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## **Predeterminism as a category error: Why Aribiah Attoe got it wrong**

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### **Abstract**

I aim to establish in this paper why Aribiah Attoe, like other determinists before him, got it wrong in arguing for the possibility of predeterminism in a materially evolving universe. I will do this by proving two things: I will first establish the inconsistency of the idea of predeterminism in an evolving universe. Then, I argue that the *adirectionality* presupposed by an evolutionary universe gives room for free will and negates the argument for a predeterministic universe. I aim to achieve the above by exposing why the view which upholds the universe and all existents within it as lacking free will—or the possibility of *adirectionality*—stems from a category error on the part of the determinists. Lastly, I defend the position that for predeterminism to stand a chance against the free will of animate things-in-the-world, it must deny the possibility of an evolving/expanding universe that is *adirectional* and suggestive of boundlessness, and the possibility that some events are not fundamentally necessary reactions to previous states of affairs.

**Keywords:** Predeterminism, predeterministic historicity (PDH), free will, evolution, *adirectionality*.

### **Introduction**

Determinism is one idea that has fascinated philosophers for ages. Built on the notion of the impossibility of free will or undetermined actions for the conscious human subject, determinists

claim that humans, limited in time and space, lack the free will to direct the course of their actions. In other words, they claim that all human actions are predetermined by some cause or chain of causes—material or immaterial (see Spinoza 2002; Hofer 2004, 2016; O’Keefe 2020; Aurelius 2020; Agada 2015, 2022). In this paper, my focus will be on the version of materialistic determinism—Predeterministic Historicity (PDH)—proposed by Attoe. I aim to establish why Attoe, like the determinists before him, is wrong about the claim of the impossibility of free will based on the interactive link that every future event—or state of affairs—shares with a previous event. Here, I will primarily focus on Attoe’s PDH as representative of the dominant conceptions of determinism, and as it fits into the scope of my inquiry.

One might ask, what is this thing called (pre)determinism? To the determinist, this question is a positive affirmation of nothing new. In other words, the question can be traced back in time to a series of antecedent interactions terminating ultimately in a grand principle or first cause. These antecedent interactions give rise to new states of affairs, thus, rendering the possibility of an ‘unlinked’ state of affairs impossible. Whether the resulting states of affairs are predictable or not, it changes nothing. In this sense, for the predeterminists, even a deviation in the order—or chaos—of the links of interaction between previous states of affairs that give rise to a new state of affairs still affirms a predetermination. Ernest Nagel offers a general definition of determinism. For Nagel (1960, 296), “determinism in its most general form appears to be the claim that for every set of characteristics which may occur at any time, there is some system that is deterministic in respect to those occurrences.” Free will, which involves free action and the formation of our “wills” to act in undetermined ways (Kane 2019, 147), consequently, becomes a mirage in the world of the determinist. Thus, an “unlinked” state of affairs is rendered practically unattainable.

Whether it is Kwasi Wiredu’s (1998, 31) version of determinism where every existent entity is believed to be “subject to the universal reign of (cosmic) law,” or what Barry Hallen (2002, 20) calls “a fundamental causal determinism.” Or Ada Agada’s (2022, 96-98) version of determinism, characterize by a futile yearning for perfection in a fundamentally imperfect universe by design. One thing is clear; all versions of predeterminism proceeds from a mistaken assumption of the impossibility of *adirectionality*—the possibility of an undetermined state of affairs coming into existence from the interaction of existing states of affairs. This mistaken assumption grounds the determinist’s denial of free will and undetermined state of affairs.

David Hume, arguably the most thoroughgoing empiricist, argues against the position of determinists. Hume found the position of the determinists to be nonfactual and consequently, he questioned the basis of their claim of a deterministic universe. According to Hume (1999, 136), “When we look about us towards external objects, and consider the operation of causes, we are never able, in a single instance, to discover any power or necessary connexion.” Here, Hume questions the claim of the predeterminists who argue for a chain of causes that inextricably links all states of affairs together without exception. Hume deflates the position of the determinists by asking for any single evidence of a “necessary connection” between a cause and its effect, beyond the association or conjunction of ideas and events by the mind. While Hume’s take is particularly insightful and has generated loads of responses in the causality debate, my focus here will be on the implications of a causal view of the universe that is characterized by constant evolution and expansion. Specifically, concerning its ability to predetermine all future events and actions without deviation.

Against the aforementioned background, I aim to establish the inconsistency of Attoe’s idea of predeterminism—PDH, and similar deterministic views of the universe, in an evolutionary and constantly expanding universe. I will further expose the problem with a predeterministic conception of the universe by arguing that the *adirectionality*<sup>1</sup> presupposed by an evolutionary universe gives room for free will and negates the argument for a predetermined universe. I will demonstrate why the view which upholds the universe and all existents within it as lacking free will—or the possibility of *adirectionality*—stems from a category error on the part of the determinists and is a product of a backward-facing metaphysics that is obsessed with providing a justification for the existence of God. In the next section, I consider in detail, Attoe’s version of determinism.

### **Predeterministic Historicity (PDH): Attoe’s Pre-programmed Universe**

Attoe, in his 2022 groundbreaking book, *Groundwork for a New Kind of African Metaphysics: The Idea of Predeterministic Historicity*, presents one of the most rigorous defenses of determinism in the philosophical literature. Attoe calls his version of hard determinism the

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<sup>1</sup> Within the context of my refutation of a predeterministic universe, I define *adirectionality* as an unpredictable or undetermined state of affairs coming into existence from the interaction of existing states of affairs. Under this conception, although the new state of affairs proceeds from the interaction of previous state of affairs, the idea of *adirectionality* rejects the claim that all the properties of the new state of affairs are wholly predetermined without exception or a deviation in any form by the previous state of affairs.

theory of “Predeterministic Historicity” (PDH). Attoe’s alternative theory of causation, PDH, is presented as a response to the perennial question of causality—the question of the existence of a necessary connection between a cause and effect, between antecedents and consequences, between the past and the future, or between event A and event B in spacetime. This theory is based on the view “that the principle on which the universe operates is a highly deterministic one that was set forth by the very act of the universe coming into being” (Attoe 2022, 67). What Attoe implies here is that the existence of the universe is foundationally tied to some causal framework in principle. In other words, to think of the existent universe is to think of it as a predetermined entity.

Attoe’s predeterministic theory is defined by *interactive* relationships as opposed to causal relationships defined by the idea of a *necessary* connection. Attoe dismisses the idea of a necessary connection as arising from a misconceived notion of causality in favour of the idea of interactive relationships. *Interactive* relationships, for Attoe, take two forms. The first *interactive* relationship takes the form of a “direct relationality.” This occurs when different objects of reality “are brought together and bound by a given state of affairs” (ibid., 69). Their ability to come together to produce new states of affairs<sup>2</sup> is made possible by the fact that the objects in question, through the medium of *interactive* relationships, have already been predetermined by a trigger-event dating back to the first cause to enter into such *interactive* relationships. Predeterministic relationality is also responsible for producing “things-in-the-world and events-in-the-world” (ibid., 70). The second form of *interactive* relationship is that of “indirect relationality.” According to Attoe (ibid., 71), indirect relationality “indicates an idling or a far less direct interaction.” Here, seemingly unconnected realities or things-in-the-world is believed to possess interactive power between and among themselves.

Explaining the basis of his theory and the nature of the relationship that characterizes PDH, Attoe (ibid., 72) asserts that in PDH,

states of affairs are bound together in a chain of history that is traceable to the first cause, that is, the thing we call God. This is so because every state of affairs is itself an outcome or effect of the necessary interactions found in a previous state of affairs, this older state of affairs, also an outcome of a previous state of affairs and so on, down to the first cause.

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<sup>2</sup> State of affairs and new complex realities in Attoe’s PDH theory are created by the mindless struggle among singular realities in the world as these entities try to occupy space. Singular realities, here, denotes stand-alone simple or complex things. For a detailed analysis, see A. Attoe (2022, 52-54).

In the above conceptualization, Attoe suggests a regressive movement from a present state of affairs to the most distant state of affairs, suddenly, terminating in a God or a first cause. What remains is a convincing justification for cessation in the chain of this regressive movement. Attoe (*ibid.*, 55) further argues, “[s]ince the relationship between singular complements is historically traceable to the thing we call God, then the relationship between God and other things-in-the-world is one of necessary dependence.” This raises the question: Is the idea of a deviation, or *adirectonality*, possible in whatever form in a PDH universe? Also, is the idea of a necessary dependence consistent with the fact of a constantly evolving and expanding universe?

Attoe, however, admits the possibility of a deviation, or what I prefer to call *adirectionality*. But, he explains away this possibility—which would give room for free will/undetermined state of affairs—by arguing that “any alteration to the defining event invariably leads to another outcome (which is necessarily related to that state of affairs plus the alteration)” (*ibid.*, 67-68). The goal, here, is to eliminate the possibility of “undetermined actions” and render free will impossible in his predeterministic universe. In other words, in Attoe’s PDH universe, every existent entity, whether animate or inanimate, is practically a pre-programmed robot of some sort, dependent on God or the eternally enduring final cause for its day-to-day movements, actions, and dispositions, without any exception. In Attoe’s universe, every argument and counter-argument lacks originality, as they were already predetermined by “the God of Predeterministic Historicity.” Any attempt at originality only serves the *telos* “that was set forth by the very act of the universe coming into being.” Thus, what you are reading on these pages is not an original critique of Attoe’s theory of PDH, but, an execution of what was pre-programmed into my brain billions of years ago by the God of PDH. This view is problematic for human agency and moral responsibility, to mention but two. I will show why Attoe’s view is mistaken in the next section of this paper.

Furthermore, for Attoe (*ibid.*, 42), in the PDH conception of existents, “Once a being emerges as a new thing-in-the-world, it necessarily belongs to a community of things-in-the-world.” However, Attoe fails to adequately account for the source of this emergence. Rather, he attempts an escape by suggesting the existence of a subsisting foundational entity which he refers to as “God” or the “first cause” (*ibid.*, 30).<sup>3</sup> This attempted escape fails because as

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<sup>3</sup> The thesis which grounds Attoe’s notion of a first cause is the idea that “all things-in-the-world are contingent things—that is, dependent on other things-in-the-world for their beingness,” (2022, 27) and thus, require some necessary being or a first cause to avoid the problem of infinite regression. Attoe had earlier defended the view

Jonathan Chimakonam and Amara Chimakonam (2022, 6) rightly argue, “That each cause leads us to chase after its cause to a possible infinity does not justify the leap of faith that lands on God as the first cause,” or ultimate foundation of new states of affairs. What Chimakonam and Chimakonam imply here is that if Attoe’s idea of *interactive* relationships is fundamentally eternally regressive, then we cannot terminate these *interactive* relationships that are the foundation of existence/existents at will because we find the idea of infinite regress inherent in *backward-facing interactions* to be uncomfortable. To do so, in a sense, would implicate the existence of free will—an outcome inconsistent with the PDH theory. In addition, aside from providing a wedge in the line of a regressive foundation built on the necessity of an always-existing material, Attoe (2022, 42) further states that in its “most basic and necessary sense, *being* interacts with other things in the world—its be-ing creating a new state of affairs, previously un contemplated before its introduction into the world of things.” Attoe, here, asserts the possibility of a “previously un contemplated state of affairs”—which suggests *adirectionality*—coming into existence as a result of the interaction of existents. In the same breath, he denies the possibility of “un contemplated actions” and the emergence of new states of affairs that stems from free will in his theory of PDH, thus, highlighting a contradiction in his theory of predeterminism. This raises some concerns about Attoe’s consistency in defense of his rigid materialistic determinism.

Similarly, Agada’s (2022, 63) consolationist metaphysics espouses a predeterministic conception of the universe which upholds a teleological view of things-in-the-world as constantly striving toward perfection in a deterministically imperfect universe. However, this attempt at striving for perfection—or final purpose—is soon realized to be a futile task due to the incompleteness that characterizes existence (ibid., 86). Perfection, for Agada (ibid., 84-85), is “that state of existence in which activity motivated by an existential lack is finally exhausted by the actualisation of this lack, so that a new, permanent, and ideal state of being can commence where acts can properly be termed *free*.” Thus, following Agada’s line of thought,

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that in order for future state of affairs to emerge, there must necessarily be interactions between previous state of affairs. This is informed by Attoe’s view of the impossibility of a consequent entity emerging without an antecedent. In ther words, for there to be a consequent/new state of affairs, there must necessarily be an antecedent state of affairs which preceded it. Attoe (ibid., 22) goes as far as describing any contrary possibility as “unfathomable.” This thesis births the idea of a first cause. The first cause, i.e. God, for Attoe, is the source of emergence of things-in-the-world or being. Attoe (ibid., 30) conceives of the first cause as a subsisting foundational entity from which all other—*contingent*—things-in-the-world derive their existence. The first cause in the theory of PDH, is a fundamentally determistic principle that grounds the emergence of all other beings. Its motion is what sets the stage for the interaction of all state of affairs which in turn produces newer states of affairs in the world. Attoe’s first cause is both regressively eternal and material in nature and is the God of predeterministic historicity. This God is the foundation of reality.

since the actualization of the yearning/lack that characterizes existence is an impossibility, freedom/free will becomes an impossibility. The consequence is a universe predetermined by imperfection and incompleteness and condemned to the metaphysics of terror.<sup>4</sup> Worthy of note is the fact that while “God” or a “regressively enduring entity from which all other entities emanate” forms the basis of Attoe’s predeterministic theory, “Mood,” constitutes the fundamental principle of Agada’s version of predeterminism. Emmanuel Ofuasia (2022, 170), for example, describes the principle of *mood* as the overriding concept in Agada’s consolationist system. Nonetheless, both thinkers deny human freedom and defend the position of a pre-programmed universe whose fate is subject to the predetermination of a grand causal entity represented as God. In the next section, I will thoroughly examine the problem with Attoe’s version of predeterminism. I will establish why Attoe, like other predeterminists before him, got it wrong in supposing the impossibility of free will and an undetermined state of affairs.

### **Predeterminism as a Category Error**

This section will primarily focus on establishing why Attoe’s PDH—and other versions of determinism—is mistaken and stems from a category error.<sup>5</sup> Firstly, I pose the question: Is predeterminism consistent with the idea of an evolutionary universe? The answer is no. Science tells us that the universe—and its constituent matter—is constantly evolving and expanding (Kragh and Smith 2003; Bahcall 2015; Pacheco 2015; Bazaluk 2016). Human beings, plants, and animals have also been argued to be the product of biological evolution (Darwin 1859, 1981; Futuyma 2005). The facts of a constantly expanding universe and the reality of an enduring biological evolution of animate beings point us in the direction of one thing—

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<sup>4</sup> According to Ada Agada (2015: 11), the metaphysics of terror as the guiding principle of consolationist philosophy posits that “the goal of consciousness as it lifts itself from an unconsciousness directed by primitive intelligence, is not the attainment of happiness but the fulfillment of consolation or the deepening of human joy and sadness as these two elements cut a path through anxiety to the concept of a transcendent Being.” The fulfillment of consolation, here, is essential in bypassing the pessimism that characterizes a universe that is deterministically imperfect and in futile yearning for perfection through a transcendent Being. For a detailed discussion, see A. Agada, *Existence and Consolation: Reinventing Ontology, Gnosis and Values in African Philosophy*. In *Studies in African Philosophy, Science, Logic and Mathematics*, edited by Jonathan O. Chimakonam. (Calabar: 3rd Logic Option Publishing).

<sup>5</sup> There is no explicit informative and generally acceptable definition of a category mistake. However, Angus Stevenson (2010, cited in Magidor 2019) offers a simple definition of a category mistake as “The error of assigning to something a quality or action which can only properly be assigned to things of another category, for example treating abstract concepts as though they had a physical location.” For a fruitful discussion of category mistake, see Ofra Magidor, “Category Mistake.” *The Stanford Encyclopedia of Philosophy*, (2019), <https://plato.stanford.edu/entries/category-mistakes/>.

possibilities.<sup>6</sup> Possibilities, in this context, are factually unpredictable/undetermined future states of affairs. The idea of an expanding and constantly evolving universe favors *adirectionality*, particularly, in the sphere of human affairs. This lends credence to free will and supports the argument for the existence of an undetermined state of affairs. Although the new state of affairs that is produced has been argued by determinists like Attoe to be subject to the interaction or influence of the previous state of affairs, the possibility of a deviation leading to the emergence of an undetermined state of affairs has not been plausibly refuted. That is my primary contention in this section.

It might interest us to know that determinists do not dispute the actuality of—biological—evolution and cosmological expansion as a scientific fact.<sup>7</sup> But, are the above ideas on predeterminism compatible with a constantly evolving and expanding conception of the universe? The idea of evolution, I argue, is incompatible with a deterministic conception of the universe, especially, if we think of the evolutionary process as not—necessarily—following a set of rules,<sup>8</sup> but rather, creating its own rules to support the *adirectional* outcomes of the different phases of its existence. However, determinists fail to acknowledge that the idea of an evolving and constantly expanding universe and the entities within it makes directional limitation—or predetermination—logically superfluous. This is because evolution as a category of existence presupposes possibilities and variations (see Futuyma 2005; Muehlenbein 2010; Bazaluk 2016). Consequently, if we accept the fact that inherent in evolution is the category of possibilities, then, it seems, the idea of a predetermined universe would be logically implausible and contradictory. Worthy of mention is the fact that the idea of evolution/expansion is *adirectional* in nature. That is, it can occur outside predictable directions and boundaries.<sup>9</sup> This subjects the argument for a predeterministic universe to question.

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<sup>6</sup> That we can speculate about possible future state of affairs does not imply certain knowledge of future state of affairs. If the latter were the case, then establishing a predeterministic link between past and future state of affairs would be possible.

<sup>7</sup> Agada, for example, acknowledges the reality of this evolution in his conceptualization of a universe that is constantly *yearning* for perfection. See A. Agada (2015, 2022).

<sup>8</sup> Douglas J. Futuyma (2010, 3) explaining the nature of mutation in biological evolution posits that “Mutation is a random process, in the sense that the probability of occurrence of a particular mutation is not affected by environmental circumstances.” This points us in the direction of randomness and *adirectionality*. For a detailed discussion, see D. J. Futuyma, “Evolutionary Theory.” In *Human Evolutionary Biology*. Edited by Michael P. Muehlenbein. (Cambridge: Cambridge University Press, 2010).

<sup>9</sup> Would a process still be adequately described as evolutionary in nature if its end was predictable and predetermined from the beginning? It is my thinking that a predetermined evolutionary process would no longer



Let us consider Attoe's materialistic predeterminism to examine what is the problem with his PDH theory. Attoe's (2022, 67) idea of predeterminism goes thus:

the very inception of the universe (itself, a state of affairs) brought about a series of events/interactions, which then leads to a newer state of affairs, which then allows for newer types of events/interactions that create new states of affairs and so on, all related to each other and built on a deterministic foundation.

Attoe (ibid., 67-68) further states:

each event is necessarily related to a previous event(s) or state of affairs, which in turn is necessarily related to other previous events and so on. It is necessarily related because...any alteration to the defining event invariably leads to another outcome (which is necessarily related to that state of affairs plus the alteration).

From the above passage, Attoe claims that all states of affairs, present, and the ones that will unfold in the future, are a result of their interactions with past states of affairs. Thus, there is an inescapable connection via interaction between all things-in-the-world. There is thus a sense in which to *be* a thing-in-the-world is to be connected directly or indirectly, to a web of interactions that were set forth by the first cause when the universe came into being. Under this conception of the universe, all existents are necessarily linked to the first cause; the possibility of undetermined existence or *being-alone* is rendered unthinkable. To buttress his point about the inescapable fate of all existents to a predetermined existence, Attoe provides an example that he hopes will convince his skeptics about the factuality of predeterminism. Firstly, Attoe (ibid., 86) claims that human beings lack "the ability required to will a state of affairs or an outcome that is different from a necessary predetermined state of affairs" into existence—again, a subtle attempt at bringing God into the argument as the ultimate deterministic principle. As proof, he claims that for any possibility of free will/undetermined/*dislinked* events to be thinkable, then we must be able to imagine the possibility of, for example, willing that the equation  $1 + 1 = 4$ . And to do so would be incorrect. I agree with Attoe that we cannot will  $1 + 1$  to equal 4. Similarly, we cannot think free will into existence; that would be superfluous in a world whose nature points in the direction of free will.

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fit into the concept of evolution at all due to its limitations and predictability, but would become a directed movement towards some expected end.

However, Attoe's example, like that of other determinists before him,<sup>10</sup> is disanalogous and amounts to a category error. Firstly, numbers are abstract entities subject to manipulations of the human mind. Although, their existence is independent of the mind (Linnebo 2023; see Russell 1920).<sup>11</sup> To this point, Gottlob Frege (1960, xvii-xviii) rightly argues that a mind-dependent conceptualization of numbers taking into cognizance the characteristically fluctuating and indefinite nature of the human mind starkly contrasts with the definiteness and fixity of numbers as the concepts and objects of the science of mathematics. Consequently, Frege (ibid., xviii) warns that we must refrain from thinking that a proposition, for example, ceases to be true when we cease to think of it as being true in the same way the sun ceases to exist when we shut our eyes to the sun. Similarly, Bertrand Russell (1920, 29) explains that numbers are metaphysical entities whose existence we can never track down with certainty. That we use numbers in counting does not imply that we can use counting to define the mind-dependency of numbers. To suppose that the latter implies the former would be to make a category mistake; it would be an instance of treating the metaphysical concept of numbers as having a physical location. Thus, while it makes no sense to will that  $1 + 1 = 4$  simply because it appeals to us, that the human mind has the free will to – and can *intentionally* – think about  $1 + 1$  as equaling 4 cannot be disputed. Similarly, we cannot will that 1 tree + 1 cow should equal 1 river in nature, independent of the manipulations of the human mind.<sup>12</sup> Worthy of emphasis is the fact that our inability to will that  $1 + 1$  should equal 4 as a mind-independent fact does not deny the possibility of the thought in itself. Free will, then, cannot be associated with inanimate beings, like rocks, and abstract entities, like numbers, because we can only speculate about the existence of a will in these entities/objects. The only category of subjects that will fit into our conceptualization of free will would be animate—and conscious—beings, for example, the human person. And perhaps, some aspects of the material universe, like the flora and galaxies. Any attempt to include inanimate and abstract entities in the conceptualization of free will constitutes a category error.

The same category distinction can be applied to refute Agada's deterministic position. Agada argues for a deterministic universe characterized by imperfection and incompleteness. In this universe, possessed by the animating principle of *mood*, existents yearn for perfection—

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<sup>10</sup> See for example, B. Spinoza (2002); A. Agada (2015, 2022).

<sup>11</sup> As abstract concepts, the existence of numbers would still be logically possible without the grasp of the human mind. Humans can only, through intuition, *intentionally* employ the concept of numbers to define a class or collection of objects with similar characteristics.

<sup>12</sup> Compare the religious example where two—or more—human beings joined by the institution of marriage are said to be metaphysically one.

a goal that is ultimately futile by design.<sup>13</sup> A careful analysis of Agada's (2015; 2022) consolationist metaphysics shows that he commits a similar category error in his attribution of the category of perfection which is purely a human construct to the nature of the universe.<sup>14</sup> It is misguided to impose on the universe, categories invented by humans in their attempt to understand their environment. The view that the universe *yearns* for perfection is assumptive and stems from Judeo-Christian religious beliefs which conceive of human beings as imperfect entities existing in an imperfect universe.<sup>15</sup> This notion of imperfection is then imposed on a universe that is neutral to human suppositions and imaginations. Furthermore, I think, as a case for *adirectionality*, that the idea of animation embodied by the inchoate yearning of *mood* in Agada's deterministic universe is most indicative of freedom—and by extension, free will—and fits more into an incomplete universe which presupposes *adirectionality*. Thus, denying free will to animated existents is nothing but a category error.

### **The Evolutionary Universe, Adirectionality, and the Case Against Predeterministic Historicity**

I will first define what is meant by evolution and provide an analysis of what an evolving universe means for the idea of predeterministic historicity. The idea of evolution may suggest a complex process as the topic is characteristically broad. However, defining what the theory entails is not such a complex task. In its contemporary meaning within the field of biology, Roberta Millstein (2021) defines evolution as “the changes in the proportions of biological types in a population over time.” Similarly, the *Oxford Advanced Learner's Dictionary* defines evolution as “the gradual development of plants, animals, etc. over many years, from simple to more complicated forms” (Wehmeier et al. 2000, 398). These definitions are not exhaustive

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<sup>13</sup> It is important to note that while Agada accepts that humans have the power of choice, he however denies that this power is the same as freedom in a radical sense. Nonetheless, his denial of freedom and general conception of the universe from purely human-imposed categories subjects his metaphysics to the same category error.

<sup>14</sup> I should note here that Agada is a panpsychist who believes that inanimate things have an experiential field that connects them with human experiential field in a totality in which both animate and inanimate things-in-the-world are aspects of nature. If Agada's position is taken to be true, then perhaps, we can extend the element of free will to the experiential universe. However, I think this is another instance of anthropomorphically projecting subjective human categories into the natural world. Thus, it will amount to a category error to draw an analogy between the physically evolving inanimate parts of the universe—for example, stars, galaxies, and the flora—and the nature of free will that characterizes conscious existents like humans.

<sup>15</sup> Other determinists like Marcus Aurelius hold a different view on the idea of an imperfect universe. For Aurelius (2020, 15), “nothing is evil which is according to nature” because “every man lives the present time only” (130). Aurelius, like Attoe, upholds a materialistic version of determinism that makes the conception of an imperfect universe logically indefensible.

and only cover their simplest meaning. Douglas Futuyma (2005, 2) defines biological evolution broadly as “change in the properties of groups of organisms over the course of generations...it embraces everything from slight changes in the proportions of different forms of a gene within a population to the alterations that led from the earliest organism to dinosaurs, bees, oaks, and humans.” The common idea that runs through these definitions is the element of “change/alteration” or “variation” which is suggestive of a deviation. When we talk about a deviation—or mutation—in the context of an evolutionary universe, what we refer to is the simple or complex *unpredictable* processes by which a new state of affairs or entity comes into existence. Inherent in the notion of a deviation is the element of *adirectionality* and the lack of determined outcomes as a mutation in the context of a constantly evolving universe has been argued to be the product of a random process (see Futuyma 2010). One might be curious to know what this means for Attoe’s rigid materialistic PDH theory.

The determinist, engaging the evolutionary claim of random mutation and unpredictable outcomes might respond thus: Assuming evolution is true and not controverted, there is still no reason to believe in the impossibility of a first cause being behind it. They might further ask: What if biological evolution and disorder are part of a grand plan set in motion by the thing we call God? Here, for the determinists, all claims to free will by animate entities are illusory and the only thing they can do is accept their predetermined fate. Again, I think the idea that the influence of a past state of affairs on a future state of affairs implies predetermination is a mistaken assumption. We have no basis for thinking that past interactive relationships necessarily have a definitive effect on whatever comes into existence in the future. Assuming that there exists some first cause that sets in motion all events in the universe, the existence of such a being does not provide a basis for believing in the impossibility of a deviation in the course of events in the universe. Neither does it eliminate the possibility of an undetermined state of affairs coming into existence from the interaction of existing states of affairs. The latter supposes *adirectionality* which provides a basis for the existence of free will in conscious subjects.

Consider the thought; if it is the case that pre-humans on the surface of the earth during the time of, say, the dinosaurs, that nothing existed to predict the possibility of the arrival of the human species hundreds of millions of years later, then, *adirectionality* seems to constitute a more adequate characteristic of existents. Although, Attoe's predeterministic view might object that the substance of humans that came into existence millions of years later was supplied by materials from past states of affairs, which inextricably ties the future to the past.

However, if my intuition is correct, I think, the fact that the present is made up of some mutations and influences—or “interactions” as Attoe would call it—from the past does not imply that the present was, *ipso facto*, predetermined by the past. For example, in the long chain of human evolutionary history, nothing could have pointed us in the direction of the existence of Aribiah Attoe millions of years later during the time of the first animated organisms on Earth. That Attoe is walking the earth today out of a billion plus possibilities that it could have been a member of another species like the Tylosaurus, or velociraptor presupposes *adirectionality*.

Perhaps, the most important question that determinists have to answer is to tell us at what stage in the evolutionary process it was determined that humans might likely emerge in the future of the expanding universe and evolving species. While it might be argued, perhaps rightly so, that existing states of affairs interact with each other and exert some influence on newer states of affairs that come into being; the argument that all the properties of the new states of affairs are wholly determined by previous states of affairs is both assumptive and implausible. There is no proof of such an unfettered predetermination. The thinking which informs such ideas is a backward-facing metaphysics that is obsessed with providing a justification for the existence of God through a first cause. If we accept the thesis of an evolving and constantly expanding universe as true as has been established by the fact of an expanding physical universe, and that this evolution and expansion is characterized by *adirectionality*, then, we must as a matter of logical necessity, accept that predeterminism is mistaken. The corollary would be to accept that *adirectionality* implies freedom and responsibility for conscious and animate beings, for example, human entities. Whether Attoe accepts this implication for his rigid determinism will then be a matter of his free will.

In his book, Attoe argues that his predeterministic framework accounts for all existents in wholly materialistic terms. “Determinism,” he argues, “is not an ideal—it is a reality” (2022, 84). His rigid materialistic predeterministic historical view of existence also rejects a dualist conception of the universe and conceives of reality in purely materialistic terms. In the PDH theory, aspects of mind and matter constitute the same material reality and are predetermined by a relational interaction that traces back to the thing we call God. I have a few problems with this materialistic predeterministic framework. My first grouse with Attoe is that the idea that being in the world entails being in a necessary relationship characterized by interaction with other things-in-the-world, exposes Attoe’s materialistic obsession with finding a justification for why there is something, instead of nothing. Attoe’s PDH, and determinism generally, in its

quest to justify the idea of an eternally existing universe—or the idea that there must be some grand entity that subsists at the foundation of existence—because it is uncomfortable to accept the idea of a universe that came into existence from nothing which would suppose randomness, claims that there exist some deterministic umbilical cord that binds all existents together in the form of interactive relationality.

Most importantly, Attoe (ibid.) disputes the existence of a cosmic purpose in his deterministic framework. His reason for this rejection is that there is no being that offers cosmic purpose to human entities which would make a free will and undetermined actions necessary. There is a problem with this characterization of reality. Recall that Attoe, at the onset, established the existence of a first cause, the God of PDH responsible for all relational interactions in the world. One might ask: What is the purpose—or *telos*—of Attoe’s first cause setting in motion all interactive relationships in the world if the goal is that there is no goal? The idea that a predetermined state of affairs can emerge without some end in sight is contradictory to the deterministic framework that Attoe proposes. This is because predetermination entails predictability and predictability is a pointer to some expected future state of affairs. By arguing for predetermination and denying the existence of a determined end, Attoe, indirectly argues for a purposeless universe characterized by *adirectionality* and free will. Therefore, Attoe’s materialistic determinism fails in principle. Also, his materialistic conceptualization of subjective thought processes in an attempt to explain away the difficulties some determinists have faced in establishing a connection between the material and immaterial aspects of existence is logically implausible. The problem that a purely materialistic conception of subjective thought processes poses is that the element of “thought” as a category of existence is not an extended thing-in-the-world with the capacity to engage in interactive relationships. Thus, the possibility of “thought”, an immaterial category interacting with, say, animate things-in-the-world to bring about a new state of affairs becomes questionable.

Furthermore, although Attoe would argue that the question I am about to ask was already predetermined, I will proceed to ask it anyway. If I decide to go on a vacation in the Maldives, and at the eleventh hour, I decide to go to Seychelles instead, was my mind predetermined to prefer vacationing in Seychelles over the Maldives, since I can generate the same feeling of pleasure which can be derived from vacationing from either of these locations? Attoe might say, perhaps my reason for choosing Seychelles at the eleventh hour is motivated by some promises of more pleasures and better exposure to sunlight. To which I would respond, what happens when I am guaranteed an equal amount of exposure to the same conditions?

What becomes the deciding factor? Predetermination or free will? So long as the universe is constantly expanding and the existents within it constantly evolving, free will stare us in the face. For predeterminism to stand a chance against the free will of animate subjects of things-in-the-world, it must fulfill two conditions: The first condition it must fulfill is to deny the possibility of an evolving/expanding universe that is *adirectional* and suggestive of boundlessness. Secondly, it must deny the possibility that some events are not fundamentally necessary reactions to previous states of affairs, but rather, are a deviation whose direction cannot be predetermined. Until an adequate response is provided to these questions, I have the *free will* to question the claims of the determinists.

One possible objection that might be raised against my position might argue that the *adirectionality* or undetermined state of affairs is in itself just one of the possible consequences of a predetermined future state of affairs. In other words, so long as the undetermined future state of affairs was produced by an interaction of an existing or past state of affairs, the existence of a causal relationship between the two states of affairs, *ipso facto*, gives cause for predetermination. By way of response, I argue that the existence of a causal relationship—or *interactive* relationship—does not necessarily entail directionality or predictability. While thoroughgoing empiricists like Hume have rejected the idea of predetermination based on the lack of a necessary connection between event A and event B, here, I reject this objection based on the non-applicability of the category of predetermination to animate beings. Also, while *interactive* relationships might predetermine the future state of inanimate things-in-the-world, they cannot determine, without any exception, the dispositions and actions of animate things-in-the-world. This gives room for free will.

## **Conclusion**

In this paper, I argued against the rigid determinism of Attoe as being inconsistent with the idea of an evolving and constantly expanding universe. I based my refutation of predeterminism on the premise of *adirectionality* presupposed by an evolutionary universe. I motivated my position by establishing that the idea of a predetermined universe, which supposes the impossibility of free will, human agency, and undetermined actions and consequences, is an offshoot of a category error on the part of the determinists. Finally, I posed a challenge to the determinists that they must bypass if they want to stand a chance against the possibility of undetermined actions and the emergence of *adirectional* states of affairs from the

interactions of previous states of affairs. As I have earlier stated, until Attoe—and the determinists—deny the possibility of an evolving/expanding universe that is *adirectional* in nature and suggestive of boundlessness, their claims of the impossibility of a deviation in future states of affairs from existing states of affairs cannot be logically tenable. I hope Attoe—and the determinists—acknowledge their free will to respond to this challenge without the feeling of being predetermined to do so.

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