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DIVINE PROVIDENCE AND CHANCE IN THE WORLD

1. INTRODUCTION

The aim of the paper is to defend two theses: first, that the existence of chance events is compatible with God's existence, and second, that chance might be part of divine providence. In what follows, the conjunction of the two is called "the compatibility thesis"; as will be argued, the thesis is grounded in contemporary science and in the concept of an omnipotent God, the creator of the universe.

Contemporary science is the best source of knowledge available to us about the world we live in, and it tells us that chance events do happen in the world. Of course, contemporary scientific theories may prove false in the future by virtue of new data and findings, but a vague prospect of possible future refutation does not undermine these theories now. The most comprehensive and widely accepted theories of the universe, such as the theory of cosmic and biological evolution or quantum physics theories, are accepted not only because there is no sufficient evidence of their falsity, but because there is evidence that they are true.

Regarding God's existence, I assume that the thesis that God exists may be justified by the argument from the existence of the world. It holds that if God decided to give rise to this world, then the world exists. Thus, the world's existence counts as evidence in favor of the divine creation act, and of God, the Creator (McCann 2012, 12).² This reasoning is not a deductive inference, and given the

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The content of this paper is based on my book (2014) and my two later papers (2015, 2018).

² A similar argument, based on the principle of sufficient reason, is presented by Wojtysiak (2012); for a comprehensive and critical discussion of various arguments for God's existence, see Ziemiński (2011).

truth of the premise (that the world exists), it is possible that the conclusion is false, and there is no God. However, we often use inferences to the best explanation in our everyday cognitive activity and in science as well. Moreover, a sheer possibility that a conclusion is false does not imply that it is false indeed. Perhaps for some people such an argument for the existence of God would be too weak, but for the purpose of this paper it is strong enough. The aim of the paper is, let us remember, to demonstrate that the compatibility thesis is rational—if there is God, the existence of chance is not excluded, and vice versa.

Our discussion belongs to philosophical discourse; therefore, I will not resort to strictly scientific methods of empirical observation in order to verify the compatibility thesis. It is assumed that coherence constitutes the criterion of rationality of philosophical beliefs; if the two propositions "God exists" and "chance events happen in the world" can be regarded as coherent, then it is rational to hold the compatibility thesis.³

Throughout the paper, the term *chance* (or *chance event*) will refer to the following concepts:

- an ontological chance (C₁), or "pure" chance: an event lacking any detectable cause or causal explanation;
- a non-intentional chance (C₂): an event which is not intended or willed by any personal agent (a divine agent included);
- an epistemic chance (C₃): an event unpredictable for any mind operating and existing in time;
- a teleological chance (C₄): a pointless event, lacking any conceivable meaning or purpose;
- a probabilistic chance (C₅): an event whose probability is very small;⁴
- a causal chance (C_6): a coincidence of two or more causal chains.

The paper is organized as follows. Section two presents the historical background and doctrinal basis of the concept of divine providence. Section three discusses the argument from chance for the non-existence of God and its critique. Section four is concerned with possible models of God's action in the world. Finally, section five elaborates on the idea of God and His perfection—omnipotence, omniscience, benevolence, and sovereign will.

³ The coherentist conception of rationality is discussed in a comprehensive way in E. Łukasiewicz (2018).

⁴ There is a wide variety of probabilistic chance events which could be defined in different ways; for example, in David Hume's *Treatise on the Human Nature*, there is a concept of chance associated with the concept of probability: occurrence of feature A within a certain class of events is considered to be a chance (random) event if and only if it is one of several events excluding each other that are equally likely (e.g., throwing a six in a fair dice is a random event and its probability is 1/6).

2. ON THE DOCTRINE OF DIVINE PROVIDENCE

In the Western tradition, the concept of providence (Greek $\pi\rho\acute{o}voi\alpha$, meaning "foresight")⁵ was brought into discussion by Socrates and his student Xenophon in *Memorabilia*. According to Xenophon's report (1994, 23–24), in a dialogue with Aristodemus, Socrates argues that the world is designed in every aspect. In order to illustrate this universal design, Socrates refers to the structure of the human body, whose each part has been made to perform its functions and be in harmony with other organs composing the whole body. In the dialogue, it is also claimed that makers who have the ability and will to make intelligent living beings by purposeful design, not by chance $(\tau\acute{v}\chi\eta)$, deserve greater honour and admiration than those who make inanimate thoughtless beings, and who do that without an intelligent design. Xenophon reports the dialogue between Socrates and Aristodemus as follows (Socrates is the character who asks questions, but the answers provided by Aristodemus are deemed to express Socrates' own views):

"Who, in your opinion, is more deserving of admiration, makers of senseless and motionless images or makers of animals with sense and activity?" "Far more, by Zeus, makers of animals, if indeed these come to be not in some chance way, but by design." "As between things the purpose of whose existence is obscure and things whose existence is visibly beneficial, which do you decide to be works of chance and which of design?" "It is fitting that the things whose coming into being is beneficial are works of design." (Xenophon 1994, 22)

Later on, Stoics used the term $\pi\rho\delta voi\alpha$ to refer to the providence of gods. For example, Epictetus, one of the Stoics, writes:

Remember that you are an actor in play, which is as the playwright wants it to be: short if he wants it short, long if he wants it long. If he wants you to play a beggar, play even this part skillfully, or a cripple, or a public official, or a public citizen. What is yours is to play the assigned part well. But to choose it belongs to someone else. (Epictetus 1983, sec. 17, 16)

⁵ The term that was used in later theological debates was Latin *providentia*, based on the verb *provideo* meaning "foresee" or "care."

⁶ *Memorabillia* (Greek Ἀπομνημονεύματα), written by Xenophon, is a collection of Socratic dialogues.

⁷ See the book *Porządek i miłość. Koncepcja opatrzności Bożej w myśli starożytnej* by Tomasz Stępień (2019), based on contemporary studies of ancient teachings about providence, Socrates' views included.

Epictetus does not refer directly to a god, but one may infer from the content that he must have meant a divine being; "the playwright" about whom Epictetus speaks seems to be someone much greater and more powerful than any human.

When discussing the historical roots of the doctrine of providence, Thomas P. Flint, one of the leading contemporary defenders of its strong version, alludes to ancient artists and historians. He describes those ancient ideas of providence as follows:

This confidence in the control over human affairs of just and good supernatural powers was equally emphasized by many non-philosophical classical figures, most notably perhaps during the golden age of imperial Athens. Herodotus, in his Histories, repeatedly sees God as intervening in human affairs to punish unruly humans or to teach a moral lesson, and while he praises Athens as more responsible than any other Greek state for the defeat of the Persian invasion, he ascribes the primary responsibility for the Greek victory not to any human, but to God. The great Greek tragedians also give evidence of similar convictions. (Flint 1998, 20)⁸

The topic of divine providence became vitally important for Christian theologians who accepted the doctrine of *creatio ex nihilo*. Athenagoras of Athens notices that it would be a sheer contradiction to believe in creation and to reject providence. If God created everything, his providential care extends without mediation to every event that takes place. Also, Augustine emphasizes the relation between providence and creation by stating that control over things means creating them, and creation means control; hence, providence and creation is one and the same thing (Gilson 1932).

The Christian doctrine of providence is grounded in numerous biblical texts. To illustrate this, let us quote two passages from The Old Testament:

From heaven the Lord looks down and sees all mankind; from his dwelling place he watches all who live on earth – he who forms the hearts of all, who considers everything they do. (Psalms 33:13–15)

For you have done these things and those that went before and those that followed. You have designed the things that are now, and those that are to come. What you had in mind has happened; the things you decided on presented themselves and said, "Here we are!" For all your ways are prepared in advance, and your judgment is with foreknowledge. (Judith 9:5–6)

⁸ Flint refers here to Aeschylus, who writes: "From the gods who sit in grandeur/grace comes somehow violent" (1998, 20); Flint himself is a Molinist and believes that nothing is left to chance.

The above passages and many others provide the scriptural evidence for the Christian doctrine of divine providence formulated in the documents crucial for Roman Catholics, such as *The Catechism of the Catholic Church* (2000) based on the formulas of the First Vatican Council (1869–1870), and for Protestants, such as *The Westminster Confession* (1647). In *The Catechism of the Catholic Church*, we read:

God is infinitely greater than all his works: "You have set your glory above the heavens." Indeed, God's "greatness is unsearchable." But because he is the free and sovereign Creator, the first cause of all that exists, God is present to his creatures' inmost being: "In him we live and move and have our being." In the words of St. Augustine, God is "higher than my highest and more inward than my innermost self." God upholds and sustains creation. With creation, God does not abandon his creatures to themselves. He not only gives them being and existence, but also, and at every moment, upholds and sustains them in being, enables them to act and brings them to their final end. Recognizing this utter dependence with respect to the Creator is a source of wisdom and freedom, of joy and confidence: For you love all things that exist, and detest none of the things that you have made; for you would not have made anything if you had hated it. How would anything have endured, if you had not willed it? Or how would anything not called forth by you have been preserved? You spare all things, for they are yours, O Lord, you who love the living. Creation has its own goodness and proper perfection, but it did not spring forth complete from the hands of the Creator. The universe was created "in a state of journeying" (in statu viae) toward an ultimate perfection yet to be attained, to which God has destined it. We call "divine providence" the dispositions by which God guides his creation toward this perfection: By his providence God protects and governs all things which he has made, "reaching mightily from one end of the earth to the other, and ordering all things well." For "all are open and laid bare to his eyes," even those things which are yet to come into existence through the free action of creatures. (n. 300–2)

Similarly, in *The Westminster Confession*, we read:

God, the great Creator of all things, doth uphold, direct, dispose, and govern all creatures, actions, and things, from the greatest even to the least, by his most wise and holy providence, according to his infallible fore-knowledge and the free and immutable counsel of his own will, to the praise of the glory of his wisdom, power, justice, goodness, and mercy. Although in relation to the fore-knowledge and decree of God, the first cause, all things come to pass immutably and infallibly, yet by the same providence he ordereth them to fall out, according to the nature of second causes, either necessarily, freely, or contingently.

The most significant (from our perspective) theses encompassed in these documents are the following:

- a. There is a perfect divine plan and every creature is subject to sovereign and unchangeable divine will.
- b. God knows from eternity all, even the smallest, events which come to happen: "all are open and laid bare to his eyes," including those things which are yet to come into existence through the free action of creatures.
- c. The divine care and love are direct and detailed: "For you love all things that exist, and detest none of the things that you have made; for you would not have made anything if you had hated it. How would anything have endured, if you had not willed it?"

Hence, it is not surprising that the traditional notion of divine providence seems to be incompatible with chance events $(C_1, C_2, C_3, C_4, C_5)$.

However, changes in the scientific view of the world, the decreasing role of religion in Western societies and progressive secularization have endorsed the naturalistic conception of the origin of life and humans. Darwin's theory of evolution has become the dominant view on the nature of the world held by educated people, and one of the major tenets of the theory, next to natural selection, is the idea that evolution is founded on random genetic mutations within an organism's genetic code, i.e., the theory presumes chance events. In this context, one should mention a book by Jacques Monod, *Chance and Necessity* (1972), which contributed a lot to the spreading of the idea that chance events play a crucial role in the process of evolution. As stated in this book, chance is an "anti-thesis of divine providence"; when explaining the basic principle of biological evolution, Monod writes:

We say that these events are accidental, due to chance. And since they constitute the only possible source of modifications in the genetic text, itself the sole repository of the organism's hereditary structures, it necessarily follows that chance alone is the source of every innovation, of all creation in the biosphere. Pure chance, absolutely free and blind, at the very root of the stupendous edifice of evolution: this central concept of modern biology is no longer one among other possible or even conceivable hypotheses, it is today the sole conceivable hypothesis, the only one compatible with observed and tested fact. And nothing warrants the supposition (or the hope) that conceptions about this should, or ever could, be revised. (Monod 1972, 110)

Jacques Monod's views and other related concepts have provided premises for formulating an argument from chance for the non-existence of God, which is the topic of the next section. In what follows, I will argue that the existence of chance

 $^{^9}$ The traditional view on divine providence accepted C_6 as that kind of chance which is compatible with the divine plan; C_6 might be conceived of as a result of the action of secondary causes willed by God.

¹⁰ Monod's views have been developed in recent decades by Richard Dawkins (1986, 2006).

is not sufficient evidence against the existence of God, and next, I will try to show that chance events could be conceived of as part of divine providence.

3. THE ARGUMENT FROM CHANCE

To start with, let us present the atheistic argument from chance:¹¹

- (1) There exist chance events in the world.
- (2) An omniscient, omnipotent and morally perfect being would not permit the occurrence of any case of chance in the world.

Hence:

(3) God does not exist.

It is worth noting that the argument from chance has never been very popular, unlike the oft-discussed argument from evil. This can be explained by several reasons. Firstly, the concept of chance has been regarded as ambiguous; furthermore, in some cases, it is (or seems to be) harmless to theists (C₃, C₆). Next, for many centuries, there dominated the teleological and deterministic picture of the world (see above) with no room therein for events like C₁, C₂ or C₄. Also, it should be remembered that the modern concept of probability, indispensable in discussions of chance, was developed only in modern times, thanks to Bernoulli, David Hume and later scholars. The following consideration is intended to show why the argument from chance may be considered insufficient to reject the compatibility thesis. It will be demonstrated that in order to undermine this argument, premise (2) should be rejected, but premise (1) should be accepted as congruent with contemporary science. It will also be explained why the rejection of premise (2) does not imply or support atheism.

The crucial point is how we understand the term *chance* in the context of the argument from chance. This atheistic argument might be considered formally correct and convincing if chance is meant in the ontological or/and non-intentional sense

¹¹ This argument is closely related in its form to the evidential argument from evil put forward by William Rowe. In its basic form, the evidential argument from evil is constructed as follows: there exists pointless evil in the world; an omniscient, omnipotent and morally perfect being would not permit the occurrence of any case of pointless evil in the world; hence: God does not exist (Rowe 1990).

¹² Let us repeat: The compatibility thesis claims that if chance events exist, their existence is compatible with God's existence, and that chance might be part of divine providence.

 (C_1, C_2) .¹³ But chance understood as an epistemic or causal concept (i.e., as human ignorance or an intersection of causal chains; C_3 and C_6 , respectively) is compatible with theism.¹⁴ As will be argued below, also C_4 and C_5 are not incompatible with the thesis that God exists; to justify this claim, the theistic "argument from small probabilities" has to be considered, and its atheistic critique.

The theistic version of the argument from small probabilities has it that if a vitally important event (e.g., the emergence of life on Earth, or the evolution of the eye) had a very small probability (C_5), but it did happen nonetheless, then its cause was God's action, and hence, of course, God exists.

The atheist, however, might respond to this as follows: If an important event was very improbable and happened nonetheless, then it happened by chance, without any purpose and without any divine causal action (C₂, C₄). If it is in the nature of the universe that the emergence of life and sentient beings on Earth (or any other planet) was very improbable, then the probability that God created the universe is very small likewise. Why so? Because an omnipotent being would not have created the world in which the probability of the existence of human beings as the pinnacle of creation—which is one of the most important Christian doctrines—were extremely small.

Furthermore, the atheist can adopt an opposite perspective and argue for a natural explanation of the emergence of life and the appearance of human beings. The argument has it that the emergence of life was an event whose probability was not very small but actually rather high (this high probability will be explained below). Therefore, if such a probable event happens, it is naturally explicable, and the hypothesis of God's existence is explanatorily useless. The atheist can refer to the law of large numbers when explaining the course of cosmic and biological evolution. According to this law, chance events, which are conceived of as wholly purposeless and unpredictable, may lead, in long-term outcomes, to the emergence of order, life and the appearance of human beings (cf. the theory of "order emerging out of chaos"; Kauffman 1995).

Thus, if the atheist is able to explain naturally the happening of events which are usually attributed to God as their cause, then atheism gains an argumentative

 $^{^{13}}$ The problem of how to make divine providence compatible with C_1 will be discussed in sections 4 and 5 of this paper.

¹⁴ However, C₃ can also be a challenge for theism if God is claimed to exist in time, and at least some events, e.g., acts of free will, are not causally determined. For possible solutions to the problem of reconciling God's knowledge and human freedom, see Tkaczyk (2015).

¹⁵ The atheist, however, in order to be entirely successful in rejecting theism, must yet do something with the argument that the very existence of the world counts as evidence in favor of the divine creation act and God's existence (see section 1 of this paper).

advantage over theism, as Richard Dawkins claims (1996, 2006). Regardless whether the probability of the emergence of life is very small or very high, the occurrence of chance events can count as evidence against divine providence.

An assessment of atheistic responses to the theistic "argument from small probabilities" will be a bit easier if we consider the famous reasoning by John Arbuthnot (1710), who was trying to explain the uneven distribution of male and female births in London in the seventeenth century. Arbuthnot's analysis may be reconstructed as follows:

- (1) The probability of a male birth equals the probability of a female birth, and it is ½ in every individual case.
- (2) Every case of a male or female birth is independent of other births, as every result of tossing a coin is independent of other results of tossing the same coin.
- (3) It is possible that during one year some fluctuations will happen regarding the proportion of male and female births, for example, there may be more male births than female ones, or conversely, but in the long run the proportion will equal 50% males to 50% females.
- (4) The empirical data gathered by Arbuthnot for London (based on records from London's parishes) covering over 82 years, from 1629 to 1710, confirmed that every year there were more male than female births, and this fact was inconsistent with the *a priori* assumption that the number of births would be equal in both cases.¹⁶
- (5) The probability that 82 times in succession more boys than girls will be born is $(1/2)^{82}$, that is 0.2×10^{-24} , and this probability is very small indeed.

Arbuthnot inferred from this that such an improbable event could not have occurred by chance; thus, it was God who was responsible for what happened. Arbuthnot even suggested God's possible motive for causing that distribution of sex. The reason might be keeping a demographic equilibrium in the world; the number of boys should be larger than the number of girls since men die sooner than women (Bartholomew 1984, 38–40).

Contemporary theists (mainly the proponents of the argument from Intelligent Design) use, in principle, the same argumentative scheme as Arbuthnot did, but with reference to more complicated processes. For example, if we assume that the appearance of life is a process involving the emergence of 2000 enzymes from 20 amino acids, then, as Fred Hoyle and Chandra Wickramashinge have calculated, the probability of this event is $1/10^{40000}$. According to William Dembski, in turn, the probability of the emergence of the bacterial flagellum (*Escherichia coli*) is 1 in

¹⁶ It is not relevant for the presentation of the gist of Arbuthnot's reasoning whether the methodology of the empirical part of his research was flawless and whether the records from London parishes were exact and corresponded to the actual number of male and female births in those parishes.

10²⁶³ (the logic of Dembski's reasoning and his calculations are critically analyzed by Bartholomew in his book from 2008, pp. 101–11).

Another example of the application of the argument from very small probabilities is the fine-tuning hypothesis. It claims, firstly, that the probability of every cosmological constant, such as the speed of light, the constant of gravitational attraction, Planck's constant, and other constants suitable for the cosmic and biological evolution, is very small. Secondly, the probability of the whole set of fundamental constants of physics suitable for the emergence and existence of life, which is calculated by multiplying together all these small probabilities, is extremely small. If this is so, then the chance hypothesis should be rejected, and one should assume that the values of basic cosmological constants were chosen and determined by a super intelligent mind, i.e., the divine designer of the universe.

The criticism of this theistic argument consists in demonstrating that it is not clear enough whether the cosmic constants are independent of each other; it is possible, for example, that the values of some of them are determined by the values of others. In that case, the probability of all of them would be significantly higher. What plays a vital role here is our common intuition that all possible values of cosmological constants are equally probable. This intuition draws on the principle of insufficient reason: if there is no reason to prefer one quantity to others, then all of them should be treated as equally probable. However, the application of this principle to the cosmic and biological evolution is questionable, and the theistic argument from small probabilities may be based on a false assumption that all possibilities have the same probability. As has been experimentally confirmed, an initial chaos may generate order in which some outcomes are decidedly privileged to others. For example, given the same number and kind of chemical substances and the same conditions of experiment, each time the substances are mixed, there appear the same organic structures (Schoffeniels 1976). This result undermines the assumption of the independence of events and, consequently, the assumption of equally probable possibilities. If we reject both these assumptions, the probabilities in question will be completely different.

There is a fundamental conceptual mistake which has been made in the theistic argument from small probabilities; it depends on the way cosmic and organic entities are conceived of. They are viewed as combinatorial and purely mechanical objects, but most likely they are not objects of this kind. Let us illustrate this with a very simple mathematical case. If I ask a randomly chosen person to think of an example of an odd number, then the probability that I could guess that number seems to be extremely small, because the set of odd numbers is infinite. However, this is not true since the probability of my correct guessing of the number chosen

is much greater in fact. I can easily presume that the person will choose one of the "prototypical" numbers (i.e., from the set: 3, 5, 7, 9, 11, 13, 15). We are dealing here with the effect of a prototype in its psychological version. An analogical phenomenon can be observed in nature, and it is called "the attractor effect." The attractor makes certain possibilities more probable than the other possible ways of how things could be. In *Life's Solution: Inevitable Humans in a Lonely Universe*, Simon Conway Morris convincingly argues for the existence of convergence in the process of biological evolution. The convergence phenomenon makes the number of empirical possibilities on subsequent levels of evolution much smaller than it would follow from purely mathematical calculations (Conway Morris 2003).

Therefore, one can reject the *theistic* argument from small probabilities and the argument from intelligent design. However, it does not follow that God does not exist. The conclusion from the above consideration is weaker: it is possible that there are chance events in the world, as the modern science claims (e.g., on the quantum level, there is a radioactive decay of atoms (C₁, C₃, C₄, C₅); on the molecular level, there happen genetic mutations (C₃, C₄, C₅, C₆); and on the level of human history, there are human free choices and free actions; cf. Swinburne 1998), but, according to the law of large numbers, in nature we observe the emergence of complex, functionally well-organized structures from many unpredictable and purposeless events (C₃, C₄), which are not designed by any mind. These structures—emerging out of chaos—can be described by mathematical equations. Thus, a convincing explanation of why order in the nature exists does not require the existence of God who designed (or *had to* design), caused and keeps control of everything in the universe.

Paradoxically, the above criticism of the theistic argument from small probabilities does not undermine theism. A theist can accept premise (1) of the atheistic argument from chance but reject premise (2) of this argument. They can argue as follows: if order can emerge in the world from a large number of random events $(C_1, C_3, C_4, C_5, C_6)$, and such events really happen, and the universe is orderly structured, then the existence of chance might be in God's plan, or it might be willed by God. Therefore, it is solely C_2 which remains troublesome and should be removed from the set of chance events $(C_1, C_2, C_3, C_4, C_5, C_6)$. In sum, not only is the existence of chance consistent with the divine will, but it may be viewed as part of God's plan, or the content of the divine will and providence. The latter

 $^{^{17}}$ Genetic mutation can arise, e.g., as a result of hitting a developing embryo cell by a cosmic radiation quantum C_6 (Heller 2011, 177).

 $^{^{18}}$ C₂ should be cancelled from the list because, if our argument is correct, chance events are intended and willed by God.

claim is the essence of "the theology of chance," which view, according to many, grasps more adequately the idea of divine perfection:

The picture of a world in which the details take care of themselves, leaving the big issues to the Creator, is more appealing and more worthy of directing our worship. This, perhaps, is a case where we are too prone to see God in the image of man as someone who thinks control depends on overseeing every detail. (Bartholomew 2008, 153)

Notwithstanding the appeal of the above view, for many people there remains a pending question concerning C₁: providing God exists, how can it be that there are truly causeless events in the world, i.e., events which are not caused by God or other supernatural agents (if such agents exist), or by any natural factors, and for which there is no causal explanation? The next two sections will discuss some solutions to this problem that have been suggested; section four will concentrate on select models of God's action in the world, and section five will outline the idea of God which is congruent with the models of divine action discussed in section four.

4. MODELS OF DIVINE ACTION IN THE WORLD

In this section, three possible models of God's action in the world will be considered: (a) epistemic deism, (b) weak/closed probabilistic theism, and (c) strong/open probabilistic theism.¹⁹ Before I discuss these models in detail, it may be useful to characterize them in a more general way. Epistemic deism assumes indeterminism regarding the nature of the quantum world, allows for God's causal action at the quantum level, and limits God's causal action to that level. Weak/closed probabilistic theism assumes indeterminism regarding the nature of the quantum world, considers God's action at the quantum level unnecessary and rejects it, but it does not exclude divine actions other than causal actions at higher levels of the world. Strong/open probabilistic theism adopts the indeterministic

¹⁹ It should be remembered that the ongoing discussions about the possible ways of God's action in the world distinguish three types of God's actions: creative action (the act of creating the world), conservative action (maintaining or sustaining everything that has been created in existence), and special divine action (extraordinary action), that is divine causal action called "intervention," or in traditional terms: miracles. Divine conservation, or sustenance, is divine action which does not consist in any determination of what the conserved being is like and how it acts on its own part. A more detailed discussion of the doctrine of divine conservation of the world is beyond the scope of this paper, but I would like to stress the following point: conservation, as I understand it, is not a total determination of any creature; this type of divine action consists in *supporting* everything that exists in its existence.

view on the nature of the quantum world, and does not exclude any divine action (causal action included) at any level of the world.

4.1 Epistemic deism

The key idea of epistemic deism is that God acts causally (intervenes) in the world only at the quantum level of the physical world, which is epistemically inaccessible to our minds; therefore, divine action lies beyond our cognitive grasp.²⁰ According to epistemic deists, by operating at the quantum level, God acts in the physical universe without breaking or violating the indeterministic and probabilistic laws of nature. The assumption that God should not break the laws of nature which He created for the world is based on the idea of divine perfection: perfect God does not change the rules issued by Himself. The laws of the quantum world are, as contemporary science claims, probabilistic or indeterministic; therefore, there are "free gaps" not determined by these laws, and thus, there is room for divine action. In this way, the problem of an ontological/pure chance (C₁) can be accounted for. By acting within the constraints of the laws of nature, God can cause effects at the macroscopic level, and thus, He can control the destiny of individuals and groups of people. On this view, God can also perform miracles without breaking the laws of nature. However, we must keep in mind that a miracle should not be understood in a traditional way as a violation of the natural order.

At this moment, I would like to make two additional remarks concerning this view. The first is of a historical nature. It was Muslim theologians and philosophers who were probably the first to suggest that God can act upon atoms or at the atomic level of the physical world (Ormsby 2011, 440). According to this conception, every being is only a combination of atoms, and God created both atoms themselves and their combinations. Thus, every change or event in the physical world is a result of a recombination of atoms, and it is caused by divine actions. But God's operations on atoms are epistemically inaccessible to us since we cannot perceive these fundamental parts of the world. By acting at the atomic

²⁰ Epistemic deism is a conception proposed at the end of the twentieth century by some participants of the project called "Divine Action Project" (DAP). Nancey Murphy, Thomas Tracey and Robert Russell, the eminent members of DAP, opted for the idea of divine special action at the quantum level of the word. The group was active from 1988 to 2002; recently, Bradley Monton, a philosopher of physics, has revived the project (Monton 2014). The program is also supported by Alvin Plantinga (2011). However, the very idea of epistemic deism was put forth for the first time by a theologian and physicist William Pollard in his book *Chance and Providence: God's Action in the World Governed by Scientific Laws* (1958). The label *epistemic deism* was coined by Leland Harper (2013).

level, God has an entire and detailed control over the universe and each of its smallest parts. Significantly, there is no room here for any chance events in the world except for C_6 .

The second remark concerns some important differences among epistemic deists. Firstly, the question arises which interpretation of the quantum mechanics is to be preferred. Some epistemic deists opt for the "classical" indeterminist interpretation of the Copenhagen School. According to this account, the only room for any divine action in the quantum world is provided by quantum measurement (Bartholomew 1984, 2008); if there is no measurement, everything is strictly determined by Schrödinger's equation. Other epistemic deists (e.g., Alvin Plantinga) opt for the so-called GRW theory of the quantum world (named after its proponents: Giancarlo Ghirardi, Albert Rimini, and Tulio Weber). Closely related to the problem of the interpretation of the quantum mechanics is the number/frequency of divine interventions at the quantum level. By and large, there are two options here: either divine interventions are episodic or they are frequent. The first option—let us call it "episodic divine action" (EDA)—is possible if we adopt the Copenhagen interpretation of the quantum mechanics, and the second—continuous divine action (CDA)—is possible if we opt for the GRW theory or one of its modifications.

Assuming the GRW theory, epistemic deism allows us to explain such miracles as changing water into wine, parting the Red Sea or, most importantly, the resurrection of Jesus.²² Also, epistemic deism allows for removing C₁ from the world, and this seems to be its important advantage.

However, one could raise three crucial objections against epistemic deism.²³ The first concerns the frequency of divine interventions in the physical world. One could argue against the first option of divine actions at the quantum level

²¹ The GRW theory belongs, like the Copenhagen interpretation, to the collapse theories of the quantum world. But contrary to the Copenhagen interpretation, in GRW, collapses are not restricted to measurements. They occur spontaneously and at a regular rate. The GRW theory tries to meet the location problem, which cannot be solved by the Copenhagen interpretation. On the standard Copenhagen interpretation, objects (macroscopic objects included) do not have a location unless their location is being measured or detected. On the GRW interpretation, as Giancarlo Ghirardi states: "a macroscopic [system] undergoes a localization every 10⁻⁷ seconds" (2016). In other words, the GRW interpretation claims that during one second there happen ten million of quantum chance events (called "GRW hits"), and those "hits" can happen to every particle (Monton 2014, 170). Importantly, the GRW theory violates the principle of conservation of energy; Monton even suggests that it is not at all clear whether this is a true principle of physics (Monton 2014, 180).

²² See Plantinga (2011) and Monton (2014).

²³ Some of these objections have been suggested by Harper (2015). However, I do not think all of Harper's arguments are convincing enough; it is not clear, for example, why and how limitations of the human mind might diminish divine omnipotence.

(EDA) by saying that such actions are irrelevant because they are episodic and exert no influence on the history of the macroscopic world. Regarding the second option (CDA), based on the GRW theory, one could counter-argue that CDA takes place too often, and therefore, the divine action at the quantum level of the world leads to theological determinism, which is incompatible with human freedom and independence of the created universe from its Creator. The second objection is concerned with divine omnipotence; epistemic deism entails limitations of divine omnipotence because God can act in the world only at the quantum level, in a way permitted by quantum indeterminism of probabilistic laws, and God always has to act at the quantum level.²⁴ Finally, the third objection concerns the divine perfection and the foundations of faith and religious hope. If God always obeys His own rules (i.e., the laws of nature), He will not fulfill His promises, for example, the biblical promise of the new Earth and new Heaven. According to the widely accepted model of cosmology, the universe will be either too big or too small, and therefore, transformation of the nature will not be possible (another reason for that impossibility can be the second law of thermodynamics).

4.2 PROBABILISTIC THEISM

The main idea of probabilistic theism (in its weak and strong versions) is that chance events (C₁, C₃, C₄, C₅, C₆) are part of the divine plan, and they are willed by God for the world.²⁵ Furthermore, the existence of C₁ may entail C₃ because events which have no causal explanation are unpredictable also for God if He exists in time. Probabilistic theism is based, like epistemic deism, on contemporary science; its most important premises include indeterminism of the quantum world and contemporary knowledge concerning the cosmic and biological evolution.²⁶ Thus, if the world has its Creator, and it is indeterministic and develops by evolution, as contemporary science claims, then God allows chance events to happen in the world. What is more, such events may have a positive value; they need not be viewed as unwelcome consequences of certain adopted assumptions and constraints.

²⁴ On the GRW interpretation of the quantum world, it is possible, for example, that human bodies may instantaneously cease to exist; see Monton (2014, 182).

 $^{^{25}}$ The term *probabilistic theism* was coined by me for naming the view which combines the claim that a personal God exists with the possibility of various types of chance events (C_1 and C_4 included), whose occurrence makes such phenomena as the emergence of life and the existence of sentient and intelligent beings in the universe highly probable; cf. Łukasiewicz (2014).

²⁶ Vitally important evidence supporting quantum indeterminism is provided by Bell's famous inequality and the fact that Bell's theorem rules out local hidden variables (Maudlin 2005, 465).

One can think of several possible reasons why God created the universe in which evolutionary processes and indeterministic events occur. The most important of them might be the following: the freedom of human will (which would be impossible in the world completely determined by God or by natural mechanisms of the universe), the idea of solidarity (which involves universal interconnection by an evolutionary chain²⁷), and the idea of divine perfection. The latter was already mentioned by Augustine in the context of the gradual development of the created order of nature. According to Augustine, gradual creation could better fit the divine majesty and glory compared to creating everything in an instant (Haught 2007). To elaborate this view in a modern context: the world with indeterminism and evolutionary processes allows for random events and the emergence of an order out of chaos, which is something more valuable than creating everything directly and instantly. Creating a world in which order arises out of chaos is testimony to God's glory and, above all, God's creative power (Murray 2008). I would add that such creation may be considered more subtle. Also, an indeterministic and evolutionary world seems more interesting, richer in content, and more viable than a world in which everything fits together perfectly and is necessary for the coherence and functionality of the whole. In the world created by evolution, there existed, exist or may exist various random, strange, or even redundant, but interesting structures and creatures enriching its diversity ("blind routes of evolution").²⁸

Furthermore, some philosophers argue that the idea of human freedom understood in an incompatibilist (libertarian) sense can be defended only on the ground of quantum indeterminism (Hodgson 2011, 79–80). This is so because if brain events are founded in quantum states, which are essentially indeterministic, then there is no necessity at the quantum level which could be transmitted to the macroscopic level to which the human brain belongs. And then we have two basic options;²⁹ either there exists a non-physical and non-emergent mind (in traditional terminology called "immaterial soul"), which has the ability and room to act upon the brain, and through the brain it can control the human body and its environment, or there exists an emergent mind, as William Hasker argues (1999), which results from a complex development of the brain, but is relatively independent

²⁷ The idea of interconnectionism has it that evolutionary processes in the world, especially the biological evolution of species, make us connected by evolutionary bonds with other species and creatures that mediated in our emergence as the links in evolution. The awareness of our evolutionary origin and kinship with our predecessors connects us with all living nature, and through the bonds between the living nature and inanimate nature, it unites us with the entire universe (Collins 2011).

²⁸ The phenomenon of redundancy in the world and its beneficial role is discussed in E. Łukasiewicz (2008).

²⁹ There are more than just two options, but the others can be omitted for the sake of brevity.

from it and has the ability and room to act upon the brain, and through the brain it can control the body and its parts ("top-down" causality).³⁰

4.2.1 Weak/closed probabilistic theism

The main idea of the weak, or closed, version of probabilistic theism concerning possible divine action in the world is that God does not have to act at the quantum level for living organisms to appear in the universe, and He does not act at this level at all. The indeterminism of the physical level of the world combined with the evolutionary mechanisms, which bring into existence the creatures willed by God, allow Him *never to intervene* in the course of the natural history of the universe. The important premise of this view is that the probability of the emergence of life and human species in the process of evolution is very high, and there is no need for any special divine action at the quantum level or at the macroscopic (biological) level of the world. However, certain objections can be raised against this position.

If God does not act at the quantum level of the world, then either He does not act at all in any way (as classic deists claim), or He acts only at the spiritual level, for example by illuminating human minds. But He never acts by exerting any form of compulsion, and in particular, He does not act as a *cause* of any event (as process theists claim). However, given these two options, one might ask about the occurrence of miracles (which are possible, let us remember, within the framework of epistemic deism). In particular, can weak probabilistic theism explain miracles such as changing water into wine, parting the Red Sea or, most importantly, the resurrection of Jesus? It seems that in the weak probabilistic theism, miracles should be treated in the same way as in the non-interventionist view based on demythologizing of the Bible.³²

³⁰ As suggested below, a third option (plurality) is possible; i.e., there exist emergent and non-emergent minds in the world.

³¹ See section 3 of this paper.

³² The non-interventionist view, based on the idea of demythologising the Bible, has its roots in the Spinozan project. Accordingly, the Bible does not include true propositions which assert facts or obtaining states of affairs, but it is a set of moral stories and prescriptions, whose meaning is rather existential, not factual. Another important premise of non-interventionism is methodological naturalism, typical of modern science, whose main claim is that all events and facts have a natural explanation, which is or will be provided by the contemporary or future science. Rudolf Bultmann, one of the main proponents of this view, writes: "it is impossible to use electric light and the wireless and to avail ourselves of modern medical and surgical discoveries, and at the same time to believe in the New Testament world of spirits and miracles" (Bultmann 1984, 70).

Of course, one could take a middle position: God acts in a non-interventionist way (through and by the laws of nature), except in miracles when He directly causes a particular non-natural event to happen. But if it were the case, then the weak probabilistic theism would be reduced to epistemic deism or even to traditional interventionism.³³ It is a serious trouble for that version of probabilistic theism; either it has to be reduced to non-interventionism or to epistemic deism. Non-interventionism is tantamount to the rejection of the traditional Christianity because, if it were true, it would mean that Jesus was not truly raised from the dead. And if the weak probabilistic theism were reduced to epistemic deism, then it would be sensitive to the objections raised against the latter (limitation of divine omnipotence and impossibility of fulfillment of divine promises).

One might consider another strategy of avoiding the reduction of weak probabilistic theism to epistemic deism, namely, choosing a different model of causality. The "bottom-up" model of causality could be replaced by the "top-down" model; God acting at the highest, spiritual level of the world (i.e., acting upon human minds) indirectly *causes* effects at the lower levels of the world. To illustrate this option, let us suppose that God by acting upon the mind of a sick person makes it possible for her, whatever way it happens, to heal her sick body or organ indispensable for life (Bartholomew 1984). If we agree that it is a plausible model of a miraculous healing, the divine action at the level of human minds does not entail breaking any laws of nature. However, there remain other, more troublesome miracles to be explained, such as changing water into wine, parting the Red Sea and Jesus' raising from the dead. If we are not ready to accept the view that these miracles might be illusions or false beliefs caused by God in the minds of witnesses—this would surely contradict the divine perfection—then the only option that remains is epistemic deism: God causes directly such miracles and intervenes in the order of nature at the quantum level without breaking its laws.³⁴ But in this case, we encounter the aforesaid objections to epistemic deism.

³³ Traditional interventionism holds that God has intervened in the world *by breaking or suspending* the laws of nature, and by performing miracles (it is the Humean notion of a miracle). The very existence of miracles is based on the Biblical testimony (cf. the Lockean view on miracles). We believe that changing water into wine happened because the Bible tells us about this event, and the Bible states it because someone had witnessed that event and told someone else who wrote about it in the text of the Bible. This particular event was not deduced from any general concept of divine action or from any metaphysical system. The same refers to the resurrection of Jesus and other Biblical miracles.

³⁴ Monton argues convincingly that, if we assume the GRW theory of the quantum world, miracles such as parting the Red Sea or feeding five thousand people with a few loaves of bread and a few fish involve no violation of the laws of nature (Monton 2014, 175).

4.2.2 Strong/open probabilistic theism

In order to avoid the danger of reduction to epistemic deism, the weak version of probabilistic theism needs to modify its view on special divine action in the world. The positions discussed so far (except for traditional interventionism) assume that God should follow the laws of nature which He created for the world. But if we assume that the world is a *causally open* system, and a law of nature is a law which "works" or is applied in casually closed (or isolated) systems only, then we are allowed to claim that God can act at every level of the world in whatever way He chooses to act, for this or that reason, without breaking any laws of nature. The particular, God can cause miracles without violation of the laws of nature and without being limited in any way by these laws or by human epistemic capacity. God can act "beyond" the created order of nature.

Can this view be compatible with the doctrine of continuous divine sustenance of the whole world and each of its parts? Is it not the case, someone might ask, that the divine continuous sustaining of the world (conservation) is an action which makes the world *always* causally open for God, and this would make the notion of "laws of nature" groundless and redundant? This, however, need not be a problem; the divine sustenance embraces isolated systems, if God wants them to be isolated, and it embraces open systems, if God wants them to be open. There is no conflict between the divine continuous sustenance of everything and the concept of isolated natural systems of causes and effects.

The above-outlined view might be called "open (or strong) probabilistic theism"; I believe this position has the advantages of the weak version of probabilistic theism, but it is not in danger of being reduced to non-interventionism or epistemic deism.

Also, the strong/open version of probabilistic theism has one important advantage over the weak version; the advantage concerns the problem of the emergent mind. It is not easy to explain by natural evolution only how the human mind and its intellectual capacities could emerge from atoms, neurons and their webs (secondary causes); there is an essential difference between human and animal minds. If we assume, following the weak version of probabilistic theism, that the world known to us has developed by evolution, and human beings are direct and wholly physical products of evolutionary processes where chance plays a key role, then we face the inexplicable problem of the huge qualitative difference between

³⁵ See Plantinga (2011).

³⁶ This view of divine action "beyond" the order of nature without breaking its laws corresponds Thomas Aquinas' idea of miracles.

animal and human minds.³⁷ In strong/open probabilistic theism, the evolutionary roots of our bodily structure join us to the rest of the organic world and make us part thereof (interconnectionism); however, in the causally open world, our non-emergent minds (souls) can be directly created by God without breaking any laws of nature.³⁸ A very close relation of the mind and body makes humans integral beings that belong to two distinct realms: to the physical world of nature and to the real (but non-physical) spiritual world of the mind.

To conclude, all three models of God's action discussed above assume the indeterministic nature of quantum events. Epistemic deism claims that God works at the quantum level without breaking any of the laws of nature. Probabilistic theism in its weak version says that God does not act at the quantum level but can operate at the spiritual level, upon human minds; however, this action is not causal. God's action in the physical world is unnecessary because the order which is sufficient for the development and sustenance of life emerges "for free," out of a large number of chance events (C₁, C₃, C₄, C₅, C₆). In contrast, the strong/open version of probabilistic theism holds that God can act at all levels of reality; according to His will, He can cause directly any event. However, strong probabilistic theism also assumes, like its weaker version, that the nature has a considerable potential for its own independent development.³⁹

One additional remark is in order to understand better the essential difference between epistemic deism and strong/open probabilistic theism, given that both allow for divine causal action (divine intervention) at the quantum level of the world. According to epistemic deism, God can cause highly improbable events, but their probability, however small, is based on calculations subject to the laws of the quantum world. In strong/open probabilistic theism, God can cause an impossible event, whose probability is zero according to all scientific theories and knowledge accessible to us.

5. THE IDEA OF GOD

In this section, I would like to outline the conception of God which is, I believe, compatible with the above-discussed models of divine action in the world,

³⁷ See also Larmer (2015).

³⁸ The existence of non-emergent minds (human souls), created directly by God, is compatible with the existence of emergent minds (animal souls) resulting from natural evolutionary process.

³⁹ The crucial point of the open probabilistic theism is that the world is causally open in some situations, and it is only up to God's will "when," how and for whom the world (or some of its parts, levels or dimensions) is open.

divine providence and the nature of the world. The traditional model of divine providence, described in section 2 of the paper, will provide the context needed for further consideration. That traditional model, let us remember, excludes the occurrence of chance events and assumes God has an entire and detailed control over the world, every created being, every substance, each of its properties, every event, process and atom—in accordance with the evangelical formula that every hair on the head is numbered. A good illustration of that idea of providence is the view of a contemporary Christian theist, Hugh J. McCann, who defends the traditional concept of God and His providence. McCann writes:

Far from being the remote and disinterested observer of whom deists spoke, God is fully and intimately involved with all that exists, and his providential care extends without mediation to every event that takes place. Only such a position is consistent with Western theism's image of God as an all-loving father, who knows the fall of every sparrow, and whose concern for the well-being of his creature is complete and pervasive. Such a God must be epitome of the micromanager: no detail can be too small, nothing is so insignificant that it may be left to *chance* or delegated to any subordinate agency or intervening mechanism. All that is, must be a manifestation of his total, loving engagement, created and guided with infallible purpose and absolute sovereignty. (McCann 2012, 29)

Let us note that McCann's view presented above is exposed to the charge of occasionalism. According to occasionalists, God is the sole cause of everything; the doctrine claims that our experience of agency, freedom of action and the existence of the external world independent of us are only an illusion. To avoid this charge, McCann and other adherents of traditional theism accept the doctrine of concurrentism, according to which, God is the first cause of everything as the creator and sustainer of every being, whereas secondary causes operate at a different level than God does as the first cause. Thus, God (the first cause) cooperates with natural causes (secondary causes) leaving room for their own operations.

The doctrine of concurrentism might be illustrated by an analogy to the model of relationship between the novelist, the literary work and its characters. The existence and actions of the characters of a literary work are absolutely dependent on the imagination and actions of the novelist, but the author is never causally present in the activities of the characters he created in his work. Dostoyevsky, for example, could not influence Raskolnikov's behavior by appearing suddenly when Raskolnikov decided to kill the old woman. Dostoyevsky created Raskolnikov along with all his thoughts, decisions and actions, but it was Raskolnikov, invented by Dostoyevsky, who himself killed the old woman, not the author of *Crime and Punishment*. In this way, according to the defenders of concurrentism, there can

never be a conflict between the action of the first cause and the action of secondary causes, because both types of causes operate at different levels of reality.

I find this model of God's relation to the created world difficult to accept. First, it limits God's omnipotence, indicating where and how God's causality can work. Second, it gives the illusion of freedom and autonomy of the created beings, and third, it strengthens the atheistic argument from evil. Such a model of causality (the novelist–literary work) seems typical for classical theism, and especially for the Thomist metaphysics. In the model of divine action proposed in the present paper, God's causal action may operate at the same level of reality as secondary causes. Moreover, secondary causes can do more than the traditional theistic theories of causation claim, because they are not under God's total control. If the reasoning presented in this paper is correct, then it should be assumed that secondary causes have the power to bring about the existence of new species. However, a new species cannot come into being against the divine creative will.

The traditional conception of God—perfect, all-powerful, good, loving and sovereign—also includes attributes such as timelessness, simplicity and omniscience. In the traditional view on God's perfection, lack of divine detailed control over the smallest details of the universe would *limit* God's power, freedom and perfection. Furthermore, lack of detailed control, constraining God's sovereignty, would be a huge risk that God will not realize His perfect and detailed plan for the world and every created being.

I believe the traditional idea of God's perfection and providence is untenable in several respects; let me indicate three major reasons why that view needs rectifying. Firstly, the idea of God whose goodness is manifested in the total control over every being is unconvincing and incompatible with our intuition of goodness; loving parents allow their children to make independent and authentic choices, especially if the choices concern important issues.⁴⁰

Secondly, and perhaps most significantly, it should be stressed that there is nothing that could in any way limit God's omnipotent creative will. The belief that lack of God's total control over every detail and every single particle in the world may limit His sovereignty and freedom is an expression of anthropomorphism of God's omnipotence, and it is simply mistaken. ⁴¹ We try to understand God's na-

⁴⁰ This idea of divine perfection is defended by process theologians (Griffin 1981, Hartshorne 1984, Gutowski 2016); they claim that divine omnipotence understood as a complete and detailed control over every creature is metaphysically and *essentially* incompatible with divine love: the essence of love is not a detailed control over the beloved but compassion and sharing the same fate.

⁴¹ Significantly, lack of divine control need not be understood as lack of interest, love, knowledge and care for every detail (literally for "every sparrow").

ture through various analogies. Thus, it seems to us that without full control over everything, one cannot be sure about achieving the intended goals; and we apply the same reasoning to God. However, most likely, God's omnipotence radically transcends our concept of God's omnipotence.⁴² Thus, the idea of God's perfection entails that nothing can limit God's omnipotence and will. Neither lack of control over chance events, nor the eternal and immutable principles of morality, logic and mathematics, nor any metaphysical doctrine can do that because for God nothing is impossible.⁴³ According to this idea of God, it is not impossible for God to create a world in which random events occur (C₁, C₃, C₄, C₅, C₆), in which there is freedom of will, whose essence is a spontaneous choice from a set of available possibilities, and in which there are *real* causal actions of secondary causes.

One of the above claims needs to be clarified. If the divine creative will is the foundation of moral principles, someone might raise an objection that moral principles have an arbitrary nature since their source is God's will only. The arbitrary nature of morality, in turn, can imply a weakening of the human motivation to follow God's commandments. In answer to this important objection, I would say that it is possible that God revealed to us that killing innocent people is morally wrong, and due to this moral belief, we can recognize an act of killing as morally wrong, because it goes against God's will. The divine will is what it is, and further deliberation on our part whether the divine will might be different, and if it were different, whether it would be a good thing to kill other people, makes no sense. What is important is God's actual will.⁴⁴

Thirdly, lack of chance events in the world would diminish the degree of diversity in the world. God's generosity consists, among others, in the fact that God created the world, and it is a world with a multitude of types and tokens of various creatures, where diverse oppositions obtain, for example, chance vs. necessity, beauty vs. ugliness, or belief vs. disbelief in God.⁴⁵ It is possible that at a certain

⁴² I reject the concept of God's omnipotence which is defined by what is logically possible. God's omnipotence consists in divine acting in accordance with His will, for which there are literally no limits; cf. a similar idea of divine omnipotence defended by Stanisław Judycki (2010).

⁴³ However, the fact that mathematical and logical truths depend on divine creative will does not imply that "anything goes." On the contrary, if mathematics and logic depend on God's will, they are independent of the human mind and will. Hence, nothing can go against God's will except for products of human free imagination that are not subject to logical evaluation and divine control.

⁴⁴ This view on the foundations of moral principles is part of the theory of ethics called "divine command ethics," which assumes the omnipotence of divine creative will.

⁴⁵ To illustrate divine incomprehensible generosity, let us quote Charles Darwin: "Thus, from the war of nature, from famine and death, the most exalted object which we are capable of conceiving, namely, the production of the higher animals, directly follows. There is grandeur in this view of life, with its several powers, having been originally breathed into a few forms or into one; and

level of reality, there are events without any cause, unpredictable or purposeless, as quantum physics claims (C_1 , C_3 , C_4). At the macroscopic level of the world, in turn, there is causal determinism (necessity), and at the spiritual level, there is freedom of choice, unlimited even by God's omniscience, allowing human beings to choose either great good or incomprehensible evil. In the world created by God, there are thoughtless and lifeless elementary particles, waves and fields, as well as emergent animal minds and non-emergent human (and, possibly, angelic) minds.

Also, it should be stressed that God's creation of the world where chance events happen might be justified not only by the attractive idea of diversity of beings; chance events can be good for some other reasons. David J. Bartholomew, one of the leading proponents of the "theology of chance," writes:

- Some random processes have outcomes which can be predicted with near certainty.
 In particular, their aggregate properties often obey simple laws which make things effectively deterministic at that level. If it is only the aggregate behavior which matters, then the fact that there is a random substructure is of no significance.
- 2. There is a principle of fairness, or equality, which is satisfied when selection is made random.
- 3. A chance element in a system introduces a flexibility and resilience which makes it robust in the face of the uncertainties of the world.
- 4. Randomization often introduces the elements of surprise, novelty, flexibility and variety, which add immensely to the enjoyment of life and which develop a capacity to deal with the unexpected. (Bartholomew 2008, 174)

The idea of divine generosity allowing chance events to happen is not incompatible with divine omniscience. It is possible, as St. Anselm claimed, that God exists outside of time and He is the creator of time: what is past, what is present and what is coming for us (Rogers 2007, 2008, 2011; Łukasiewicz 2014). Thus, God can know everything, the smallest details included, not because everything was *directly* created by Him and is under His constant and total control. Since the scope of God's omniscience is limitless, there is no need for God to cause everything, including chance events; God does not have to be the creator of chance events in order to eternally know that they will happen.

In my view, this idea of God's perfection does not require an explanation of possible divine reasons for allowing the instances of horrendous evil to happen, nor do we need to attribute to God a direct responsibility for every evil whose

that, whilst this planet has gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being, evolved" (1954/1859, 490).

occurrence was eternally planned and caused by God in minute detail.⁴⁶ The content of the idea of God the Creator is that God created the world without any meticulous plan, because He did not need such a plan. The omnipotent creative divine will needs no plans and is not limited by any possibilities (possible worlds), nor any necessities like, for example, the necessity of creating the best of all possible worlds.⁴⁷

Thomas Flint argues that without strong providential control a God may seem a rather comical figure (1998, 13). However, I would respond to this that the idea of God whose "providential success" depends on minute and irrelevant details, for instance on the number of protons, neutrinos, or hairs on one's head, is far more unconvincing. God cannot be viewed as the true Lord of absolutely everything in the universe if His "strong" providence is hostage to such irrelevant, minute details.

6. CONCLUSION

In the above inquiry concerning the compatibility of divine providence and chance (the compatibility thesis), some conceivable options of how God can operate in the world containing random events have been considered. The starting point for the inquiry was the acceptance of certain tenets of modern physical and biological theories, whose status in the scientific world is unquestioned, such as the theory of cosmic and biological evolution and the quantum theory of the microscopic world. It is not assumed that these theories of modern science must be the only plausible, complete and final descriptions of the world, but it is assumed that they may be correct, and the world works as described in modern physics, biology and cosmology. Also, it is assumed that our intuitions, experiences and insights regarding the nature of the world, moral and aesthetic values may be accurate; these insights include the idea of God's perfection. It may well be that this idea does not adequately reflect the true nature of God, but in a philosophical inquiry like the foregoing, we are entitled to analyze various possibilities.

⁴⁶ By saying this, I do not aim to discredit free-will defense, soul-making theodicy, theodicy of divine non-intervention policy or evil-defeating theodicy, but I would like to emphasize the greatness of the divine incomprehensible generosity.

⁴⁷ All these possibilities and necessities discussed by metaphysicians (Molinists, Leibniz, modal realists and others) are like the locked doors that St. John mentions in his Gospel: "Now a week later his disciples were again inside and Thomas was with them. Jesus came, although *the doors were locked*, and stood in their midst and said, 'Peace be with you'. Then he said to Thomas, 'Put your finger here and see my hands, and bring your hand and put it into my side, and do not be unbelieving, but believe'. Thomas answered and said to him, 'My Lord and my God!'" (John 20:26–27), emphasis mine. God's power does what it wants; for God no "doors" are *locked*.

One of these possibilities is the conception of God as an unlimited creative power for which nothing is impossible. I believe this conception is coherent with the above-outlined general view on the metaphysics of the world and God's action therein. The view on possible divine action in the world which I suggested in the paper and called "open probabilistic theism" is a form of interventionist theory of divine action, compatible with divine timelessness, simplicity, unlimited omnipotence, omniscience and unlimited divine freedom; such a view might be regarded as a form of theological voluntarism.

I believe the set of ideas proposed in the paper concerning the metaphysics of God is not reducible to any of the traditional views on divine nature. It is not the classical theism since authentic chance events are allowed to happen (C₁, C₄). Nor is it an open theism because God is timeless and knows from eternity the smallest details about the world. It also differs significantly from the Molinist view; God is not limited by any eternal counterfactuals of freedom since the divine creative will is not constrained by anything. Moreover, the conception of God and His providence outlined in the paper is congruent, to a large extent at least, with the teachings of the Scripture and the Christian doctrine. Let us repeat these key concepts of Christianity concerning God's relation to the world:

- (a) There is a perfect divine plan and every creature is subject to sovereign and unchangeable divine will.
- (b) God knows from eternity all events, even the smallest ones, which come to happen; for "all are open and laid bare to his eyes," even those things which are yet to come into existence through the free action of creatures.
- (c) Divine care and love are direct and detailed: "For you love all things that exist, and detest none of the things that you have made; for you would not have made anything if you had hated it. How would anything have endured, if you had not willed it?" (*Catechism of the Catholic Church*, 2nd ed., 301).

The conception proposed in the paper is congruent with (a) because it is claimed that nothing could happen or exist against God's will; this also applies to chance events which are part of His plan. It is also coherent with (b) as God's omniscience can be realized through a timeless contemplation of everything, if God wants it to be realized that way. With regard to (c), God's direct and detailed care about the world consists in the fact that nothing is beyond the reach of God's omniscience, which is identical with the divine goodness manifesting itself in the generosity of His creative will. That generosity results in the created world with a multitude of beings, events and creatures. This pluralistic world includes irrelevant chance events of different kinds, but also events which are planned, good and beautiful, both natural and supernatural; for instance, the incarnation and resurrection of

Jesus. From the human viewpoint, perhaps the most important is the hope that there is nothing that could in any way, even to a minimal degree, threaten God's promised triumph over all evil, suffering and misery of this world. This hope is based on the words from The Book of Revelation:

Then I saw a new heaven and a new earth. The former heaven and the former earth had passed away, and the sea was no more. I also saw the holy city, a new Jerusalem, coming down out of heaven from God, prepared as a bride adorned for her husband. I heard a loud voice from the throne saying, "Behold, God's dwelling is with the human race. He will dwell with them and they will be his people and God himself will always be with them [as their God]. He will wipe every tear form their eyes, and there shall be no more death or mourning, wailing or pain, [for] the old order has passed away." (Rev. 21:1–4)

How could all this be possible if God's all-powerful creative will were limited by anything?

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DIVINE PROVIDENCE AND CHANCE IN THE WORLD

Summary

The aim of the paper is to defend two theses: first, that the existence of chance events is compatible with God's existence, and second, that chance might be part of divine providence. In what follows, the conjunction of the two is called "the compatibility thesis"; as will be argued, the thesis is grounded in contemporary science and in the concept of an omnipotent God, the creator of the universe. The paper is organized as follows. Section two presents the historical background and doctrinal basis of the concept of divine providence. Section three discusses the argument from chance for the non-existence of God and its critique. Section four is concerned with possible models of God's action in the world where chance events occur. Finally, section five elaborates on the idea of God and His perfection—omnipotence, omniscience, benevolence, and sovereign will.

Keywords: God; divine providence; creation; chance; omnipotence.

OPATRZNOŚĆ BOŻA A PRZYPADEK W ŚWIECIE

Streszczenie

Celem artykułu jest obrona dwóch tez: pierwszej, że istnienie zdarzeń przypadkowych jest do pogodzenia z istnieniem Boga oraz tezy drugiej, że przypadek może być częścią Bożej opatrzności. Koniunkcja obu powyższych tez nazwana jest w artykule tezą kompatybilizmu. Argumentacja w obronie kompatybilizmu opiera się na danych współczesnej nauki oraz na idei wszechmocnego Boga Stwórcy. Porządek argumentacji w artykule jest następujący. W części drugiej przedstawiony jest historyczny kontekst oraz podstawy doktrynalne pojęcia opatrzności. W części trzeciej omówiony jest argument za nieistnieniem Boga oparty na założeniu głoszącym istnienie zdarzeń przypadkowych w świecie oraz przedstawiona jest krytyka tego argumentu. W części czwartej prezentowane są możliwe modele działania Boga w świecie, w ramach których przyjmuje się istnienie zdarzeń przypadkowych. W części piątej i ostatniej rozważana jest idea Bożej doskonałości obejmującej takie atrybuty jak wszechmoc, wszechwiedzę, doskonałą dobroć i suwerenną wolę Bożą.

Słowa kluczowe: Bóg; opatrzność Boża; stworzenie; przypadek; wszechmoc.