

Analysis and examination on John Charlton Polkinghorne, Theology of Divine Action)

Abstract:

As philosophy of religion is concerned, Divine Action has been one of the challenges which has received much attention on how God does his action within the natural order (within the human world and physical world). John Polkinghorne seeks to address this issue with a quantum perspective. Given Polkinghorne's background as a scientist and theologian, he *vis a vis* divine action due to his understanding of God's involvement in the mundane world. The research aims to clarify Polkinghorne's complicated views on how God acts within the physical world. John Polkinghorne compares the relationship between God and the world as the relationship between a watchmaker and a watch, although he considers science and religion to be two complementary approaches for understanding the world. There is some kind of contradiction in Polkinghorne's theological approach of the Divine intervention in the natural world, because he says on the one hand that God works in nature without violating the freedom of creatures in the physical world, on the other hand, he sees a kind of determinism in all three categories of actions that he considers for God.

Although he acknowledged relative independence to some physical events in the special acts of God, but this relative independence is the predestination that exists in quantum space and chaos theory.

Keywords:

Divine Action, science, John Polkinghorne, Javadi Amoli, quantum physics.

Introduction

The concept of divine action in the natural world is one of the most polarizing topics that divides scientists from theologians as well as theologians from theologians. -In fact, discussions about divine action have divided theologians of the same religions and have led to the formation of entirely distinct schools of thought. For example, the Mu'tazila (mostly extinct rationalist Islamic theological school of thought which was founded by Ibn Athar) are distinct from the Asha'ira (literalist theological school of Sunni thought which forms the majority of Sunni Muslims even today) primarily belief that God has no hands in the actions of day to day happenings of the universe, whilst they later believed that God is directly responsible for each and every little detail that occurs, might occur and could occur in the universe- Whilst theologians generally believe that everything that occurs in the world occurs one way or the other through the direct action of the divine (Ghazzali,1993, Vol ,1:109), (since even the rationalists believe that what set all actions into motion was the divine) scientists on the other hand mostly hold that the natural order is the result of natural forces that all together came into being as a result of the big bang and thus, are completely incidental and not intended nor ordered particularly (Charles Darwin, On the origin of species). Understanding the concept of divine action therefore, lies at the center of theological inquiry, which seeks to explain the ways in which the divine interacts with the natural world. In the midst of this discourse, the theological views of John Charlton Polkinghorne is proven to be a very significant framework for examining the delicate edges of divine agency. As a distinguished physicist-turned-theologian, Polkinghorne sails through the storms and high waves of science and religion with a profound depth of insight and intellectual integrity. His theological contributions serve as a bridge between theological reflection and scientific inquiry.

This research explores John Polkinghorne's theology, focusing on his concept of divine action as presented in works like "The Faith of a Physicist" and "Belief in God in an Age of Science." It aims to clarify his theological framework and contribute to the dialogue between theology and science. Polkinghorne balances divine sovereignty with the natural world's integrity, advocating for a view of divine action that aligns with the universe's laws while allowing genuine divine interaction. The study examines themes like divine intervention, prayer, and human roles in divine providence, ultimately comparing Polkinghorne's views with those of Ayatollah Javadi Amoli and other scholars.

Background of John Charlton Polkinghorne

John Polkinghorne, a British scholar who wore the dual hats of a physicist and a clergyman, championed the harmonization of scientific and religious viewpoints. Born into a deeply religious Christian family in 1930, he demonstrated exceptional prowess in mathematics, earning several degrees from Trinity College at Cambridge. He began his career teaching mathematical physics and later ascended to the rank of professor. In a significant career shift in 1982, he was ordained as a clergyman and pivoted towards the study of

theology, eventually serving in various scholastic and ecclesiastical roles. Polkinghorne's unique blend of scientific and theological knowledge has prompted thoughtful examination of his views on God's intervention in nature. However, some detractors suggest that his religious convictions may color his interpretations.

PURPOSE OF THE RESEARCH

The purpose of this research is multifaceted and encompasses several key objectives:

Clarification and Interpretation: the primary aim of this research is to clarify in a very simple and reader friendly manner the basic theological grounds of John Polkinghorne vis a vis divine action in the natural order.

Contribution to Scholarship: this paper aims to contribute to the existing discourse on divine action and to further the frontiers of this discourse in order to better effect the daily quality of human life.

Integration of Disciplines: Given Polkinghorne's background as a scientist and theologian, this research aims to close the gap between modern science and theology. The importance in bridging this gap lies in the fact that theology provides a very useful moral and ethical framework as well as motivation for orderly behavior which is necessary for human development and peaceful dwelling, while science provides the daily tools and basic survival amenities that the human requires. In the event where the human race strays too far away from either of the two disciplines, the progress of humanity could be said then to be threatened. Therefore, a balance is required, and for balance to be achieved, an understanding of where exactly theology meets science is very necessary just as the language of theology and the language of science must be defined to the understanding of the other.

Practical Relevance: Beyond academic discourse, this research also aims to explore the practical implications of Polkinghorne's theology for religious belief and practice. By addressing questions related to prayer, providence, and human agency, it offers insights that can inform religious communities and individuals grappling with these issues in their lived experiences. There is no doubt that finding a balance between faith in providence and duty could be a very useful possession for a person's personal development and progress.

Stimulating Further Inquiry: Finally, the purpose of this research is to challenge the human mental faculty to extend beyond its comfort zones and to discover new information that might be uncomfortable but useful nonetheless. By raising important questions and identifying areas for future research, hope could be retained in that progress would be in motion as the human mind seeks to foster ongoing exploration and engagement with this complex theological theme.

THEOLOGICAL FRAMEWORK OF JOHN POLKINGHORNE

Polkinghorne deals with Divine's agency in the world based on natural theology, so he believes that Divine intervention in the physical world has continued since, and on the other hand, he emphasizes that God is not determinist and his actions do not jeopardize the free will of his creatures, and along the line with this theory, he is inclined toward process theology. Although Polkinghorne is not a process thinker in the sense of what is common in the intellectual space of philosophy (Dibaji, 2021:2)

Summarily, John Polkinghorne theological framework could be said to be deeply rooted in his physics background and his belief in the unity of truth across science, philosophy, and theology. While that of Ayatollah Javadi Amoli is based largely off of philosophy, theology and Islamic divine texts. The framework of Polkinghorne could be summarized as follows.

Science and Religion Interplay:

Polkinghorne saw no conflict between science and religion. Instead, he viewed them as complementary paths to understanding truth. He became a leading voice in explaining the relationship between these two areas. he contends that science requires a leap of faith (Polkinghorne, 2007:56) and demands of the universe to be without purpose or intelligibility (Markham, 1998:90-91). He argues however that, there is a need for intelligibility and order for things properly work. He said: "even mathematics requires an act of commitment as to its ultimate consistency (Polkinghorne, 1991:6).

Quantum Theory Influence:

His work in quantum theory, especially on how fundamental particles behave in high-energy collisions, significantly influenced his theological views. He saw a connection between the doctrine of the Trinity and the complex world of quantum theory, viewing them as compatible within an entangled universe.

Understanding of Human Nature:

In contrast to Cartesian dualism which saw the human as a composition of soul and body (Descartes, 1901:04). Polkinghorne saw the soul as a unity of mental and physical aspects, and the heart as a combination of cognitive, emotional, and volitional activities (Polkinghorne, 1989:18).

Harmony of Science and Religion:

He imagined a world where science and religion coexist and contribute to a unified culture. Although it could be argued that the extent to which he succeeded in bridging the gap between science and religion is sketchy at best and almost a failure in other instances.

Concept of Top-Down Causation:

A recurring theme in his work is 'top-down causation,' the idea that larger systems can influence the behavior of their parts. This concept highlights his holistic view of causality within complex systems. "In practice, working scientists... adopt a skeptical and qualified realism, according to which their theories and models are proposed and regarded as 'candidates for reality

(Polkinghorne,1984:14. Peacocke, 1984:25).

God as Creator and Sustainer

we have already established that Polkinghorne views God as the creator of the cosmos and what lies in it, though, he views the creation process in a wildly different way than what orthodox Christians interpret it to mean. The difference between Polkinghorne and orthodox Christians does not lie in the question of 'where does the universe come from?' since they both agree; rather, believe that the universe was created by God. The difference between them lies in the question, "how was the universe created?"

In light of this, much may not be said regarding God as the creator from the perspective of Polkinghorne. In his book: *Searching for truth: Lenten meditations on science and faith* he said: "*We praise you, O God, for the order and fertility of your creation, for the discoveries of science about its history and pattern, and for the insights of those who have seen your hand at work as its Creator.*" (Polkinghorne, 1996:37)

There is no need to further commentary on this statement, since it explicitly calls God as the creator.

However, on the question of how does the universe sustain itself, or how does God sustain his creation, Dr. Polkinghorne had the following to say:

"We see emerging from this study of the dynamics of complex systems just those characteristics of structured openness which seem to offer hope that those super-complex systems, which are ourselves, might indeed manifest the freedom within regularity which is our basic human experience. And might not one go on to suppose that similarly the super-super-system of the cosmos might be capable, in an analogous way, of sustaining the operation of the acquiescent, economic and purposive wills of its Creator, within the flexibility of its lawful process [Polkinghorne,1989:29].

Comparing the human being to other entities which are self-sustaining such as the universe and even machines that are created by humans, one would see that all of them run on energy which gives them the ability to be self-sufficient and self-sustaining. Polkinghorne therefore believed that, it is plausible to say that the human also operates in the same manner by the intended will of God.

Islamic Philosophers.

In contrast to Polkinghorne, there have been discussions about divine agency by Islamic Philosophers Such as, Ibn Sina, Sadra, Javadi Amoli, and Shaheed Motahari. they are among the Islamic philosophers who have addressed this issue accordingly. The discussion about divine agency is important not only from a philosophical point of view, but also from a theological and mystical point of view. A correct understanding of how God's power is applied in the world can help deepen faith and man's relationship with God.

when it comes to the creation of the universe. they posited that the universe is eternal in as much as God is eternal. Although, -being an effect and not the cause- the being of the universe depends on the being of God to be: and since God is eternal and his attributes are not separate from his essence, his

attributes are therefore also eternal, and since the title of "creator" is one of Gods attributes there could not be a time or situation under which God is not creating since excusing himself from creating would disqualify him from answering to the title of 'the creator'. Therefore, God as He ever was, was always a creator and shall remain ever the creator. His creation, no matter what it was, must therefore be eternal.

Motahari Morteza clarify that, being eternal does not equate been uncreated, rather, being without cause is what equates to being without a creator; and since the universe is caused by God, the universe is therefore created and yet, it is eternal.

It is worth noting that, Motahari Morteza does not recognize the need for time, within which creation would take place, which would necessitate the being of the cause in time, before the coming into being of the effect; which would disqualify the universe from being eternal.

"In the Quran Allah is the absolute Creator as well as the eternal Creator. in the Quran there is no difference whether the universe is constrained by time or not. Therefore, even if the universe were unconstrained in time, then creation in it would also be endless, we say: 'O Eternal of Benevolence,' meaning, 'O One whose benevolence has been since forever,' for He is exalted and His benevolence is perpetual (Motahari, 2009:161).

In conclusion, one can say that the difference between views of Islamic scholars and Polkinghorne lies largely in ascertaining when the universe began. Polkinghorne believes that God created the universe and all that is in it purposively in time, while Islamic scholars hold that, God created the universe in eternity. and there hasn't been a moment when God existed without the universe also existing. Both of them however, agree that God continues to play a creator role in these creations every single moment, however. Islamic scholars hold that God also continues to sustain his creation while Dr. Polkinghorne holds that they sustain themselves.

God's Action in Evolution

When looking at evolution, Polkinghorne does not view it as an upfront to creation, rather, he believes that evolution explains the creation process which has for long eluded the human understanding. In his case, Dr. Polkinghorne engages with evolution in stages:

Grasping Evolution: Polkinghorne starts by recognizing the scientific theory of evolution, which explains the development and diversification of life on Earth over billions of years through mechanisms like natural selection, genetic mutation, and adaptation. He acknowledges the substantial evidence that supports evolution as a credible scientific explanation for the variety of life forms on our planet. He stated: "The cosmic explosion of the Big Bang gifted to the cosmos systems as complex and as interesting as humans themselves. This explosion was hot enough to fill the entire cosmos with a sustained nuclear reaction for an estimated three minutes. Now called the anthropic principle, these three gifted minutes produced a tightly knit world of highly particular characteristics that allowed for the evolution of life (Polkinghorne, 1986:67).

particular characteristics that allowed for the evolution of life.

Divine Intervention: Next, Polkinghorne explores the theological issue of how and if God interacts with the world, including the natural processes of evolution. He dismisses the idea of a remote, deistic God who merely initiated the universe and then retreated from active participation. Instead, he advocates for a view of God as deeply involved with creation, constantly maintaining and directing the natural world. Polkinghorne does warn against looking at God's actions in terms of human actions since humans are limited and God is not, and since humans require and need, whilst God does not: *"We have been exploring how analogies with human action might be used to cast light on divine interaction with the world. We need also to recognize the differences which limit the applicability of such analogies. As physical systems we humans operate in ways which must be consistent with general physical principles, such as the conservation of energy and the thermodynamic relations (due to Brillouin and Szilard) which link information processing and storage to the necessary expenditure of a minimum quantity of energy (Polkinghorne, 1989, pp.32). I have said that, he further explained that God's actions are so subtle and stealthy that the human might not readily perceive it, nonetheless, his influence and constant actions are present in his creation: "If God acts in the world through influencing the evolution of complex systems, he does not need to do so by the creative input of energy. Of course, such divine energetic interaction is not to be excluded theologically, and it could be so hidden in complex process as not to be perceivable scientifically, but we have no need to invoke it. Moreover, it is probably wise not to do so, since it would risk turning God into a demiurge, acting as an agent among other agents.*

Finally, it is necessary to acknowledge that a subtle and respectful balance is required if the flexibility of physical process is to accommodate both God's action and our own and also the freedom of the universe to explore its own potential. How these intertwine and how each finds space for its own fulfilment without usurping the room necessary for the others, is a profound problem beyond our power to resolve in detail (ibid:21).

He believes that God has given the world the freedom to be independent, but not to the extent that it should be merely be come between an encouraging God and a despotic tyrannical God who intervenes in every detail, God is involved in the processes of the world and never separated from it. In fact, Polkinghorne acknowledges the divine agency in the physical world much more than the God accepted in process theology. Hence, we must be able to distinguish between creator and creation like classical theology (Polkinghorne 2007:32).

Polkinghorne disputes a simplistic interpretation of divine action as direct, miraculous interventions in the natural order. He proposes that God's activity in the world is more nuanced and indirect, operating through the inherent regularities and contingencies of natural processes rather than contravening them. This perspective corresponds with the concept of God as the ultimate origin of order and creativity in the universe.

Polkinghorne posits that God's action in evolution is manifested through the inherent creativity and emergent properties of natural processes. Evolutionary mechanisms such as mutation and natural selection function within the

framework set by God, leading to the emergence of new species and biological complexity over time. In this manner, God's creative influence is expressed through the progression of evolutionary history.

Polkinghorne underscores the openness of the evolutionary process to future possibilities, reflecting God's ongoing engagement with creation. While evolution adheres to certain principles and constraints, it also displays unpredictability and contingency, allowing for the emergence of novel life forms. This openness mirrors God's invitation for creatures to participate in shaping the future of the natural world through their own agency and creativity.

Non-coercive Divine Action in the Process of Evolution

Polkinghorne, in order to solve the problem of God forcing things into being according to the directions that he chose, thereby making irrelevant the creation process which he has championed, explained that there is no coercion in the creation process, rather, it comes about as a consequence of its nature. He explained that God's action in the process of nature bears semblance to the action of humans within themselves and beyond. He contends that, even though the creation of things is continuous, the human yet has actions which they take intentionally, thereby affecting whatever it is that they affect through their willful action and not as a result of God forcing that action through them. He holds that 'will' must be true, since the human knows that there is element of intent and will that derive their actions. God therefore may not be said to have coerced the actions of the human, and in the same way, He did not coerce evolution into being so he quotes Schrodinger in his book to draw parallels between these two situations of whether the evolutionary process is coerced or not: *"My body functions as a pure mechanism according to the Laws of nature; Yet I know by incontrovertible direct experience, that I am directing its motions... from which he reached the astounding conclusion that The only possible inference from these two facts is, I think, that I - I in the widest meaning of the word, that is to say every conscious mind that has ever said or felt 'I' am the person, if any, who controls the 'motion of the atom 'according to the Laws of Nature (Polkinghorne,1889:24).*

Polkinghorne contends that though it is God who made the process, he only put it into motion while leaving the possible outcome out of his own hands and into the hands of the creation. Thereby making it possible for the end results of any of his creation which he had put in motion to be anything and at any time undetermined by God. This very position that he has taken is the direct consequence of 'divine kenosis' which Polkinghorne himself had put forward. Divine kenosis simply says that, God himself willfully emptied himself of some future knowledge in order to allow for greater freedom and participation in the creative process by the creation itself. (Polkinghorne,1984:45) In other words, God is not omniscient, but only out of choice and self-limitation and not out of weakness and inability.

He thinks that, God's purposive action within the flexibility of process may be expected to bear some analogy with our human experience of willed activity, for which we know that there must be such flexibility, since we exercise it all

the time. How can we picture its coming about? The answer will lie in such modest understanding as we may possess of how our psychosomatic unity is realized within the physical world. (Polkinghorne 2007:25).

We then conclude that Polkinghorne believes that evolution as a creative process was put in motion by God through the big bang, and it culminated in the advent of the human being as the purposeful fulfilment of that creative process which began with the big bang; but that the creative process and evolution in itself were not determined by God, rather, he simply put it in motion.

SHAHEED MUTAHARI ON EVOLUTION

While Dr. Polkinghorne recognizes the big bang and evolution as a true explanation for the origin of species, Motahari Morteza does not. He posits that the theory of evolution takes a simple natural phenomenon which occurs in limited boundaries, but expanding it to extents where it does not apply. Motahari Morteza recognizes the role of environmental conditions in shaping the anatomy of species, however he does not recognize its ability to influence such changes as would completely transform one species into another. He also holds that; all of these changes occur as a result of an ultimate cause which causes those small changes. He stated:

"We do not view the theory of evolution as been sufficient without introducing a supernatural element. Unless we acknowledge the origin of the final cause or the existence of a controlling force in the living organism, we cannot direct a theory of the evolution of species. We acknowledge the influence of environmental factors on humans and animals, but not to the extent that all different kinds of animals are absolutely under the influence of that factor (Motahari, 2009:222).

Despite the fact that he does not believe in absolute evolution, and the fact that he views the theory of evolution as a theory with shortcomings, he does not view the theory of evolution as one that contradicts monotheism in any way.

Furthermore, the first principle in this theory is based on the belief in the change of types of living beings. Is there a relationship between the issue of changeability and non-changeability and the issue of monotheism and belief in the existence of God? No, there is no relationship between a person's belief in the existence of God and his belief that species are mutable.

He goes as far as to state that: "a person may believe - and this is a naive belief - that it is necessary to believe in the existence of God, to hold that he alone is the cause of everything and nothing else has effects in how things run. that is to say, he rejects cause and effect (Motahari, 2009:225)

Miracles and Divine Intervention

Polkinghorne believes in miracles, however, he does not see it as a magical occurrence. Instead, he views miracles as the advent of the unexpected within the realm of what we know: *"The miraculous is simply the providential in unusual circumstances (Polkinghorne,1989:18,25,29,32).*

In contrast to the above, he ascribes to 'providence' the discovery of what we do not know: *"Secondly, those laws of nature that we do know do not imply that there is no flexibility for action, both human and divine, within the process they describe. Pursuit of the first point opens up the possibility for what is usually called miracle; pursuit of the second point opens up the possibility for what is usually called providence (Ibid:25).*

(emphasis) furthermore, he states -in a rather sharp contrast to his laid-back style- aggressively: "miracles are seen, not as celestial conjuring tricks, but as signs, insights into a deeper rationality than that normally perceptible by us, (Polkinghorne, 2007: 90).

This of course, raises questions regarding the reconciliation between what he believes to be a miracle, and the supposed resurrection of Jesus which by all accounts appears to be magical and not just the unexpected. To solve this seeming contradiction, Polkinghorne posits that the 'resurrection and ascension' of Christ was an act of transcendence and not merely a miracle. I think he is trying to say that, the great symbol of the ascension of Christ is that in him humanity is taken into the divine nature. As part of that mystery the Eternal accepts the experience of temporality (Ibid:34).

This means, while miracles might be eternal truths, they are not to be expected everyday of our lives, nor should we expect magical resolutions of problems in the names of miracles, rather; it is the unexpected within the known that might be called miracles.

Human Free Will in Polkinghorne's Theology

God's action in the world and our human free actions are not precluded by scientific laws: Polkinghorne argues that the laws of science do not prevent God from acting in the world, nor do they limit our human freedom. He suggests that divine action and human free will can coexist with the laws of science.

Quantum theory which is in-deterministic: Quantum theory, a fundamental theory in physics, is inherently in-deterministic. This means it allows for multiple possible outcomes and does not predict a single definite result. Polkinghorne uses this aspect of quantum theory to argue that it leaves room for divine and human actions.

Chaos theory which shows inherent unpredictability: Chaos theory deals with systems that are highly sensitive to initial conditions, leading to long-term unpredictability. Polkinghorne suggests that this inherent unpredictability in nature, as described by chaos theory, also allows for the possibility of divine and human actions.

In summary, Polkinghorne is using principles from quantum and chaos theories to argue that scientific laws do not preclude the possibility of God's action in the world or human free will. His perspective is one of harmony between science and faith, rather than conflict.

AYATOLLAH JAWADI AMOLI ON FREE WILL

According to traditions and rational proofs, the creator of the entire universe, its resourcefulness and the survival depend on Divine's providence. so, in the universe, nothing can be enforced except by God's permission, and everything that ever existed has a time.

Therefore, Islamic philosophers and theologians have put forward their

reasons and justifications to prove and explain the levels in Divine actions. Islamic intellectuals have put forward different views about the reality of Divine actions, which clears the doubt of predestination and abandonment or entrusting in human action (Jawadi Amoli, 1387, vol, 1:50-61). It is obvious that believing in the reality of the inter-ordinating matter leads to the proof of levels in Divine actions. Of course, it is clear that the existence of levels in the Divine actions does not lead to the attribution of divine actions to time. Believing in the reality of the inter-ordinating matter.

means, God is both the creator and the agent of human action, hence leads us to the conclusion that human action has different levels and stages, these levels represent the different stages that the intellect takes to attribute phenomena to the Supreme Being and it does not require any change in its essence. Jawadi Amoli said, based on the theory of personal unity of existence the pluralities of existence are the manifestation of the oneness of Being (Jawadi Amoli, 1386, vol,10:39-131-182), and this is much more compatible with the religious phenomena. He said, though pluralities are from the oneness of Being but they are an independent and portray their own way (Jawadi Amoli, 1386, vol,10:182).

Ayatollah Jawadi Amoli believed that many verses in the Holy Quran indicate that creatures are the signs of God. Some of these verses include:

"And within the universe are some signs for the faithful ones * and so within yourselves, won't you perceive." (Dhariyat/20-21).

For that matter, it is out of the free will of the human that they choose what to do in the circumstance which they find themselves. Thereby ensuring that human does not have absolute freewill, but rather, has freewill in their choices only. The circumstance and situations in which the human might find himself may not be as a result of his choice, but what he or she chooses to do then in those circumstance would determine what his recompense would be. Motahari Morteza said: its similar to an examiner or a teacher who, even though he may already know which student of his will achieve first class and which will achieve second, but he will still conduct a test among them to make the truth clear to others and remove any doubt (Motahari, 2009:195) ... God does not test His servants to learn something unknown to Him, as He states in the Quran:

"Indeed, we have created man and knew what his soul whispers to him." (Qaaf/ 16).

with time human being reveals his true essence and hidden nature no matter what (Motahari, 2009:295).

Prayer and Divine Response

When it comes to prayer and its effects in the natural flow of events and whether or not prayer may alter natural patterns, Polkinghorne has a very interesting take on this. He divides prayers into different kinds and then makes a case for certain types of prayer been meaningful even if that prayer is not going to alter the natural pattern of natural law. And if prayer were to interfere with the natural order of events, wouldn't that upset the known laws of physics, which would also upset any hopes of haven order in the human space? "I don't think that the effect of purely physical causes is drawn so tightly that it rules out either human choice or divine providence (Polkinghorne,1996:99)

Polkinghorne divides prayer into various categories such as Praise, Confession; meditation and petitionary prayers. He concludes however that, it is petitionary prayer that's most troubling to most people; they' will rather things just went as they would and they feel as though it is childish to ask God for something to be change or provided for in a world that is already known to work in accordance with certain laws and orders and does not give way to faith.

١. What happens when two contradictory prayers are offered? Would God change summer into spring because of a prayer? He answers these as follows: *"The motions of the solar system are mechanical in nature, with a predictability over long periods of time which permits the construction of almanacs. Thus, the succession of the seasons will be guaranteed by transcendent divine reliability and it would indeed be foolish to pray for their alteration (Ibid:32).*

٢. *"Petitionary prayer is real, but it is not as crudely mechanical as that (Ibid:25)*

However, when it comes to Praise, he seems to wonder, are we not to be grateful for a favor we did not ask for? Or rather, should we be grateful for a favor we did not ask for?

Polkinghorne believes that Divine agency can be applied in three ways: special, general and miraculous. In his general act, God manage the world through the laws embedded in nature. And the special agency includes the manner of special actions, for example: a physical event is organized differently from the whole natural accident, and miracles are also based on unnatural and are issues beyond human power (Dibaji 2001:2).

And the laws embedded in nature, are the same laws that can be defined in the Newtonian physical framework. For example, in this framework, the relationship between the mass and the speed of objects follows specific and definite formulas, upon this basis, Divine agency in the universe is defined as God has created the world in such a way and governs it in such a way for mankind in the form of these definite physical formulas that can be extracted before and can be predicted.

And what is meant by Divine special agency is the non-deterministic physical situations that are formed based on a kind of relativity. He believes that in the quantum space as well as in the situations and also in the situations where chaos theory is defined, is unlike Newtonian physics, where humans are facing a kind of uncertainty, and this is actually a place that God has reserved for himself in order to be able to spread his agency in the world. Miracles are among the third categories of Divine agency, which are known as unnatural issues in a different way (Dibaji,2021:2-3)

this stance of Polkinghorne is compatible with Brummer's theory of God's agency in the world when answering prayers or creating miracles, because Brummer believes that these two situations are also situations that have uncertainty, and through this uncertainty God applies his agency in the world. (Nabavi & koochanani, 2011,7(27):125-146)

Summary of Key Findings

Significance of John Polkinghorne's Theological Insights:

Polkinghorne compares the relationship between God and the universe as the relationship between a watchmaker and a watch, while Ayatollah Javadi Amoli considers this analogy incomplete and believes that the relationship between God and the universe is the relationship between the creator and the created. The criticism of Polkinghorne's views from the perspective of Ayatollah Javadi Amoli helps to understand the relationship between science and religion more deeply. This criticism shows that Polkinghorne's views are not compatible with the divine attributes and philosophical foundations in some cases, as he shifts from the realm of physics to that of theology offers a distinctive lens through which to view divine intervention, merging the paths of theological inquiry and scientific discovery while maintaining a harmony between God's sovereignty and the independence of the natural order. On the other hand, Motahari Morteza also, posits that the cosmos is without beginning or end, mirroring the timeless nature of divine creation. The act of creating is a fundamental aspect of God's nature; thus, God is in a constant state of creation. However, the universe's eternal existence does not negate its reliance on and origination from God.

Polkinghorne's Theological Approach:

Drawing from his scientific expertise, Polkinghorne advocates for a harmonious relationship among science, philosophy, and theology. He sees these disciplines as complementary avenues for seeking and understanding truth, and he encourages their collaborative interaction.

Concept of Top-Down Causation:

Polkinghorne proposes the concept of top-down causation, suggesting that larger systems can shape the actions of their individual components. This idea mirrors his belief in the presence of the divine in daily existence.

Polkinghorne's Conception of God:

Polkinghorne perceives God as transcendent, separate from the universe, and highlights the supremacy of the divine. He acknowledges the inadequacy of human language to fully capture the essence of God and portrays God as a personal entity, steering clear of human-like representations.

Polkinghorne's View on Evolution:

Polkinghorne embraces the theory of evolution as a credible scientific account for the emergence and progression of life, tracing its origins back to the Big Bang and the subsequent evolution of complex organisms over eons.

Motahari's Critique of Evolution:

While Motahari recognizes the role of environmental factors in shaping species, he disputes the notion that these influences can lead to the complete transformation of one species into another. He contends that a divine or ultimate cause is at play and maintains that this view is compatible with monotheistic beliefs.

Polkinghorne on Non-Coercive Divine Action:

Polkinghorne dismisses the idea of a deity dictating the course of evolution. Instead, he envisions a process driven by natural forces, with divine influence subtly interwoven within the laws of nature, thus permitting the inherent flexibility of natural processes. Motahari views free will and divine tests as been there for humans to recognize their own actions and outcomes, emphasizing limited free will shaped by circumstances.

Conclusion

Polkinghorne has taken a scientific theological approach in his attempt to explain the involvement of Divine agency in the material world, in his theological approach, he has tried to adopt a way between classical theology and process theology, and in his scientific approach, he has focused on new physics theories. Of course, not all of the new physics is part of his theorizing field, but rather his is focusing on what is for commenting, which is the Physics of in determinates.

In order to adopt a path between classical and process theology, he divided divine agencies into three categories, general and special agencies plus miracles, but in this view, there is some kind of contradiction. Because on one hand, he believes that Divine agencies in nature is without violating the freedom of creatures, but on the other hand, he admits some kind of predestination in all three categories of agencies that he considers for God. Although he believes that there is relative independence in certain divine actions for some physical events, but this relative independence is the indeterminacy that exists in the quantum space and chaos theory, and divine intervention in that physical phenomenon which is been directed and specified by God. hence, it is again the subject to the same predestination and the reality determinism that he is avoiding.

Master Javadi Amoli considers science and religion to be two separate domains of knowledge, and believe in the objectivity of the Universe, while Polkinghorne considers science and religion to be two complementary approaches for the understanding, and believe that, Universe exists objectively and independent from human mind, master Javadi Amoli also believe in the objectivity of the Universe, but dependent on God wills. Therefore, the systematic creation of this Universe and its temporal characteristics changes in every aspect of its phenomena, falls under the perfect design system of Divine agency. For example, the gradual and progressive agencies, such as anger, satisfaction and answering the prayers of his servants, does not mean that, the attributes of God are also changing. But rather indicate the different levels of divine agency and action which are manifesting and appearing in the material world gradually over time.

Theologically; Divine action, such as creation, sustenance, life giving and taking is one of the inherent attributes of God, which has been emphasized in religious texts, especially in the Holy Quran

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