

(Quran: 57/25)

Regarding the ever-present knowledge of God, at the very point God decreed to test Jane, Zayd brings from the future his video recording. And supposing that this point of decree is today, God watches the video about which car Jane bought¹⁶⁴. Note that from the perspective of God, the point of decree cannot be located within any point of our time perception. But from our perception, we can say that certain behaviors of Jane caused God to test her in more difficult ways, at a certain point of our perceived time.

God is not limited with any single perspective or point of action. We process data we receive with both of our eyes. We can raise

¹⁶⁴ Remember that video recording is only a similitude. God directly watches whatever the video-recorder records, Jane's inner voice, and more.

something with both hands. Likewise, God observes things and influences things through whatever points He wants.

As noted in the following verse, some replace God with time as if time is an effective thing. Allah rejects this claim:

And they say, "There is not but our worldly life; we die and live, and nothing destroys us except time." And they have of that no knowledge; they are only assuming.

(Quran: 45/24)

The following verse shows also that time is not an all-encompassing absolute thing. Some things undergo change, some do not. For example, the food and drink in the following verse do not undergo change. And there is no need to take some of them as superior to others.

Or [consider such an example] as the one who passed by a township which had fallen into ruin. He said, "How will Allah bring this to life after its death?" So, Allah caused him to die for a hundred years; then He revived him. He said, "How long have you remained?" The man said, "I have remained a day or part of a day." He said, "Rather, you have remained one hundred years. Look at your food and your drink; it has not changed with time. And look at your donkey; and We will make you a sign for the people. And look at the bones [of this donkey] how We raise them and then We cover them with flesh." And when it became clear to him, he said, "I know that Allah is over all things competent."

(Quran: 2/259)

Time is a unit and an outcome of design like a designed machine. Logically and empirically, for God there is no limitation to have any knowledge that relates to the future. Time is not an absolute distance.

Things do not happen because time passes, but time passes because things act. So, time is derived, secondary, element of design, and a measure. It is not something that can divide or limit God.

The existence of any speed and related vector is sufficient to show that time is not a distance. Change is an essential element related to time. Generally, this change occurs in space, hence for example, the term spacetime is generally used. If a point in space can be subject to change in terms of movement, then the change cannot be defined by less than at least two points. To define a simplest movement as a change we need two points in space, hence in time. Without them we cannot have direction and movement. Therefore, the minimum thickness of a time bracket cannot be zero. If it is zero and things are in time, then nothing would be able to interact and be interacted. The minimum thickness will have a non-separable unity, because if there is this minimum unity, then we cannot talk about time as something bringing new things on its own. Because, the relationship between these two points necessarily exists between the second point and a third point. Consequently, within a chain of events and their sub-parts, all points of time must be non-separable. So, all points of time will be as if they are in the same common point. Actually, Bell's inequality experiments confirm a non-localism which is in harmony with this unity. Therefore, it is not correct to try to divide time into parts and think that God is squeezed in such a part.

Question 145.

If God decrees to test Jane, He instantly sees the future. But does not He know what Jane will do before He decrees that? If He knows this before this decree, then is not He obliged to take this decree?

Answer 145.

Time does not divide God into compartments. All acts of God are as if instantaneous since time is not over God. The similitude of God may be like a set of equations where one equation is fundamental and others depend on the fundamental one. There is no differentiation within the fundamental one. Note that this is just a very limited similitude to give an idea about the non-existence of any logical inconsistency.

God's knowledge of future does not cause Jane to do what God knows. Likewise, God's knowledge of the future does not cause God to do what He knows.

Let us assume that God is not Omniscient, and He makes all else. And assume that in this case there is free will. Now, let us add the omniscience of God in this whole structure. How the addition of omniscience would influence the free will?

God's access to all things is like instantaneous in our terms. Respectively to God there is no before or after. Event (a) which is before event (b), is before in its relationship to event (b). However, God has instant access to event (a) and event (b). Allah is the basis of the connection between these two events. Same Allah is also the receiver of the outcome of this relationship. And Allah is not divided.

Knowing the future when we are in the past is like knowing something in another location. It does not cause anything as mere knowledge without relating to an act, without being combined with energy or will. That I know that the glass cup I made fall will be broken in a second does not make the breaking the result of my previous knowledge. Subjective previous knowledge does not have any causal power about the future. Knowledge is in no place in a previous time slice.

The thing that confuses people is that if someone is informed by an omniscient being about what he will do tomorrow, and if he cannot negate that info, then this means that his free will is of course does not exist about that info. If Zayd was informed that he will will to eat the red candy instead of the white candy, and knowing that and in the presence of both candies, he was not able to see the white candy, or touch the white candy, if he was experiencing a power prevented him from willing the white candy, then that info would be like a coercive one aborting his free will. Because that way, that info would have entered into the causal chain¹⁶⁵ - though in fact a knowledge would never influence with any physical energy what Zayd would do, and it would be something else which would execute that knowledge to become true -. But otherwise, if he could will to eat the white candy then that info would be ineffective on his free will power. So, the alleged free will and omniscience paradox can happen and be solved only in an actual situation that is explained above. In such an actual situation it will be seen whether there is a coercive omniscience coerced with a power, or the free will of Zayd overcomes that info. The normal solution is that the knowledge of God about our free wills are dependent on what we will, unless it is communicated to the agents so as it is deliberately made coercive by the coercive power of God.

The following verses in the Quran are relevant to this paradox:

Knower (He) of the Unseen, and He discloses not His Unseen to anyone,

¹⁶⁵ If such a thing happened, this would mean that either there is a deterministic relationship or someone who has this knowledge and the power to make this knowledge come true and to make it come true, he would exercise his power. So in any case, the foreknowledge would not be compelling Zayd to do anything.

Except whom He has approved of messengers, and indeed, He sends before each messenger and behind him observers,

That he may know that they have conveyed the messages of their Lord; and He has encompassed whatever is with them and has enumerated all things in number.

(Quran: 72/26-28)

If Allah informed any info, then it would come true. And it would generally remove the responsibility. So, other than exceptions, Allah does not share His knowledge about the future with anyone.

If Allah shared such a foreknowledge, then it would be possible to try to negate this foreknowledge. And if God is the giver of this knowledge, then He would have the power to prevent the agent from negating the foreknowledge. In this situation, there would be an exercise of power over the power of the agent. And he would not be free. But when such a foreknowledge is not shared, then there is no inconsistent will of the agent with any foreknowledge which contains the will and approval of Allah. Hence, there is no need to suppress the will power of the agent.

Question 146.

Time travel back in time causes some paradoxes. For example, if it is possible, then someone may go back in time and kill his mother so that he will not even exist so as to go back in time and kill his mother. So, given this paradox, how can we say that God is able to create such a time machine?

Answer 146.

Such paradoxes are applicable for multiple agents who are limited within time. In fact, this may be a reason for why God limits His creation in their transcendence through time. For example, a person

P1 sees that tomorrow the extremely successful CEO of the company he invested in would have an accident, and die, and that company's stock prices would plummet. Upon that P1 immediately sells his shares to another person P2. P2 also sees the future, and goes to the future and saves the CEO, and also sees that the company would have a key patent which will double the company's profits. On the foreseen accident's actual day, P1 sees that the accident does not happen. He goes to the past, and cancels his order to sell the shares. So, what happened and what did not happen? So, in the presence of many agents who can travel through time, either nothing happens conclusively, or things happen in a metatime. But then the metatime becomes the time and if they can travel through time, then they would also travel through metatime. In this case, metatime also becomes non-conclusive. Note that precise transfer of information from unfinalized states to the present would also produce similar results. Therefore, each one of the multiple agents is limited to his own time bracket in terms of will and action.

On the other hand, if the active transcendent power through time belongs to the One All-Knowing Creator, then there will be no such paradoxes. Because there will be no need for Him to negate His will since there will be no new information once all probabilities are known.

Furthermore, it is obvious that transcendence through time for the Creator is necessary and actually observed: Without a transcendent power through time, this universe would not exist in the first place. We precisely compare today's events with tomorrow's events in physics. We can calculate the movements of galaxies, atoms, and so on. Without a power transcendent through time, we would not be able to calculate things through time. We do the same for events in separate locations as well.

Furthermore, our observation that the time is extended is also subjective and limited because of our multiplicity. Time cannot be the addition of moments one after another where only those which enter within the zero-width time slice of the present exist actually. Such a view would produce many contradictions and absurdities like: What would be the glue between moments? What is the glue between the moments of each regions of space and entities? If moments are separate, then how can we talk of a direction of a moving object? How can anything be with zero extension in time, since things are necessarily combined with vectors in time?

So, in fact, God does not need to create Zayd and his time machine as we described the event in a simple way. God an All-Encompassing Power, is present both today and on Wednesday. The passage of time is only our subjective observation. Our observation is designed so as to be limited because of the paradoxes mentioned above.

Such paradoxes are not applicable to God since He is One.

Question 147.

Did God know that Jane would buy that car even before He created the universe?

Answer 147.

The scale is not important. The same explanations apply for all scales.

Question 148.

If Allah knows that He will create the universe, and Jane, and that Jane will buy that car, then does not He depend on this knowledge? If He has this knowledge and if He ever knows all things correctly, then can He choose to not create the universe and Jane?

Answer 148.

Allah's power of knowledge is not separate from His power to do. He is an essence, omniscience and omnipotence are His attributes. There is no necessity to consider the Power and Knowledge of God as separable attributes, or separately exercised powers. We as human beings plan something now and do it later, because we are limited by the flow of events which are beyond us. Therefore, we tend to do a faulty generalization about this limitation so as to include God.

The question presumes that God is squeezed within a time bracket, since the tenses are used as if this presumption is true.

As noted in the above verse, time is a unit, it is kind of a language element. It is not something that absolutely limits things. Allah creates and sustains the relationships of time. He is not restrained within chambers of time.

Claiming that He cannot choose to not create Jane, implies that He was not present as the One Creator, Sustainer, and Observer when she existed.

Time does not exist as a coercive thing by itself over all things. Because of our subjective limitations, we tend to perceive and consider time as something absolute which limits all things including God.

The existence of Jane depends on God. But the existence of God does not necessitate the existence of Jane. God is necessary, and Jane is contingent. The plan of God to create Jane and give her free will power does not ultimately compel God to do those things, because He is the One who plans.

Question 149.

Did God know that decree about Jane before He made that decree?

Answer 149.

Time does not divide God into compartments. There is no change in God. So, for God to have that decree at a point in “a time” is not meaningful. The all-encompassing knowledge and will of God are like in a single instant. Yet, this knowledge and will comprises all of His decrees specific to any universe, stage, layer.

The creation and resurrection of (all of) you is the same as that of one person. Allah is Hearer, Seer.

(Quran: 31/28)

Question 150.

Do logical steps or requirements form distances and barriers for knowledge, and do such knowledge mean necessities for following logical steps?

Answer 150.

Though logical steps and requirements may have a hierarchy, they are instantaneous, they are not absolutely separated by time or by anything else as limitations upon God. It cannot be said that one logical step must be before in time and another after in time. So logical bases can be surrounding other steps. Hence, they do not form barriers nor distances for God.

Question 151.

Let us suppose that the internal time within the universe does not constitute a distance for God. But what about God’s state before creating the universe, and after the change of the creation of the

universe? Is not there a distance/ difference of stage? Does not the knowledge about the universe exist in the knowledge of God before He created the universe?

Answer 151.

Originator of the heavens and the earth. When He decrees a matter, He only says to it, "Be," and it is.

(Quran: 2/117)

Between God and His saying "be" and His act there is no earth rotation or any other absolute event nor absolute time. God's saying "be" and the result is like the influence of 2s on 4 in " $2+2=4$ ". There is no time distance between the two sides of equation unless Allah defines a distance. But nothing makes Allah absolutely distant to anything. On the other hand, the knowledge of Allah is not indexed to His speaking or acts. And His word 'be' and what happens are also united based on the unity of Allah. And the events are not like the separate frames of a movie. The feeling of separation arises because of our limitations. Nothing can be conceived of as a separated instant with zero extension in time. There are units of intervals or beings that transcend intervals.

Question 152.

If God tells someone what he will will, then can the agent negate that?

Answer 152.

As a general rule, God does not share such information. Once such information is shared with the creation, then the creation is given the opportunity to test the knowledge of God, and since God cannot be proven wrong, He will probably compel the result against the creation's wills and acts.

In this respect, let us change the time machine example as follows: (1) Jane has free will, and without any prediction she has chosen to buy the expensive car. (2) Zayd comes to the past with his video recording and informs Jane that she will choose to buy the expensive car at a specific time in the future. Jane finds this very important. Because if there is someone who can video-record the future and bring to the past, then she can earn billions quickly for example on the stock exchange. So, she needs to test whether Zayd really has such a machine. To test this, she wants to see what will happen if she does not want to do what is on the video-recording.

In the scenario where Zayd fails in his prediction, the time she goes to the car dealer comes according to the video-recording. And Jane does not go to the car dealer, and at the time of the deal on the video-recording, she does not buy the car.

In the scenario where Zayd does not fail, she cannot behave other than what the video-recording shows, even though she wanted to test by not buying the car. She wants not to go, but she wills all sub-steps to go; she wants not to buy, but she wills to sign the contract...

So, the state containing the communication of a true prediction about a future state is essentially different than a state where this prediction is not communicated. If there is someone or a mechanism which underlies such a prediction, then the person subject to the prediction will lose his free will to a certain extent. The one who has such a knowledge capacity and communicates such a prediction, must have the power to make it true no matter what the previous states are.

Hence, other than exceptions, God does not share His knowledge about the future with His creation, as underlined in the Quran.

But in exceptional cases, God gives such information to His prophets as noted in the Quran. For example, in the following chapter, God

informs about Abu Lahab, the uncle of Prophet Muhammad (PBUH) and the wife of his uncle that they will enter hell:

May the hands of Abu Lahab be ruined, and ruined is he.

His wealth will not avail him or that which he gained.

He will [enter to] burn in a Fire of [blazing] flame

And his wife [as well] the carrier of firewood.

Around her neck is a rope of [twisted] fiber.

(Quran: 111/1-5)

Since if they believed, under certain conditions they might be forgiven and not enter hell, we can assume that this chapter prophesies that they will not believe and that they will not correct themselves sufficiently, ask for forgiveness, and be among those who do not burn in the hell. In fact, though they lived for many years after this chapter was revealed, they died as disbelievers. Could they negate these verses?

There are two main possibilities: (1) If by these verses it is meant that they will enter hell as disbelievers, then they could not negate by believing, since in this case they would have proven Allah wrong. (2) If by these verses it is meant that they will enter hell not as disbelievers, but just to pay for their past sins and injustice, then they could not negate the verses, because the verses would not mean that they will die as disbelievers.

If the first possibility was true, then this would mean that because of their past attitudes, they passed a threshold in their disobedience, and Allah closed the door to belief. Because the historical knowledge known by Allah about the future contains the fact that they are given

this prediction. As this prediction depends on their disbelief, they do not have the power to believe and falsify the knowledge of Allah.

So, in cases where Allah clearly and specifically informs such an end, there is no return. Other than such, we should have hope, but there is no guarantee for forgiveness or guidance, especially if we do big sins.

If the second scenario is true, then they would not have contradicted the prediction of Allah.

Though regarding the above chapter, it may be argued that the second scenario is possible, the following verse contains a clear prediction about the future disbelief state of some people:

And it was revealed to Noah that, “No one will believe from your people except those who have already believed, so do not be distressed by what they have been doing.”

(Quran: 11/36)

Regarding this verse, we do not know for sure whether this communication was also communicated to the people of Noah (PBUH). So, the like of the above scenario (1) may be true.

Nevertheless, we should note that the additional influence of these predictions is not in the direction of making them believe. On the contrary, even if someone subject to these verses would tend to believe -which should be very unlikely since God does not intend to be unjust to His servants who may tend to believe-, these verses would create a paradox for them. Because, if they chose to be believers against the predictions of these verses, then this would mean that the God who revealed these predictions did not know the future. So, these verses could be considered also as Allah being involved in blocking them against belief; however, it is also possible that according to the knowledge of Allah, they would not tend to

believe in any case. These are just possibilities according to my limited understanding; Allah knows the truth.

Time regarding its aspects relevant to free will is examined in part 3.5.6.4.2.6.5 .

3.8.1.4.4 Destiny

And ever is the command of Allah a destiny¹⁶⁶ decreed.

(Quran: 33/38)

He to whom belongs the dominion of the heavens and the earth and who has not taken a son and has not had a partner in dominion and has created each thing and determined it with determination.

(Quran: 25/2)

They say, "If there was anything we could have done in the matter, some of us would not have been killed right here." Say, "Even if you had been inside your houses, those decreed to be killed would have come out to their death beds."

(Quran: 3/154)

Say, "Never will we be struck except by what Allah has decreed for us."

(Quran: 9/51)

¹⁶⁶ Transliterated as "Kadar", "kader" or "qadar" from the original text of the Quran. The word predestination is generally used synonymously for the word destiny. The word qada' is also used sometimes in the same meaning. However, qada' is closer in meaning to execution, completion, and judgment.

3.8.1.4.4.1 Description

And not absent from your Lord is any [part] of an atom's weight within the earth or within the heaven or [anything] smaller than that or greater but that it is in a clear register.

(Quran: 10/61)

The destiny is made by Allah and it is a comprehensive and clear record of the creation and the events created by Allah. The destiny has many different aspects:

In one way it is a register that includes also both worldly and religious cause and effect relationships and definitions. Physical, biological definitions of objects, physical laws, and the relevant relationships or the relationships between bad deed and the relevant punishments may be cited as examples in this respect. This is partially explained in the following verses:

Exalt the name of your Lord, the Most High,

Who created and proportioned

And who determined and [then] guided.

(Quran: 87/1-3)

[Pharaoh] said, so who is the Lord of you two, O Moses?

He said: Our Lord is He Who gave everything its nature then guided it.

(Quran: 20/49-50)

And of the people is he who disputes about Allah without knowledge and follows every rebellious devil.

For him it is written down that whoever takes him for friend, he verily will mislead him and will guide him to the punishment of the Flame.

(Quran: 22/3-4)

As understood from the following verses, regarding the acts of Allah the destiny is also like a plan:

And for every nation is a [specified] term.

So, when their time has come, they will not remain behind an hour, nor will they precede [it].

(Quran: 7/34)

So, he¹⁶⁷ invoked his Lord,

“Indeed, I am overcome, so help.”

Then We opened the gates of the heaven¹⁶⁸ with rain pouring down,

And caused the earth to burst with springs,

And the waters met for a matter already destined.

(Quran: 54/10-12)

Allah has written down: I will most certainly prevail, I and My messengers.

(Quran: 58/21)

Furthermore, the destiny has the feature of a budget for the

¹⁶⁷ Noah (Peace be upon him)

¹⁶⁸ Sky

distribution of resources as mentioned in the following verse:

And there is no creature on earth but that upon Allah is its provision, and He knows its place of dwelling and place of storage.

All is in a clear register.

(Quran: 11/6)

On the other hand, the destiny is like a historical record¹⁶⁹ from the perspective of Allah who knows and witnesses the future without any limitations of time. So, although we have free will to a certain extent, everything is ever known by Allah. In the following verses there is a reference to such knowledge of Allah:

No soul knows what it shall earn tomorrow, and no soul knows in what land it shall die. Surely Allah is Knower, Aware.

(Quran: 31/34)

He knows what is before them and what is after them, and they encompass not a thing of His knowledge except for what He wills.

(Quran: 2/255)

Indeed, Allah is ever, over all things, a Witness.

(Quran: 4/33)

Allah encompasses all things.

(Quran: 4/126)

¹⁶⁹ While it includes the future

To Allah belongs the command before and after.

(Quran: 30/4)

Also, the destiny has the property of Allah's permission for any wills and acts of His creations. Nothing can happen contrary to His will as seen in the following verse:

And it is not for a soul to believe except by permission of Allah.

(Quran: 10/100)

3.8.1.4.4.2 The Reason for Destiny

No calamity [or blessing] occur on earth or in yourselves without being [written] in a Book before We bring it into being. This is certainly easy for Allah.

In order that you not despair over what has eluded you and not exult [in pride] over what He has given you. And Allah does not like everyone self-deluded and boastful

(Quran: 57/22-23)

Say: "Naught shall visit us but what God has prescribed for us; He is our Protector; in God let the believers put all their trust."

(Quran: 9/51)

Who, when disaster strikes them, say, "Indeed we belong to Allah, and indeed to Him we will return."

(Quran: 2/156)

No calamity [or blessing] occurs except by permission of Allah. And whoever believes in Allah He will guide his heart. And Allah is Knowing of all things.

(Quran: 64/11)

In any act of Allah, who knows all, including the future we can assume that there are all positive aspects of a perfect plan in any case, even if there was no register. So, we can expect everything He does, to be consistent and balanced as something perfectly planned even though there was no Book of destiny. The knowledge and other attributes of Allah do not gain anything because of destiny.

The destiny has some implications for us as follows:

Writing/ recording gives us a feeling about a reliable medium of communication and stability. Some may have difficulty of conceiving a control over such a big universe even though the controller is Allah. However, as an equation makes us understand many physical events easily, the recording of such relationships among other things in a register may help us better digest the power of God over the universe.

Also, without such a framework, we might feel very insecure. If things were just imprisoned within deterministic machinery of the universe, unable to do anything else, this would be devastating psychologically. If things were random, then it would be a very insecure setup for us. We live on a planet which moves with a huge speed. There are millions of variables, many of which if slightly deviated would cause us to disappear immediately. If the universe was a combination of both deterministic and indeterministic setup, then again, we would be under the psychological pressure of the bad aspects of both. However, with destiny, everything is under control, so that we have a strong feeling of security. We expect to live the next hour, the next day, the next year, and we can make plans, we can make choices. On the other hand, even if certain

disasters happen, we would know that they are part of a plan of the One God who is Wise; that they are not coincidental; that they are already known at least by the All-Powerful and All-Knower; and that they will serve certain higher goals.

As we see in the above verse 57/22, every event that occurs is prescribed by Allah in a register.

As noted in the above verse 57/23, this gives a message to us that everything is under control of God and in accordance with His goals and values. This reflects the unity and consistency of all events within themselves and with the goals and values of God.

On the other hand, as Allah is the Beneficent Creator of all, whatever happens comes from Him and to Him all shall return as noted in verse 2/256. Ultimately, nothing would come unjustly from Him. And in accordance with verse 9/51, the servants should be patient on things that may look hard at the beginning, and trust in Him since everything is under His control.

We must own our wills, but in a balanced way. We may have missed something because of our deficiency, we may feel like a hopeless loser. But we could not get it in the first place without the permission of Allah. Whatever we get or miss belongs to Allah, and is ultimately under His control. In any case, it would be the favor of Allah if we could get it. So, there is no need to panic in times of difficulty, and in any case, when we die, we will return to Him and if we are good, there is no fear about the end. So, we are not hopeless.

If something bad occurs because of bad actions, then, either this is to warn the servants, or to compensate for the evil, or for another reason; it is under control and in accordance with justice. Again, we must not be seeing what happens negatively, and we have to think about our context, and as it is consistent, we have to try to find out how it may concern us, and we have to improve ourselves.

These events may also push us to ask for help from Him, hence, increase our nearness toward Him, especially if we have become arrogant or forgetful about Him. Some difficulties may help us become stronger by finding other solutions, other methods.

As we see in verse 57/23, the occurrences may also be positive.

In such situations, we must not be proud, we should also keep in mind that they come under the control of God.

If we get rich, we must know that this was the plan of Allah though our wills also were important.

We must be ready to share, and we must recognize the help and favor of Allah.

Also, they may be tests, for example to expose whether we will help the poor if we became rich, to see if we will become arrogant and unjust, to see if we will trust our power and be ungrateful against God.

Verse 64/11 explains the good or bad happenings in respect to the permission of Allah. Whatever happens is with the permission of Allah. The register is a means for this permission. For example, in big organizations as government, for each expenditure there is a budget, some approvals, some registry or papers where what will be spent will be registered and signed by those who have authority. Likewise, for each wealth to be given to a person or to a community there are similar registration and approval processes. The destiny is a means for this.

In conformity with the destiny, thanks to the patterns and relationships in it, as we are in a well-organized and harmonious framework with some predictability, we also can make plans, and we can determine goals. Thanks to this we are able to think and to have our own will. Otherwise, we could not have any continuity thanks to which we could think and link event (a) to event (b) or means to goals.

And thanks to this we know that something that we miss may go to another one of His servants. Thus, we can relate everything to the registry, and the registry to its Maker, and this Maker to ourselves.

3.8.1.4.4.3 The Processes of Destiny

And she, in whose house he was, sought to seduce him. She closed the doors and said, "Come, you." He said, "[I seek] the refuge of Allah. Indeed, he is my master, who has made good my residence. Indeed, wrongdoers will not succeed."

And she certainly determined [to seduce] him, and he would have inclined to her had he not seen the proof of his Lord. And thus [it was] that We should avert from him evil and immorality. Indeed, he was one of Our servants, sincere and purified.

(Quran: 12/23-24)

He said, "My Lord, prison is more to my liking than that to which they invite me. And if You do not avert from me their plan, I might incline toward them and [thus] be of the ignorant."

So, his Lord responded to him and averted from him their plan. Indeed, He is the Hearing, the Knowing.

(Quran: 12/33-34)

Destiny is sometimes understood very simply as follows: God decreed what objects, beings, events and so on bring into existence, and prescribed them in a register, and then makes them happen.

According to the Quranic teaching the destiny is not so simple. According to the Quran, the destiny is an interactive process. It is not a one-way oriented process.

As explained in the above verse 57/22, every event before coming into existence is prescribed in the register. However, before it is finally prescribed there may be some interactions between God and His Creation.

In the above verse 12/33 I gave an example verse which mentions the supplication of Prophet Joseph (PBUH) to Allah. There are plenty of verses in the Quran where Allah specifically orders us to ask help from Him about past or future events. Hence, according to the Quran it is obvious that we do not have in front of us a plan and a future that cannot be influenced. We can influence the future.

But are not our supplications also registered and planned by God in the Book of destiny? If everything is in that book then how can we make any supplication that is not there?

The answer to this question is precisely and clearly given in the following verse:

(Moses said) “And prescribe for us in this world good, and in the world to come; we have turned to You.”

Said He, “My chastisement - I smite with it whom I will; and My mercy embraces all things,

And I shall prescribe it for those who are godfearing and pay the alms, and those who indeed believe in Our signs,”

(Quran: 7/156)

The above verse contains a part of a dialogue between Allah and Moses (PBUH). Moses asks Allah to “prescribe” things. The word “uk’tub” in the original Arabic text is the imperative form of “kataba”

which means to write. It also means to prescribe, to decree, to ordain. The word used for “Book” which is also translated as registry which corresponds to destiny is “kitab”. It is another form of the word Moses (PBUH) used while supplicating to Allah so that He “prescribes” certain things. Therefore, Moses (PBUH) asks Allah to prescribe in that Book good things in this world and in the hereafter. Hence, we clearly understand from this that this Book is not a Book which has been finalized billions of years ago within our perspective. Though Allah knows its final version, as explained in the previous sections.

Furthermore, in the above verse the reply of Allah is very relevant about this aspect of the book: Allah uses the statement “I will prescribe” in His response to Moses. The word used here is the future tense of the word “kataba” in Arabic which means “I will write”, “I will ordain”, “I will decree”, “I will prescribe”. Hence, at the time of Moses, which as we know is much later than the creation of the universe, Allah uses the future tense, and says that He “will” prescribe His mercy to people who behave in good ways. We understand that He will prescribe upon certain behavior of people in the future as well. So, the behavior of people affects the mercy that Allah will prescribe for them.

So, we understand without any doubt that the destiny or the Book is a dynamic registry which is influenced by our supplications and our behaviors if Allah responds to them positively.

Moreover, through the clarification in this verse, we understand a very important mechanism about the relationships of our wills to the destiny: If our supplications change that way the destiny, then do our wills also change it? Of course, since the above supplication of Moses was an outcome of his will power. And his will is expected to influence the Book and what will occur based on it. And numerous verses in the Quran make it clear that our wills change future events.

The following verse which invites to spend in the way of Allah is an example:

If you loan Allah a goodly loan, He will multiply it for you and forgive you. And Allah is Most Appreciative and Forbearing.

(Quran: 64/17)

The following verse explains the outcomes of some bad deeds:

And [We cursed them] for their breaking of the covenant and their disbelief in the signs of Allah and their killing of the prophets without right and their saying, “Our hearts are wrapped”. Rather, Allah has sealed them because of their disbelief, so they believe not, except for a few.

(Quran: 4/155)

As we have seen what the Quran says about the relationship between Allah, the Book, events, and agents, let us now see how the mechanism of destiny works through a specific example:

In the 12th chapter of the Quran called “Joseph” Allah explains in detail what happened to him since his childhood until his maturity. This chapter is extremely important for understanding how destiny and God’s knowledge works. A person who wants to understand these subjects, must read and try to understand this chapter well. I will not go through all of it, but I will underline a few points from among many important points mentioned in that chapter:

Prophet Joseph (PBUH) was created. He had no say about in which family, in which geography he would be created -though note that the supplications of Prophet Abraham (PBUH) may have been influential in those matters-. Prophet Joseph was tested many times by God. Each test situation consists of certain circumstances where Prophet Joseph can will option O1 or option O2. If he chooses to

will O1, then there are secondary options as O1.1, O1.2, O1.3... Allah knows all of these options. But once Prophet Joseph (PBUH) prepared his will and proceeds to actualize it for O1, Allah may approve it and prescribe its actualization for him or not. If He prescribes it, then it is in the Book.

One actual test is told to us by God as in the following verse:

And she, in whose house he was, sought to seduce him. She closed the doors and said, "Come, you." He said, "[I seek] the refuge of Allah. Indeed, he is my master, who has made good my residence. Indeed, wrongdoers will not succeed."

And she certainly determined [to seduce] him, and he would have inclined to her had he not seen the proof of his Lord. And thus [it was] that We should avert from him evil and immorality. Indeed, he was one of Our servants, sincere and purified.

(Quran: 12/23-24)

Prophet Joseph (PBUH) had free will. He was free to commit adultery. But keeping in mind the ought to be truth which is not to commit adultery and especially not to betray his master, he exercised his free will power in harmony with his other mental powers. Yet, we see in the above verses that it was a real test and tempting situation, and he might tend to commit that sin.

We should also note that in the verse Allah mentions His help. Hence, the will of Prophet Joseph (PBUH) was with the help of Allah, however, this help also relates to his general attitude. We see in the above and following verses that he always feels the nearness of God and always seeks His help.

He said, "My Lord, prison is more to my liking than that to which they invite me. And if You do not avert from me their

plan, I might incline toward them and [thus] be of the ignorant."

So, his Lord responded to him and averted from him their plan. Indeed, He is the Hearing, the Knowing.

(Quran: 12/33-34)

The above statement "he would have inclined to her had he not seen the proof of his Lord" shows us that the help of Allah has been useful in his protection against committing that sin.

So, as Prophet Joseph (PBUH) was pure and sincere and always supplicating for the help of Allah, in the Book, Allah has written His help for him. Yet, though His help is true, Prophet Joseph (PBUH) needs to act with his own free will. Albeit the help, he had the freedom of will to go astray.

As we see in the following verses about Prophet Muhammad (PBUH), it is possible for prophets to go astray:

And if [Muhammad,] he had made up about Us some [false] sayings,

We would have seized him by the right hand;

Then We would have cut from him the aorta.

(Quran: 69/44-46)

The examples of prophets such as Prophet Adam (PBUH) who committed errors also show us that they own their free wills.

Hence, the good intention and deeds of Prophet Joseph, made God help him further. Allah might not offer His help to him. Or He might not permit him to refrain from that sin. His refraining from that sin is with the permission of Allah. So, in accordance with the verse

57/22, his refraining from the sin became written in the Book before he refrained, Allah permitted him not to sin in that context.

Note in the following verse, that had he not behaved well, his future might be a disaster:

And they both raced to the door, and she tore his shirt from the back, and they found her husband at the door. She said, "What is the recompense of one who intended evil for your wife but that he be imprisoned or a painful punishment?"

(Quran: 12/25)

So, had Prophet Joseph (PBUH) chosen the other option, then he might be caught by the husband of that woman. And then let aside being a personality whose name is mentioned in the Quran as a praised person, he might be killed or be a totally worthless person. In this situation, he would have been written in the Destiny Book like that.

Though the Destiny Book is dynamic, we should also keep in mind that there are many future events that do not depend necessarily on our wills or behaviors.

Now that we have seen the gradual development of the Destiny Book, we need also to consider this in its relation to the knowledge of Allah. If the destiny Book progresses gradually, then how can Allah know all eternally?

The same chapter gives us relevant information about this as well.

[Of these stories mention] when Joseph said to his father, "O my father, indeed I have seen [in a dream] eleven stars and the sun and the moon; I saw them prostrating to me."

He said, "O my son, do not relate your vision to your brothers or they will contrive against you a plan. Indeed Satan, to man, is a manifest enemy.

And thus, will your Lord choose you and teach you the interpretation of narratives and complete His favor upon you and upon the family of Jacob, as He completed it upon your fathers before, Abraham and Isaac. Indeed, your Lord is Knowing and Wise."

(Quran: 12/4-6)

In the above verses we see that even when Prophet Joseph (PBUH) was a child, he saw in his dream that he would be a successful person.

As explained in part 3.8.1.4.3 in the similitude of time machine, Allah is not confined within time brackets. But this does not mean that He cannot interact through time brackets. Imagine a boss of a big company who has screens that relate to him what is going on in tens of departments of his factory; he is also able to talk to people in those departments while he is sitting in his room. The fact that God is not confined to time brackets, does not mean that He cannot act upon those brackets. Allah asks Moses (PBUH) what is in his hand, or Allah asks the help of the believers, and there are many instances like this in the Quran. This is not because of the limitations of God, but because of our limitations. We are in the bracket of the time; we can conceive of limited things in limited ways; hence, Allah communicates with us through those things. The same happens regarding destiny. We need security, we need consistency, we need peace, therefore as explained above, Allah makes destiny, and gives us the mechanism of destiny so as we may be assured and feel more secure.

Yet, this does not mean that Allah cannot make use of His eternal knowledge in our context.

In the above verse we see that Allah incorporates His divine knowledge within our world and destiny as well. Prophet Joseph (PBUH) was given by Allah some information about the future. Remember from part 3.8.1.4.1 that Allah knows the future. And since He knows it, He can share it as well. But, as this knowledge of God was dependent upon what happens in the future, this is not necessarily causing effects in the real world. Could Prophet Joseph (PBUH) commit that adultery and be killed though he saw that dream? We should rather ask, could he see that dream had he committed that crime? Probably not. The dream is not necessarily a unipotential cause for what happens after it.

Anyway, the above thinking is based on the assumption that the dream was known to be a true dream from God. Did they know that it was such a dream?

However, the following verse of the Quran tells us an event related to that dream which happened many years after it was seen:

And he raised his parents upon the throne, and they bowed to him in prostration. And he said, "O my father, this is the explanation of my dream of before. My Lord has made it reality. And He was certainly good to me when He took me out of prison and brought you [here] from bedouin life after Satan had induced [estrangement] between me and my brothers. Indeed, my Lord is Subtle in what He wills. Indeed, it is He who is the Knowing, the Wise.

(Quran: 12/100)

So, a possibility is that the dream might not come true.

Note that there are other verses in the same chapter where Prophet Joseph (PBUH) informs people about the events that will happen in their future.

Another important thing to note is the possibility that there are different kinds of registers under the heading of destiny. While Allah informs us about the “Book”, He also talks about a tablet which is protected in which things are recorded. The following verses mention that book:

Indeed, We have made it an Arabic Quran that you might understand.

And indeed it is, in the Mother of the Book with Us, exalted and full of wisdom.

(Quran: 43/3-4)

Indeed, it is a noble Quran

In a Register well-protected;

(Quran: 56/77-78)

But this is an honored Quran

In a preserved master tablet.

(Quran: 85/21-22)

Some scholars say that it is the same as the Book related to destiny, some say that it is of different nature. The thing that may be relevant for us is that the record does not need to be one, and if there are other books, then there can be some relationships between them.

We should also note that the knowledge of God is not limited to the knowledge contained within these books.

3.8.2 Environment

O you who have believed, fear Allah and be with those who are truthful.

(Quran: 9/119)

The environment is a very important factor which influences the will power. In this context, the environment means the factors external to the agent which may influence the wills of the agent such as friends, society, economical, social, physical, technological, biological factors and conditions. These may influence specific wills as well as the general tendencies of the agent.

The environment often may offer positive influences. After all, we survive and do most of what we can do thanks to our environment. We also have the ability to make it more positive and enhance its positive aspects. The following verse gives a general rule about the need to try to transform our environment for the better:

Invite to the way of your Lord with wisdom and good instruction, and argue with them in a way that is best. Indeed, your Lord is most knowing of who has strayed from His way, and He is most knowing of who is [rightly] guided.

(Quran: 16/125)

However, the environment may have negative influences as well: A person who enjoys being with the criminals, will be influenced by them. A person under the management of oppressors will also be influenced. An environment with huge economical means or very limited means will have influences upon the will power.

Most factors that may mislead a person do not have any coercive causal power. The following verse gives the example of the words of Satan:

And Satan will say when the matter has been concluded:

Indeed, Allah had promised you the promise of truth. And I promised you, but I betrayed you. But I had no authority over you except that I invited you, and you responded to me. So do not blame me; but blame yourselves. I cannot be called to your aid, nor can you be called to my aid. Indeed, I deny your association of me [with Allah] before.

Indeed, for the wrongdoers is a painful punishment.

(Quran: 14/22)

But, in any case, there are things to do in order to manage the environmental factors as they relate to the OTBT of the agent.

Therefore, the agent should consider the circles of the environment, and if they are close to be coercive in a negative direction, he should even think about emigrating into an environment which facilitates his being in harmony with his OTBT as underlined in the following verse:

And whoever emigrates for the cause of Allah will find on the earth many [alternative] locations and abundance. And whoever leaves his home as an emigrant to Allah and His Messenger and then death overtakes him his reward has already become incumbent upon Allah. And Allah is ever Forgiving and Merciful.

(Quran: 4/100)

Sometimes, the negative influencers may be very near. For example, the following verse explains how one would behave if his parents force or invite to evil deeds:

But if they endeavor to make you associate with Me that of which you have no knowledge, do not obey them but

accompany them in [this] world with appropriate kindness and follow the way of those who turn back to Me [in repentance]. Then to Me will be your return, and I will inform you about what you used to do.

(Quran: 31/15)

The environment does not consist only of people. The following verse gives an example of weather conditions that the agents should resist:

Those who remained behind rejoiced in their staying [at home] after [the departure of] the Messenger of Allah and disliked to strive with their wealth and their lives in the cause of Allah and said, "Do not go forth in the heat." Say, "The fire of Hell is more intensive in heat" if they would but understand.

(Quran: 9/81)

Wherever an agent goes, in any case, there will be many influencing factors and conditions. So, an agent should learn how to change his environment for better, how to protect himself from its bad influences, how to benefit from its positive factors and conditions, and should be active in these matters. Otherwise, an agent may lose himself, his family, waste his life, and many other things.

3.8.3 Emotions

Emotions are closely related to consciousness which we had under a distinct heading under the inputs of free will. However, as they are very important, we will examine emotions here as an influencer of the free will.

God intends to give us huge and permanent favors, rewards, and degrees. And rewards require good servants who have deserved them through big achievements, especially through adopting good values,

and through seeking it through the true source. These also require challenges.

In the other parts I mentioned lots of such challenges. And one type of those challenges arises from our own selves.

Our emotions deeply related to our own selves may be considered among the biggest challenges. Because these are very close to us, they originate within us, they are very intense. Yet, they are also closely related to our ultimate goals. For example, the paradise and the hell are closely related to our emotions.

Emotions also can be good as well as evil, hence, distinguishing the good emotions from the harmful ones is a big challenge in itself. Our OTBT relates also to our emotions. We want peace in the first place; we may want to be superior in goodness; yet, we may also tend to feel superior unfairly. We may risk mixing useful emotions with harmful ones, and we may consider the harmful ones as if they positively relate to our OTBT. Sometimes, the line between a good emotion and a bad one may be very thin: For example, a person who envies a successful person, may find himself being jealous of him and working for his failure.

Each of us has some weaknesses. Each of us may be the victim of one or more of the bad tendencies such as arrogance, oppression, injustice, jealousy, hypocrisy, impatience, excessive love for money... Allah invites us to recognize this risk, and to try to have them under control, or to purify ourselves from them and from their causes.

And [I swear by] the soul and He who proportioned it

And inspired it [with discernment of] its wickedness and its righteousness,

He has succeeded who purifies it,

And he has failed who buries it [in corruption].

(Quran: 91/7-10)

Have you then considered him who takes his low desire for his god, and Allah has made him err having knowledge and has set a seal upon his ear and his heart and put a covering upon his eye. Who can then guide him after Allah? Will you not then be mindful?

(Quran: 45/23)

Therefore, the routine practice of daily prayers, evaluating how we behave compared to the divine values, strong and continual introspection about our emotions, learning about human psychology, allocating time to long term goals to balance the intensity of short-terms emotions are very important and necessary.

4 Implications of Quranic Framework of Free Will

The Quranic framework about free will and related areas have big implications. In this part we will examine them.

4.1 Argument for God from Free Will Power

In this sub-section, we will see the implications of free will power as an evidence for the existence of God. I should underline that by free will power I mean the main free will power as defined in this book.

4.1.1 Methodology About Proving God

Some people claim that there is no evidence for God. And they argue that the acceptable evidence for God must be scientific, and they also argue that scientific evidence means testable and repeatable evidence which God should display directly for Himself in order to prove

Himself, in areas other than the patterns and unity observed within the creation of God.

In the first place, these arguments are not rational in themselves. Because the God they would prove would be a kind of God who has some compulsive obsessive disorder. And there is no claim by God or by theists that God has any such disorder. He does not need to necessarily repeat anything, and He does not need to repeat anything in order to convince anyone. However, many different patterns and differentiations within His creation as part of systems He created already display the power that sustains and governs them.

In this context, the existence of free will as a real power which is not based on repeatability, demonstrate that repeatability does not have a fundamental or default position within the universe. It also shows that repeatability is not the indispensable proof for the truth of God. It also demonstrates that any scientific thing needs not be necessarily deterministic or repeatable. However, the testable and repeatable things constitute in any case evidence for the existence of the Creator.

Hence, free will power refutes from another angle the claim that there is no evidence for God. The repetitive things in the universe are not absolute, and they are and they can be based upon the free will power of God. Free will shows that the laws and patterns are not basic, all-encompassing, and necessary. They are not things that can replace God.

If repeatability does not have a fundamental place, then the disbeliever in God will have a duty of demonstrating that the universe and repetitive things are self-sufficient, and that they are not evidence for God.

Also, if the free will power is true, then the objection against the existence of God becomes just a matter of degree, not a matter of

kind. Because, if free will power is true, then it is not reducible to the spatiotemporal. Either it has a different nature than the spatiotemporal, or the spatiotemporal also has a nature with some aspects that are like free will. This nature is transcendent in unity. Once the possibility of such a nature is recognized, then there is not much reason to reject God who has this nature with the difference of being necessary, and being the Only One in encompassing all things.

There can be arguments for the multiplicity or contingency of God-like beings. However, such arguments will not be very acceptable for reasons explained in part 2.2.1.

4.1.2 Argument for God from The Effectiveness of the Free Will Power

We will show them Our signs in the horizons and within themselves until it becomes clear to them that it is the truth. But is it not sufficient concerning your Lord that He is, over all things, a Witness?

(Quran: 41/53)

The Quran presents everything in the skies and on the earth as evidence for Allah. Anything at any stage or at any scale is evidence for Allah. The sun, the moon, the water, the plants, the animals, the eyes, the ears, the atoms... are all evidence for Allah.

Further evidence is that (at times) you find the earth to be barren. When it is watered it moves and swells (to let the plants grow). The One who brings it back to life will also bring the dead back to life. He has power over all things.

(Quran: 41/39)

And the earth We spread it out and cast therein firmly set mountains and made grow therein [something] of every beautiful kind,

Giving insight and a reminder for every servant who turns [to Allah].

(Quran: 50/8)

None of the above is self-sufficient, self-creator, and eternal; none of them owns power and knowledge of their own. However, what we observe requires knowledge, power, stability. Hence, a cause who has powers to create, to determine and design what to create, and to sustain the creation is necessary. This is the main line of thought for the proof of God.

The following verse makes reference to the lack of self-sufficient knowledge of the creation:

Allah brought you forth from the wombs of your mothers when you knew nothing, and He gave you hearing, sight and intelligence so that you may give thanks to Him.

(Quran: 16/78)

The following verse underlines the fact that whatever is replaced instead of God does not have any power to create:

O people, an example is presented, so listen to it. Indeed, those you invoke besides Allah will never create [as much as] a fly, even if they gathered together for that purpose. And if the fly should steal away from them a [tiny] thing, they could not recover it from him. Weak are the pursuer and pursued.

(Quran: 22/73)

The following verses emphasizes the contradiction of self-creation:

Or were they created by nothing, or were they the creators [of themselves]?

Or did they create the heavens and the earth? Rather, they are not certain.

(Quran: 52/35-36)

Almost all arguments for God are structured around the above facts. They focus on different aspects of this universe. Some focus on contingency, some on beginning, some on the fine tuning of the universe...

Like everything which is part of this universe, which is not self-sufficient, free will power is also an evidence.

Some of its aspects make it a special evidence. As explained in part 3.4.12.1 about the negation experiments and brain observation experiments, free will power shows that not everything is reducible to spatiotemporal things. It also shows that determinism and indeterminism are false. The falsity of determinism, indeterminism, and reductionism are also proven by many other arguments presented in this book. Free will power is a fact which disproves them.

Especially as a power belonging to all sovereign wholes, free will power shows that unity, transcendence, multipotential causality are fundamental aspects of the non-self-sufficient universe. These show that the originator of the universe does not need to be spatiotemporally complex, since, everything has transcendence and multipotentiality aspects no matter how simple they are in terms of spatiotemporality.

If we can transcend the spatiotemporal, then a transcendence over the spatiotemporal is possible. The spatiotemporal is not an absolute limitation.

If the material interacts with the free will power, then it must have some aspects related to transcendence and unity. Since the material is contingent, its aspects of transcendence and unity must be originating from a necessary.

Actually, those who reject God, reject the properties that relate to free will power. If the spatiotemporal is supposed to have free will power, then it would not be much different than some types of god, since it would be causing all future things even though it would be different than Allah in terms of unity, eternity, self-sufficiency, and some other aspects.

Free will power shows that things are not reducible to the spatiotemporal, and therefore that the originator and sustainer of the universe is not merely spatiotemporal. If we did not create our transcendence, and if we are not reducible to the spatiotemporal, then there is a source from which we get this power. We know that we have not created ourselves, and we know that we are not eternal.

The free will power also shows the reality of the preferences, good, evil, truth, error, rationality, consciousness, responsibility, blame, praise. With the absence of free will power, and with reducibility of judgment, moral values, and acts to the spatiotemporal, all those things would be epiphenomenal, illusory. Free will power shows that they are effective and real; with the free will power, they also become objectively observable and effective. The reality of these demonstrate the need for a cause for them who is beyond the spatiotemporal, and who has the corresponding attributes.

The material can only exist based on a transcendent and unitary essence as shown in argument from unity in part 2.2.1.3. The unity necessary for free will power supports the argument from unity in that part.

Furthermore, free will power shows that nothing subject to free will power is necessary, because things subject to free will power can be willed to be otherwise and changed; hence things that can be subject to free will power are contingent, conditional, hence, they need a necessary source.

Free will power owners at the same layer and which can be multiple are also contingent, since one free will power owner can interrupt another free will power owner at the same layer. But if “every” thing is conditional and depends on other things then there would be circularity and/or infinite regress, and then there would be no existence. Therefore, there must be one necessary being.

This necessary being must have a free will power, because (1) otherwise it could not be able to cause free will power owners, (2) the default should have no necessary bias, and (3) arguments in part 3.4.1.2.2 show the falsity of determinism, and arguments in part 3.4.2 show that indeterminism is false, arguments in part 3.5.6.4.2 show that reductive physicalism is false.

4.1.3 Proof for God from Free Will Power and Non-Existence of Partial Nothingness

If there is free will power, this power cannot be surrounded by partial nothingness, because partial nothingness cannot exist by definition, since, nothingness does not exist, does not have any effect, and does not have any extension. This power can be originated, sustained, and surrounded only by an infinite free will power owner. The argument for God from the non-existence of nothingness is explained in detail by Tosun¹⁷⁰.

¹⁷⁰ (Tosun 2012)

4.2 Personal and Social Achievement

That no bearer of burdens will bear the burden of another,
And that there is not for man except that [good] for which
he strives,

And that his effort is going to be seen.

Then he will be recompensed for it with the fullest
recompense.

(Quran: 53/38-41)

A human being or a society may be within advantageous or disadvantageous conditions. Yet, when free will power is accepted, then what affects the net success or failure will be the specific individual or society. Of course, within the Islamic framework, the effort must include the invocation of the help of Allah as well.

Hence, the initial conditions, deterministic laws, or indeterministic behavior of particles are not what makes someone or a society superior or inferior. Every being or society has challenges. Admitting that what an individual produces is only the outcome of his past and initial conditions, will make those born within disadvantageous conditions hopeless, and the ones with advantageous conditions arrogant at least for their luck. Yet, according to Islam, any person or society should and can add to what the positive initial conditions provide for him and should and can overcome many challenges of independent variables.

Some say if we reject free will, then we can recognize the factors that caused the evil things, and we can improve them. There are these factors, this is clear due to the limitedness of free will. The Quran recognizes these factors. But the Quranic framework also recognizes our freedom to change those factors. However, those who reject free

will, contradict themselves when they say “if we can recognize the causal factors that caused the evil or the good we can improve things”, because according to them, we cannot will something on our own other than what the particles deterministically or indeterministically do. So, if free will is rejected, then there is no room for improvement and for change that we can produce.

Also, a reductionist approach brings in the risk in a society that the strong will promote lack of free will, because the lack of free will will remove responsibility from them. Also, since they cannot be responsible without free will, they may tend to be more oppressive. On the other hand, the weak may tend to adopt the lack of free will for denying their responsibility of their position. This may create a vicious cycle, and the truth of free will may be undermined based on misleading emotions. However, that someone feels more comfortable with a thought has nothing to do with the truth of that thought.

4.3 Logic and Truth

That is because those who disbelieve follow falsehood, and those who believe follow the truth from their Lord. Thus, does Allah present to the people their comparisons.

(Quran: 47/3)

Free will power supports the logic and the claim of truth. If there is no free will power, then any claim will be the outcome of either deterministic or indeterministic processes. If a claim is the outcome of such processes, then truth and logic cannot have any effect in the formation of a claim. But free will power, combined with knowledge and reasoning powers, can produce claims with truth value.

Further details about truth have been given in part 3.6.2.

Someone who claims the absence of free will power cannot claim that he is rational and upon the truth. Because while he believes in the

absence of free will power, he must be assuming that he is no more than particles bumping one onto another. So, his conclusion cannot be based on logic. For the same reason, his emotions are just epiphenomenal and ineffective. So, his conclusions cannot be even based on emotions.

Can he say that he put the hat of the believer in free will power while reasoning, and say that there are inconsistencies with the free will power? He cannot, since, even if he feels that he puts on the hat of the believer in free will power, the above point applies.

On the other hand, can I as a believer in free will power reason and conclude logically that the absence of free will power is true and then claim afterwards that my conclusion was true and based on reason? Can I claim that I was reasonable at least in a part of my life, and that I was upon the truth when I made that conclusion?

No. Because, the moment I reach that conclusion, I will have to admit that while I was thinking as a believer in free will power, I was wrong as a believer in free will power; I was nothing more than particles bumping one onto another. So, my conclusion was not the result of my free will power. All of the concepts, premises, logical chains were in fact epiphenomenal, supervenient upon the behavior of particles bumping one onto other, they were not even wrong, and no logical chain, syllogism, premise had any effect on my conclusions. More dramatically, according to this, I would be nothing more than the particles bumping one onto another.

So, the denial of free will power entails the rejection of truth and reason. The recognition of free will power entails the recognition of truth and reason.

The absence of free will power can be postulated upon neither logical nor emotional ground.

The recognition of reductionism, determinism, and indeterminism entails the same with what the denial of free will power entails.

Question 153.

Does not an opponent of free will power reach correct conclusions as $2+2=4$, so why would not he be able to reach a correct conclusion about free will power?

Answer 153.

He reaches such conclusions because he has free will power even though he denies free will power. He can transcend $2+2=5$ as well. And as he has the necessary unity and transcendence as opposed to being reduced to point-like infinitesimal instantiations, he can discard $2+2=5$ and conclude that $2+2=4$.

Question 154.

Does not a computer produce a correct result even though its acts are based on deterministic processes?

Answer 154.

If a computer does not produce a correct result, the human beings detect the problem with its relevant parts, for example with its chips, and fix the problem. The computer is just a tool of human beings. They are not producing claims on their own.

4.4 Morals, Good and Evil

Whoever does an evil, he shall not be recompensed, (with aught) but the like of it, and whoever does good, whether male or female, and he is a believer, these shall enter the garden, in which they shall be given sustenance without account.

(Quran: 40/40)

4.4.1 Truth of Morals

If everything is "that which must be" according to determinism, indeterminism, and/or reductionism, then there is no free will power. Hence, the agent cannot transcend the good and evil, and compare them effectively, and he cannot navigate freely between good and evil, he cannot effectively design and produce concepts and definitions, while thinking and willing. And he cannot put into action his will in favor of good or evil. He cannot judge what is evil and what is good.

If we say "Being B must not be tortured", our judgment is useless without free will power, because our judgment does not exist distinctly. That which must or must not be is only meaningful if we have free will power and if free will power may have an implication. Without such freedom, the above claim and the claim of someone who says "B must be tortured" are equal, since they are just an illusion reducible to the behavior of particles bumping one onto another.

Can we "behave as if there is free will power" while we say "this must be"? But then this behavior would be based on a self-refuting illusion. We would then be saying "free will power is not true but let us behave as if it is, let us deceive ourselves".

In the Quranic teaching, ought to be truth (OTBT) is consequential. The moral and the immoral agents will bear the consequences of their wills and acts. All acts and actors will be judged and the relevant recompenses will be given.

Hence, acts subject to moral evaluations are not only subject to subjective and arbitrary evaluation of other agents, and sometimes

inefficient judgment, investigation and sanctioning capacities of human beings.

There is the truth, and there is the Knower of the truth.

There are the default and all-encompassing attributes of God that relate to morals. Some of them are related to peace, beneficence, justice, stability, balance...

Surely Allah enjoins the doing of justice and the doing of good (to others) and the giving to the kindred, and He forbids indecency and evil and rebellion; He admonishes you that you may be mindful.

(Quran: 16/90)

Indeed, He does not like the arrogant.

(Quran: 16/23)

These are the default truth, and the commands of Allah are in accordance with them.

4.4.2 Acting Morally While There Is No Free Will

Let us examine the reasoning behind morally relevant actions while rejecting free will with an example:

A child has fallen in a river. A person sees and he has a new expensive mobile in his pocket. He can save the child, but if he saves the child, the mobile will be useless or someone may steal it. He thinks: All is deterministic and I do not have free will, what will happen will happen in any case.

So, he waits calmly and the child gets drowned. And afterwards he says: There was determinism, so I could not have done otherwise. If

he saved or not, he could not be praised nor blamed according to determinism. Again, if he chose to be determinist, then it is what had to be.

But he could behave as if he had free will, but in fact this would not make a difference in the deterministic universe. Although it is deterministic, this faking free will would be also part of the deterministic universe. But if he did not fake, this was what had to happen against which he has no power at all. For him, even he does not have the capacity to decide to fake, since this decision would not be anything other than the behavior of particles bumping one onto other.

Some claim that well-being is the basis of morals, not free will or truth or anything else. If this is true, the man above has acted perfectly morally. Since he did not lose time and he did not lose his mobile; and from his perspective these were very important for his well-being.

The above thoughts are in harmony with the denial of free will power.

A person who believes in free will power would say that he can make a difference. And he would make a quick prioritization, and considering the life of a human being is much more important than a mobile, he would will to save the child and get into action.

In terms of the Quranic teaching, additionally the statement in the Quran that I mentioned earlier which says that saving a soul is like saving the whole mankind would be very important about what action to take.

The Quranic teaching about free will power is necessary for the existence of morals.

4.4.3 Sanctions, Morals, and Free Will Power

Should a criminal feel ashamed? Should he regret what he did? Should a raper be punished? Should a thief return what he has stolen if he is caught? Should a killer be punished even if it is certain that he will not kill anyone again? Should someone who signed a contract to pay his supplier be blamed if he does not pay it though he can?

Without free will can we answer the above questions positively? If the person does not have any power to not commit that crime why would he be punished? Why then would he be ashamed, after all, was not it the act of the particles bumping one onto other? Why would that buyer who defaulted be blamed?

Sanctions, blame, praise are not justifiable if there is no free will power. They cannot justifiable if there is only free will power which is defined according to compatibilism.

Or can they be applicable for rehabilitating such people in a pragmatic approach without any kind of retribution? If we do not have free will power, then we are not in a place to do any change. So, if we do not have free will power, then we cannot improve any person. We cannot even “will” to rehabilitate any person, except as an illusion. Conversely, if a denier of free will power believes that people can be rehabilitated for the good of society, then why does not he think that the criminal should have rehabilitated himself?

Hence, without free will, all bases of morals collapse, and morals itself becomes no more than an illusion.

Consistently with the above, in the Quran, the necessity of sanctions, rewards, blame, praise have been underlined strongly.

There are implications of the truth regarding the acts that are relevant in terms of morals.

All wills and acts are known by God and they are recorded as noted in the following verses:

He is with you wherever you are. And Allah, of what you do, is Seeing.

(Quran: 57/4)

Or do they think that We hear not their secrets and their private conversations? Yes, [We do], and Our messengers are with them recording.

(Quran: 43/80)

And on the judgment day, there will be a precise judgment:

And We place the scales of justice for the Day of Resurrection, so no soul will be treated unjustly at all. And if there is [even] the weight of a mustard seed, We will bring it forth. And sufficient are We as accountant.

(Quran: 21/47)

Hence, in terms of morals, the Quranic teaching is very precise. Morals is not something that is ambiguous. The criminal does not get away with what he has stolen if he is not caught in this world.

There is an Authority who establishes the rules based on His divine (more than universal), and default attributes. The rules will produce their consequences justly, the evil and the good will not be the same in their ultimate consequences. Therefore, the agent has to exercise his free will power appropriately if he wants to be successful and to be among the righteous in the hereafter.

The free will power of the agent puts a responsibility on the agent to comply with the divine values. If he does not comply, then he will have buried himself in evil, and transformed himself to evil.

Sanctions in the hereafter are very functional in terms of morals. Punishment in the hereafter according to the Quran, is not like the punishment in the secular criminology in some respects.

The goal of secular criminology is to deter people from committing crimes, to protect the society and some other things, though the indication of the degree of the crime may also be a side product. The public authority is not interested in distinguishing the good and the evil. For example, it is not interested in seeing who is so evil as to commit a crime which requires a capital sentence.

The Islamic sanctions to be executed in worldly life contain the goals of secular criminology such as deterrence. The Quran requires some worldly sanctions for some crimes. This is consistent with the recognition of the free will power of the agent.

However, the rejection of the free will makes worldly sanctions with no basis and creates inconsistencies: The one who rejects free will would need to compensate for the hardships that a criminal undergoes for example in prison. And prisons must be very comfortable. Because the criminals committed those crimes without free will and they were victims of determinism. Hence, if there is no free will, they must be compensated for being kept away from society for the good of the society.

While the Quran stipulates worldly sanctions, these are limited in scope. The essentials about sanctions are the principles and the sanctions in the hereafter. These sanctions correspond to the goodness or evilness of the agent besides the attributes of the actions. Hence, these sanctions are more permanent in nature.

Regarding the sanctions in the hereafter, God's framework is essentially different than secular criminal sanctions.

Indeed, the Hour is coming I almost conceal it so that every soul may be recompensed according to that for which it strives.

(Quran: 20/15)

He creates an ownership of will by the agents by giving them freedom and no immediate access to some facts which if accessed would supersede the agents' will that exposes his goodness or evilness. Imagine the public prosecutor, judge, police officer, and executioner waiting for the killer who would kill his victim; and the killer knowing about them. But he would kill the victim if they did not know and were not present. Therefore, the information being under the monopoly of only One God who has power over all things, and His hiding the information about the future makes a big difference.

If everybody knew and was exposed to the future, the hell, and the paradise coercively, instead of being given the ability to know, accept, and reject, then they would be deprived from free will. Then they would lose their potential to be good or evil objectively.

The paradise and the hell are essentially options given by God to human beings. God does not need the belief of a person, and He is not harmed by the disbelief or sin of a person. However, goodness and evilness are important and they will be compensated. Also, God can guide human beings even if there is no punishment in hell, even if they have their free will. Again, differently than secular worldly sanctions, in a punishment after a person dies, it is not expected that the person is rehabilitated for this world.

The punishment of the hereafter is also a benchmark to expose how big and strong the negative attitude of a person is against God and against morals. And the attitude against God is the biggest criterion showing how good or evil a person is. For example, if a person insults God, this is much heavier than insulting a human being. If a person

is arrogant against God, this has different implications about the arrogance of that person compared to his arrogance toward another human being. However, arrogance or insult against human beings are also very important in reflecting the goodness or evilness of that person.

The magnitude of the sanction for the crime that the agent dares committing is an indicator of how intense he is in willing to commit that crime. A criminal C1 who commits a crime whose sanction is 15 days in prison, may choose not to commit the same if he knows that its sanction is 20 years in prison all else being the same. But another criminal C2 may will to commit the same even if he knows that its sanction is 20 years in prison all else being the same. C1 may refrain from committing that crime if its sanction is 20 years. C2 is obviously an eviler person in that even a big punishment does not stop him from committing that evil.

Let us see a more specific example: If the sanction for driving while very drunk was one dollar, then a person who drove while very drunk would not be considered as a serious offender of the law. But if it requires the suspension of the driver's license, and a big fine, then if he is stopped while he drives drunk though there is no accident, he should be much more embarrassed.

There must also be a correlation between the seriousness of the offense and the sanction. But only the magnitude of the sanction gives a message in and of itself about the seriousness of the offense and the level of disobedience of the offender to the rules. In the above example, the magnitude of the sanction is important in that it is a concise indicator and summary of the probable harms of driving drunk to other people and their goods.

In parallel with the above, by the promise of hell, the evilness of the evil person becomes more drastically shown since they commit their

crimes however big is the risk arising from it. If there was a very limited punishment for those who reject or rebel against God, they might say “well at the end it will be over, so now we can revolt and I can take that risk”, but a permanent punishment shows how big is the risk they undertake, how intense and willful they are for their acts.

If the agent undergoes the punishment of hell, this means that he did not exercise his free will power and related powers appropriately, and that he transformed himself and his will power into an instrument of his low desires. Hence, his low desires won in getting short term pleasures, and the pureness of his essence has been buried, and its light has been extinguished. He has failed to achieve the ultimate ought to be truth (OTBT) and the moral benchmarks included in the OTBT.

By the opportunity given, human beings exhibit and demonstrate who they really are. From this angle, Allah does not establish punishment to deter or prevent them. He could prevent them with no need for hell. As mentioned earlier, Allah says that had He willed, everybody would be a believer. He chose to give us a higher degree of freedom, hence higher degrees of reward and punishment. Hence, we are free to some extent to reach what degree we will have in terms of morals and we will see the consequences.

And let not those who disbelieve ever think that [because] We extend their time [of enjoyment] it is better for them. We only extend it for them so that they may increase in sin, and for them is a humiliating punishment.

(Quran: 3/178)

Everybody may claim acting very morally. These claims will not remain suspended:

(This) shall not be in accordance with your vain desires nor in accordance with the vain desires of the followers of the Book; whoever does evil, he shall be requited with it, and besides Allah he will find for himself neither a guardian nor a helper.

(Quran: 4/123)

4.4.4 Training the Free Will Power and Related Powers for Morals

In order to be able to exercise free will power and related positive powers to comply with morals, these powers must be developed. There is continual training for this power in the Quranic teaching. Every person has a potential to be good. But if these powers are weak, low-level modules may overcome. Hence, there needs to be some level of training for these powers so that they may overcome the urges of low desires and the agent may proceed toward his ought to be truth (OTBT). In this respect, there are continual practices such as daily prayer, fasting, charity, which enhance self-control, which help to prioritize things and not do whatever comes to mind. These are also some of the indicators about the agent.

4.5 Law & Secular Legal Systems

In a contract, rights and duties are agreed upon in the beginning.

The party who plans to receive some supplies to manufacture goods to his client, or the party who plans to receive payment to pay the workers may face a crisis, if the other party says “I did not have free will when I signed the contract since the universe is deterministic, so I am not obliged to perform my obligation”. If such an excuse is acceptable, there would be no economy, no legal system, no predictability, and no order.

Consistently with the recognition of the free will power, the Quran orders the fulfillment of the contracts:

O believers! Fulfil your contract [obligation]s.

(Quran: 5/1)

Likewise, all laws other than divine stipulations, are like a social contract. Hence, the rejection of free will would undermine the basis of legal systems. Without free will power, the law-making people would be considered reducible to their particles which bump one onto other, and there would be no reason to comply with the laws which would be the result of such blind and deterministic or indeterministic interactions.

Free will does not relate only to the above. It relates also to almost all legal instruments.

So, the recognition of free will power is necessary for the recognition of legal systems.

4.6 Forgiveness

But if you pardon and overlook and forgive then indeed, Allah is Forgiving and Merciful.

(Quran: 64/14)

Allah does not charge a person except [with that within] his capacity.

(Quran: 2/286)

Some say, if we reject free will, then we can forgive criminals or evil-doers easily. As we said freedom of will is limited and it is subject to the capacity of a person. In any case there are factors that may have influenced a bad act or an error. So, there is no problem in considering those factors and forgiving when applicable.

Yet, we do not need to deny the reality of the subject and his power; evil is evil, and good is good.

Rejecting free will power will disable a person from forgiving, since, forgiving is also a will and without free will power one cannot forgive except as an illusion.

4.7 Stress Management

Allah does not charge a person except [according to] what He has given him.

(Quran: 65/7)

Some say that having full freedom, creates a stress on the subject. One may say: "I have the free will, so all was my fault, I am nothing but a loser". The Quranic teaching is very balanced in this respect. Firstly, the door of forgiveness is always open other than precisely declared cases. Secondly, Allah does not charge anyone beyond his or her capacity.

Everything is according to the plan of God. Hence, the agent is not alone with the blind forces of nature. He can communicate with the Creator and sustainer of all, and seek refuge in Him. No matter what we will, in terms of the outcomes what Allah wills occurs. And as the All-Knower and Beneficent, nothing unjust will happen ultimately. Something bad may happen to a person. But this is not a matter of coincidence. Allah knows all. And as He is the giver of all favors, He can take them back. So, whatever evil happens beyond the capacity of the agent, the agent should submit to his Creator and see the good in it. Either Allah may compensate for it, or we deserved it, or there is another reason behind it that we may not see. The implications of the destiny which are relevant on this point are explained in part 3.8.1.4.4.

A being as God, who has no fear may also cause stress for human beings. However, that Being who gives us lots of favors gives us indication that He will not be unjust. A good person would have some stress for not being as good as God demands. However, if he does his best, then he will be more comfortable. But an evil person who would do evil things had he been a God, would rather be scared of such a Being because he would expect that that Being might behave unjustly against himself as he himself would do.

4.8 Problem of Evil and Argument for The Injustice of God

Rejecting free will, produces the problem of evil. Because, if there is no free will, then the only responsible becomes God. So, for materialists who reject free will, a god who is claimed to be good is not consistent with what we observe. Hence, some such materialists who generally tend to reject God, may believe that by rejecting free will, they have another argument against God.

As explained in this book, obviously, free will power is true. Hence, the responsibility of evil belongs to the evildoers.

One may claim that the human beings do not have free will power but God has. Therefore, only God would be responsible for the evil. So, the claims for a good God are false. However, this person would be contradicting himself, because he would be admitting that at least one person may have free will power. So, in principle, determinism and/or indeterminism are not the only option. Therefore, he has no basis to claim that the human beings do not have free will power, since determinism and indeterminism are not supported by complete empirical observations.

A person who rejects free will, is in no position to claim that there is evil. Because if there is no free will, then there is no evil, since, we

cannot say that someone who does not have free will power can do evil, as we cannot say that a big rock which fell on a person is evil. On the other hand, recognizing evil, entails recognizing free will. Because, if there is evil, this means that things are not reducible to spatiotemporal behavior of particles; pain, joy, and those who feel them are real. But if this person says that they are reducible to such behavior of particles, then his claim that there is evil has no truth value as his claim would be nothing but the behavior of particles bumping one onto other.

Those who pronounce the problem of evil like this, contradict themselves in these ways, and seem to be confused.

Regarding the natural disasters which are also considered evil by some, they are different than the above type of evil. The agent behind them is God, and God only takes back what He has given. Hence, in any case, there is a net good about them.

This chain of thought will lead to the recognition of free will. Because, if actually what “must be” does not happen, and if what “must not be” happens, this means that the agent diverges from the spatiotemporal. He wills something other than the spatiotemporal. Hence, his will is not supervenient upon the spatiotemporal, hence, to some extent, he is free from the spatiotemporal.

This inconsistency of the one who rejects God based on the problem of evil, shows us the consistency of the Islamic teaching in this respect. Islam recognizes the free will, the good, and the evil.

4.9 Physics

Free will has important implications regarding physics. As explained in parts related to determinism, indeterminism, reductive physicalism, these are false. Naturally, these also have some claims

that relate to the physics. Hence, the issue of free will requires careful attention in terms of physics.

The truth of “free will” power and multipotential causality entails that new information appears, and old information may be lost. This truth has important implications about the conservation of information which is a key issue regarding all physical layers including the electrons and black holes.

The truth of free will is also relevant for the transcendent nature of the physical.

That everything has some kind of free will at the bottom, requires a totally new look at the space, time, and matter.

In this respect, the command of Allah to all things in the creation of the universe and afterwards, gives us an idea that instead of seeing things as particles bumping one onto another, seeing them as obeying certain commands along with some kind of free will will be more realistic. The arguments presented in this book against physicalist reductionism, determinism, indeterminism support this.

Recognition of the free will of God, will also help us understand why the universe is the way it is.

4.10 Technology

The teaching of the Quran that even objects have a kind of free will so as to obey the commands of Allah opens a new horizon in terms of technology. Hence, we understand that the artificial intelligence which is really artificial as of now, does not need to be fully artificial.

4.11 Politics

And had your Lord willed, those on earth would have believed, all of them entirely. Then, [O Muhammad], would you compel the people in order that they become believers?

(Quran: 10/99)

In Islam, teaching and good communication is the way to promote the truth, not coercion. An important thing is that people own their decisions, approaches, acts. Numerous examples have been given in this book in this respect. Hence, regarding politics and freedom this is an important principle.

5 Conclusion

In this book, I tried to address important issues that relate to free will power in accordance with the Quranic teaching.

An important aspect of the free will power is its irreducibility to other things and the irreducibility of the agent who exercises free will power. The irreducible and distinct agent interacts with his parts and other things. Hence, within a range, he can overcome the effects of other factors, and he can determine one of the two alternatives as the one to be acted upon. Within that range, there is nothing which can coercively prevent him from willing the other alternative.

To demonstrate the free will power and its effectiveness, I followed two main paths:

(1) The refutation of reductionism, determinism, and indeterminism: I presented numerous empirical and logical arguments which show beyond doubt that these are false. This is very important, because I am convinced that the apparent paradox about free will arises because of false and unquestioned presuppositions about the truth of those isms. Their refutation is possible thanks to the alternative system of

Islam related to the ontological reality and its basis. Without such a basis, refuting them might left many things up in the air.

(2) Free will power negation experiments and brain observation experiments: I designed certain empirical, thought, and combined experiments which show that the free will power is distinctly effective.

I addressed systematically the key points that relate to the free will power such as, the agent, his transcendence, unity, his sub-modules, their interactions, the soul, its interaction with the spatiotemporal, consciousness, the will mechanism, Libet experiments, space, time, truth, knowledge, reasoning power, responsibility, hereafter, God...

Of course, I gave a definition of the free will power in accordance with the Quranic teaching which lies at the basis of this work. The only thing that free will power considers about the sets of alternatives is that they are distinguishable from each other. This point is in harmony with the distinct and holistic reality of the agent.

But as the essence of the agent who exercises free will power bears the consequences of the wills, he has to exercise it in harmony with his other powers. Hence, again with his free will power, this essence has to navigate through his knowledge resources, conscious experiences, get the feedback of his reasoning power, and so on. He has to act in accordance with his ought to be truths (OTBT) as much as possible. OTBT means what ought to be optimally and objectively within the capacity of the agent under the present circumstances. However, OTBT is not a coercive cause upon the agent.

This works also includes the divine omniscience and free will paradox, and addresses it perfectly under the light of the Quran. In this context, the destiny, and its implications are also addressed.

The conclusion is clear: We have our distinct existence as agents and human beings; and we have our sovereign free will power in a certain range.

Allah does not charge a person except [with that within] his
capacity.

He will have [the consequence of] what [good] he has gained,
And he will bear [the consequence of] what [evil] he has earned.

(Quran: 2/286)

WORKS CITED

- Berryman, Sylvia. «Leucippus.» *The Stanford Encyclopedia of Philosophy (Winter 2016 Edition)*,. Editor: Edward N. Zalta (ed.). 2016.
<https://plato.stanford.edu/archives/win2016/entries/leucippus/> (Accessed: 5 29, 2020).
- Bukhari, Sahih-i. *Sahih-i Bukhari*. .
- Chalmers, D.J. «Facing up to the Problem of Consciousness.» *Journal of Consciousness Studies*. 1995.
<http://consc.net/papers/facing.pdf> (Accessed: 5 29, 2020).
- Dictionary.com. «Dictionary.com.» *Dictionary.com*. 2020.
<https://www.dictionary.com> (Accessed: 5 29, 2020).
- Encyclopaedia-Britannica-Editors. «Determinism.» *Encyclopaedia Britannica*. 2020.
<https://www.britannica.com/topic/determinism> (Accessed: 5 30, 2020).
- . «Indeterminism.» *Encyclopaedia Britannica*. 2020.
<https://www.britannica.com/topic/indeterminism> (Accessed: 5 29, 2020).
- Etymonline.com. «Etymonline.com.» *Etymonline.com*. 2020.
<http://www.etymonline.com> (Accessed: 5 29, 2020).
- Gatherer, Derek. «So what do we really mean when we say that systems biology is holistic?» *BMC systems biology*. 12 3 2010.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2850881/>.
- Hitchcock, Christopher. «Probabilistic Causation.» *The Stanford Encyclopedia of Philosophy (Fall 2018 Edition)*. Editor: Edward N. Zalta. 2018.
<https://plato.stanford.edu/archives/fall2018/entries/causation-probabilistic/> (Accessed: 5 29, 2020).

- Hofer, Carl. «Causal Determinism.» *The Stanford Encyclopedia of Philosophy*. Editor: Edward N. Zalta. 2016.
<https://plato.stanford.edu/archives/spr2016/entries/determinism-causal/>.
- Kim, Jaegwon. «Essays in the Metaphysics of Mind.» Kluwer Academic Publishers. Netherlands. 1999.
<https://books.google.com.tr/books?id=edYUDAAAQBAJ>
 (Accessed: 5 30, 2020).
- Latham, Noa. «Physicalism and its Discontents.» 2009.
<https://www.cambridge.org/core/books/physicalism-and-its-discontents/substance-physicalism/D71564A1B2B2181BFA9E08FC67F69BE2#>.
- Lexico. «Lexico Dictionary.» 2020.
<https://www.lexico.com/definition/transcend> (Accessed: 5 29, 2020).
- Lowe, E.J.,. «Dualism (Property Dualism, Substance Dualism).» *Encyclopedia of Neuroscience*. Editor: Windhorst U. (eds) Hirokawa N. 2008.
https://link.springer.com/referenceworkentry/10.1007%2F978-3-540-29678-2_1629 (Accessed: 5 29, 2020).
- McDonald, J.H. «Handbook of Biological Statistics (3rd. ed.).» Maryland Sparky House Publishing. 2014.
<http://www.biostat handbook.com/hypothesistesting.html>
 (Accessed: 5 30, 2020).
- Merriam-Webster.com. «Merriam-Webster.com Dictionary.» *Merriam-Webster.com Dictionary*. 2020.
<https://www.merriam-webster.com/dictionary/> (Accessed: 5 29, 2020).
- Nagel, Ernest. «The Structure of Science: Problems in the Logic of Scientific Explanation.» *Internet Encyclopedia of Philosophy*. 1961. <https://www.iep.utm.edu/red-ism/>.

- Nida-Rümelin, Martine and O Conaill, Donnchadh. «Qualia: The Knowledge Argument.» *The Stanford Encyclopedia of Philosophy (Winter 2019 Edition)*. Editor: Edward N. Zalta (ed.). 2019.
<https://plato.stanford.edu/archives/win2019/entries/qualia-knowledge/> (Accessed: 5 29, 2020).
- O'Connor, Timothy and Wong, Hong Yu. «Emergent Properties.» *The Stanford Encyclopedia of Philosophy (Spring 2020 Edition)*. Editor: Edward N. Zalta (ed.). 2020.
<https://plato.stanford.edu/archives/spr2020/entries/properties-emergent/> (Accessed: 5 29, 2020).
- Oxford-Dictionaries. «Oxford Dictionaries.» *Oxford-Dictionaries*. 2020.
<https://en.oxforddictionaries.com/definition/sovereignty> (Accessed: 5 29, 2020).
- Pereboom, Derk. «Nonreductive Physicalism.» *Encyclopedia of Philosophy*. 2005.
<https://www.encyclopedia.com/humanities/encyclopedias-almanacs-transcripts-and-maps/nonreductive-physicalism> (Accessed: 5 29, 2020).
- Robinson, H. *Matter and Sense: A Critique of Contemporary Materialism*. Cambridge: Cambridge University Press, 1982.
- Saheeh-i-Muslim. «Saheeh-i Muslim.» .
- Searle, John. R. «Minds, brains, and programs.» *Behavioral and Brain Sciences*. 1980.
<http://cogprints.org/7150/1/10.1.1.83.5248.pdf> (Accessed: 5 29, 2020).
- The-Holy-Quran. «Islam Awakened - English Translations.» *Islam Awakened*. Following translators' translations were used, Shakir, Muhammad Asad, M. M. Pickthall, Muhammad Sarwar, Umm Muhammad (Sahih International) Rashad Khalifa, Muhsin Khan & M al-Hilali, Arthur J. Arberry, George Sale Yusuf Ali (1938 - 1985). . <https://www.islamawakened.com/> (Accessed: 5 29, 2020).

Tosun, Ender. *Guide to Understanding Islam*. İstanbul, 2012.

Van Riel, Raphael and Van Gulick, Robert. «Scientific Reduction.» *The Stanford Encyclopedia of Philosophy (Spring 2019 Edition)*.

Editor: Edward N. Zalta. 2019.

<https://plato.stanford.edu/archives/spr2019/entries/scientific-reduction/> (Accessed: 5 30, 2020).

Wikipedia, Contributors. «Outline of Energy.» *The Free Encyclopedia Wikipedia*. 6 5 2020.

https://en.wikipedia.org/w/index.php?title=Outline_of_energy&oldid=955194621 (Accessed: 5 29, 2020).

