Biological Determinism and the Christian Perspective on Free Will

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FOR CITATION: *Boudníková O.* Biological Determinism and the Christian Perspective on Free Will // Bogoslov. 2025. № 1 (5). P. 8–21. DOI: 10.62847/BOGOSLOV.2025.74.91.001

ABSTRACT This essay presents an interdisciplinary exploration of the problem of free will through the lenses of the philosophy of mind, empirical sciences, and Christian theology. The author examines the concepts of freedom and determinism, drawing on the ideas of Robert Kane, Robert Sapolsky, Sam Harris, Jacques Monod, Jakob von Uexküll, and Frans de Waal, comparing them with a Christian perspective rooted in the works of St. Maximus the Confessor and expanded by 20th-century theologians such as Hans Urs von Balthasar, Karl Barth, John Meyendorff, Georges Florovsky, and John Zizioulas. The paper proposes a synthetic Christian view of free will as an ontological property of being with an eschatological dimension, defined by the interplay of natural and gnomic will. Particular emphasis is placed on contemporary discoveries in neuroscience and biology, which contribute to the theological understanding of free will.

KEYWORDS: Free Will, Determinism, Christian Theology, Philosophy of Mind, Neuroscience, Philosophy of biology

THE EVERGREEN PROBLEM

The problem of free will is one of the foundational issues in philosophy inspiring generations of thinkers over thousands of years. With the advancements in biology and cognitive sciences, and more recently, neuroscience, we have gained access to natural mysteries that past philosophers could not have even imagined.

This essay aims to present the conflict between the understanding of free will as it is revealed in rapidly evolving theories of the philosophy of mind and empirical sciences, and theological approaches to the problem. Additionally, it proposes a direction that might contribute to the dialogue between theology and modern science. Some ideas presented here may also find application in pastoral care, particularly in interactions with families of individuals suffering from brain disorders that impair self-awareness and free will.

Contemporary philosophy of mind has formulated a conceptual space for addressing the problem of free will, deeply rooted in historical tradition and achievements in empirical sciences. This framework is shaped by two main axes[1]: determinism and free will. In addition, it incorporates questions of freedom of action and moral responsibility. The central question, however, remains whether determinism exists. Many philosophers working in this area adopt a position often referred to as "scientific agnosticism", asserting that we do not know if our actions are entirely determined, nor whether we will ever be able to ascertain this[2]. Nonetheless, theories have been developed that propose concepts of free will (or the absence thereof) under any resolution of this dilemma.

Christian theological thought offers solutions grounded in two main traditions. The first, associated with Protestant predestination, asserts strict determinism, and denies free will. The second, rooted in classical Thomism and Cartesian ethics, proposes a dualism between the physical body, governed by natural laws, and the free, immaterial soul which directs the body and exists in perpetual conflict with it. Modern philosophy is cautious about these

1 *Fischer J. M. e.a.* Four views on free will. Blackwell Publishing, 2007.
2 Ibid.

frameworks, as they rely on premises that cannot be verified or supported by daily empirical experience.

A deeper look into the theological tradition reveals a third approach. On one hand, this perspective is grounded in the universal Christian philosophical heritage. On the other hand, it incorporates an intuition that resonates with human experience, alongside intellectual flexibility in understanding determinism through the antinomian lens which constitutes one of the signature characteristic of the Christian thought.

This approach first appears in the works of St. Maximus the Confessor in the 6th-7th centuries, later emerges in the theological thought through the centuries, and resurfaces in the writings of 20th-century theologians such as Hans Urs von Balthasar, Karl Barth, John Meyendorff, Georges Florovsky, and John Zizioulas. This approach also aligns with modern bio-philosophy, as seen in the theories of Jakob von Uexküll and Jacques Monod, as well as neuroscience, genetics, and evolutionary biology, which explore the roots of biological determinism not only in human experience but also in the animal world.

This essay examines the theological approach to determinism, particularly biological determinism, and the Christian perspective on free will, as reflected in contemporary theological thought.

BIOLOGICAL UNPREDICTABILITY AND THE "RANGE OF POSSIBILITIES"

"Causal determinism", as defined in contemporary philosophy, suggests that in a determined world, only one possible scenario can unfold at any given moment, even if it seems like a choice exists. On the opposite end lies indeterminism – the idea that all events are random, even if we perceive ourselves as making choices[3]. Indeterminists often invoke concepts such as complex systems, emergence, quantum effects, and chaos theory, yet the overarching principle remains the same: the world is governed by blind chance. This view threatens the concept of free will even further, as random events

[3] Ibid.

cannot be influenced. Both extremes contradict human intuition, clash with daily experience, and remain highly debated.

Positioned between these extremes is the concept of indeterminism proposed by the contemporary philosopher Robert Kane[4]. He posits that humans do have choice, albeit limited, and describes indeterminism as a kind of "noise" generated by alternative possibilities in the brain. Navigating this noise, making difficult decisions, and taking responsibility for them allows individuals to shape their identity – a process Kane calls a "self-forming act". However, while this perspective diverges from traditional determinism, one may question whether it truly qualifies as indeterminism.

Modern empirical sciences have accumulated substantial evidence showing that the processes occurring in our minds are determined by our experiences, the books we have read, our genetics, the biochemical characteristics of our brains, evolutionary heritage, upbringing, environment, culture, and multiplied other events that happened even before our birth. This causal chain recedes into the darkness of the past, beyond our ability to fully trace it. Renowned biologist Robert Sapolsky simplifies the debate on determinism with the statement: let's find at least a single neuron that fires completely at random, without a chain of causality, and then we can talk about free will[5].

Consequently, the range of alternative possibilities in the brain is challenging to classify as true indeterminism since each possibility has its own unknown cause. These possibilities are processed in regions of the brain responsible for reflection, where they are weighed and lead to a final decision. One might argue that reflection itself is an expression of free will. However, with the advent of functional magnetic resonance imaging (fMRI), which tracks brain activity in dynamic, numerous studies have demonstrated that decisions and actions are initiated several seconds before individuals consciously recognize their choice.

As philosopher Sam Harris writes, the causal chain always leads into the unknown, compelling us to make both initial and final

4 Ibid.

5 *Sapolsky R. M.* Determined: A science of life without free will. Penguin Press, 2023.

steps based on reasons that are inaccessible to us[6]. Using Sapolsky's terminology, it would be more appropriate to describe this process as unpredictability rather than indeterminism[7]. In essence, we are mere witnesses to the causality unfolding in our minds, seemingly without the ability to influence it. This seemingly grim conclusion ironically aligns prominent atheists such as Sapolsky, Harris, and Derek Pereboom with a core aspect of Christian compassion: if humans lack agency over their will, even a serial killer might deserve pity rather than condemnation.

Another challenge to our understanding of humanity comes from evolutionary biology. Similar to humans, the brains of higher primates, such as chimpanzees, activate multiple evolutionary programs simultaneously in complex moral situations, leading to competition among these programs. The most optimal program at the moment prevails.

Research shows that in chimpanzees, our closest genetic relatives, the winning program is not always directly linked to survival. Primates exhibit an understanding of family and community, altruism, compassion for others, and a sense of justice. They recognize when they harm their peers, feel shame, and display a rudimentary form of remorse[8]. As Catholic theologian Hans Urs von Balthasar notes, nature, as it ascends to humanity from pre-human depths, inevitably brings with it the reality of love, embedded in the very foundation of living existence – a reality that no deconstructive theories of pure will to power or happiness can overcome[9].

In the 20th century, altruism in the natural world was often viewed through the lens of delayed reciprocity: a variation of "tit-for-tat" principle where animals seem to follow a biological program calculating how much benefit to offer others to ensure future help in return[10]. This concept, known as utilitarianism, remains influential in philosophy and is referenced by figures such as Sam Harris[11].

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6 *Harris S.* Free will. Free Press, 2012.

7 *Sapolsky.* Op. cit.

8 *Waal F., de.* The Bonobo and the Atheist: In Search of Humanism Among the Primates. W. W. Norton & Company, 2013.

9 *Balthasar H. U., von.* Love alone is credible. Ignatius Press, 2004.

10 *Wright R.* The Moral Animal. Why We Are and Way We Are. The New Science of Evolutionary Psychology. New York: Knopf Doubleday Publishing Group, 2010.

11 *Harris.* Op. cit.

However, primatologist and evolutionary biologist Frans de Waal argues that decades of research allow us to dismiss utilitarianism as a misconception. Higher primates demonstrate profound moral instincts oriented toward empathy, care, and kindness to others[12]. They even show rudimentary forms of religious feelings, such as awe and wonder when encountering grand natural phenomena like a magnificent thunderstorm[13]. This profoundly Christian notion inspires hope: "and God saw everything that He had made, and behold, it was very good" (Gen. 1:31).

Human beings possess a far more complex combination of innate and acquired biological, behavioral, cultural, and social programs than chimpanzees. However, these findings provoke deeper reflection on where the biological "range of possibilities" ends and free will begins. We have grown accustomed to understanding the body as operating within a set circle of biological programs, recognizing our emotions as the result of neurochemical processes that can control us, and realizing that significant decisions are made before we become consciously aware of them.

The latest discoveries in evolutionary biology challenge our most treasured moments – love, friendship, compassion, empathy, and mutual support. If these, too, are deeply ingrained evolutionary programs activated without our participation, then where does human will reside, and how free is it truly?

FREE WILL IN ST. MAXIMUS THE CONFESSOR

St. Maximus the Confessor occupies a unique position in the history of Christian thought, standing at the intersection of Constantinople, Alexandria, and Rome; between patristics and Byzantine-Carolingian medievalism; and between Eastern and Western theology and spirituality. As Hans Urs von Balthasar notes, Maximus' theology operates within the dynamic tension of East and West, with synthesis at the core of his approach[14].

[12] *Waal.* Op. cit.
[13] Ibid.
[14] *Balthasar H. U., von.* Cosmic liturgy: The universe according to Maximus the Confessor / Transl.: B. E. Daley. Ignatius Press, 2003.

A foundational concept in Maximus' philosophy is the triad of genesis-kinēsis-stasis. Every created being receives an impulse toward life (genesis), then enters an independent historical phase defined by motion (kinēsis), and ultimately strives for rest in the Divine (stasis)[15]. As Balthasar explains, through natural movement, being draws closer to its ideal. Yet this ideal eludes creation, becoming a transcendent goal that is attainable only through Grace[16].

In the genesis stage, each creation is endowed with its unique purpose or meaning of existence (*logos*). The task of every creation in the subsequent stage is to realize this purpose in freedom. As Orthodox theologian Fr. John Meyendorff observes, Maximus' framework affirms the reality, freedom, dynamism, and independence of divine creation[17]. By assuming the freedom of created nature, Maximus distinguishes between the meaning (*logos*) and the mode of existence (*tropos*). The created world exists in alignment with the divine plan, but its mode of being may deviate from this Higher Intent.

Every movement possesses freedom. Thus, natural will is inherent not only in humans and living beings but also in inanimate objects – it is grounded in the ontology of being itself. As Meyendorff writes, an example of such natural will can be found in gravity[18]. Here, we return to the idea of determinism combined with unpredictability – freedom constrained by a set of "alternative possibilities" available to a specific subject. The more complex the subject, the greater its freedom.

This understanding of created nature builds upon and transcends the dualism inherent in Eastern thought, as reflected in Scripture. For instance, the Apostle Paul proclaims that "there is now no condemnation for those who are in Christ Jesus, who do not walk according to the flesh but according to the Spirit, for the law of the Spirit of life in Christ Jesus has set you free from the law of sin and death" (Rom. 8: 1–2) – for "flesh" here seemingly to reflect our reliance on natural biological determinism. Further, Paul asserts that "creation itself will be set free from its bondage to decay into

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15 *Meyendorff J.* Introduction to Patristic Theology. St. Vladimir's Seminary Press, 1983.

16 *Balthasar.* Cosmic liturgy.

17 *Meyendorff.* Op. cit.

18 Ibid.

the glorious freedom of the children of God" (Rom. 8: 21). Thus, Paul juxtaposes the freedom of self-expression in God with natural determinism, distinguishing the realm of the Spirit from the realm of the world, envisioning freedom as an eschatological hope for the liberation of being from the temporal bondage of created existence.

St. Maximus moves beyond this dichotomy, suggesting that freedom arises from being itself as an ontological property. According to Maximus as well, freedom is constrained by a dual necessity: the necessity to act in accordance with the determinism of one's being and, simultaneously, the *obligation* to act without full discernment – essentially, to choose the way partially in the dark, "for now we see only a reflection as in a mirror" (1 Cor. 13: 12).

As Orthodox theologian Fr. Georges Florovsky also explains, created freedom encompasses not only the *possibility* but also the *necessity* of choice, along with self-determined resolve and decisiveness[19]. Protestant theologian Karl Barth also observes that the freedom of creation is both established and constrained by the orderliness of creation and the existence of other beings[20]. Greek theologian Bishop John Zizioulas likewise recognizes freedom as an ontological property of being, highlighting a dual necessity. The first necessity is natural instinct, which is beyond the control of freedom, and the second is separateness – the drive to differentiate oneself from others and affirm unique identity[21].

The idea of natural freedom and unpredictable, partially blind choices within a "range of possibilities" aligns with modern bio-philosophy and theoretical biology. In "Chance and Necessity", Jacques Monod notes that what appears to be randomness in the orientation of macromolecules, leading to the formation of connections and, ultimately, primary living structures, is governed by the logic of "optimal choice"[22].

Jakob von Uexküll, the philosopher who developed the concept of *umwelt*, shows how a living being exercises its freedom within

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[19] *Флоровский Г., прот.* Догмат и история. Москва: Издательство Свято-Владимирского братства, 1998.

[20] *Barth K.* Dogmatics in outline / Transl.: G. T. Thomson. Harper & Row, 1949.

[21] *Zizioulas J. D.* Being as communion: Studies in personhood and the church. St. Vladimir's Seminary Press, 1985.

[22] *Monod J.* Chance and Necessity: An Essay on the Natural Philosophy of Modern Biology. New York: Knopf Doubleday Publishing Group, 1971.

a “range of possibilities” shaped by experience through trial and error with its environment[23]. One of the modern evolutionary biology approaches also suggests that mutations occur blindly within a “range of possibilities”, with organisms testing their advantages through environmental interaction. Nature thus realizes its freedom through a dual necessity: determinism and the obligation to choose, as its purpose is to act and manifest. Likewise, for St. Maximus, as for St. Augustine, freedom of will is more a matter of necessity than independence.

CHRISTIAN UNDERSTANDING OF FREE WILL

However, humanity is a unique, synthetic entity. According to St. Maximus the Confessor, as a part of the created world, humans are intertwined with the cosmic web of existence, influenced by countless threads, forces, and destinies. They are subject to various forms of determinism, which makes them essentially passive. In this respect, they do not surpass the rest of the natural world.

To distinguish the natural will inherent in all creation from human free will, Maximus introduces his famous division between natural will and gnomic will. Natural will is an ontological property of all being. Gnomic will, on the other hand, involves intention, deliberation, and selectivity, and it belongs exclusively to humans[24]. It is gnomic will that causes humans to struggle and waver in their choices between good and evil, often leading to torment over whether the choices made were correct.

The synthetic nature of humanity, according to Maximus, means that humans cannot search for themselves without simultaneously striving toward the Other, which forms the foundation of their existence. As Fr. Alexander Schmemann wrote in his journals, the uniqueness of the Christian approach lies precisely in the “immanence of the transcendent” and the “transcendence of the immanent”[25]. Christ is transcendent to the world, yet at the

[23] *Schroer S. A.* Jakob von Uexküll: The concept of umwelt and its potentials for an anthropology beyond the human // Ethnos. 2019. N 1(86).

[24] *Meyendorff.* Op. cit.

[25] *Шмеман А., протопр.* Дневники, 1973–1983. Москва: Русский путь, 2005.

same time, He resides within it, transforming the world into a path toward transcendence. Similarly, Maximus explains that humans are drawn to their *logos*, the divine plan that called them into being, while simultaneously striving for stasis, or rest, in divine grace.

The essence of gnomic will lies in its role to consciously strive toward the Other. For this reason, in the ontological sense, freedom is never a choice between good and evil. This idea is supported by Meyendorff, Balthasar, and Barth. True personal freedom, according to Maximus, is realized in self-determination toward goodness, in obedience to an innate drive toward God. The freer creation becomes for God, the more God makes it free within itself and in its relationship to Him.

As Balthasar explains, this corresponds to God's absolute being and essence: a limitless, unrestricted freedom expressed as unfathomable love. This love is not an absolute good situated beyond being but the depth, height, breadth, and width of being itself[26].

Following this logic, human free will appears to be fundamentally possible only in conscious striving toward God. When Christ reaches out to the human heart, "that we may know and believe in the love God has for us" (John 4: 16), humanity comes to understand the vastness of its unlikeness to God. In this encounter, the relationship between the absolute and the relative, between divine and earthly existence, becomes clear.

In this process, the human being gradually expands an inner space for God, winning it back from their created nature. They begin to sense Christ's presence in the midst of the storms of human passions, struggles, and doubts, as "He calms the winds and stills the waters" (Luke 8: 24). At this moment, the ultimate expression of human free will is found in moments of freedom from creaturely existence, from the chain of causality stretching into the darkness of the past, as the person forms their own causality in synergy with God, born from the experience of inner stillness.

Karl Barth, transcending the limitations of Lutheran predestination, arrives at a paradoxical, neo-orthodox conclusion: freedom is God's great gift, the gift of encountering Him[27]. True freedom, Barth explains, belongs to the one who perceives barriers,

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[26] *Balthasar.* Love alone is credible.

[27] *Barth.* Op. cit.

constraints, and limitations all around yet simultaneously witnesses them crumble, revealing God's vast, eternal world. Humans, as inhabitants of God's world, are already granted a vision of how insignificant and transient their imprisonment is compared to the boundless and everlasting divine reality.

In Orthodox tradition, this understanding of freedom as awakening, personal union with Christ, and expanding one's inner space for God defines the goal and direction of Christian life. However, the deeply individualistic and ascetic nature of Eastern spirituality has struggled to take root in Western culture. Thus, in the 20th century, Orthodox, Catholic, and Protestant thought introduced another dimension to free will: an eschatological orientation toward others and community as a means of encountering the divine and transcending personal limits.

As Balthasar observes, human existence is possible only as coexistence[28]. Barth adds that when individuals unite in community, they aim for the ultimate goal that lies beyond this world – through which they encounter Christ[29]. In the same spirit, Bishop John Zizioulas reinterprets the Eucharist as a form of liberation from division and individualism, gifted by Christ to creation. It offers true communion while allowing each person to maintain their uniqueness within the shared experience[30].

Biologists might return to the question: show me the neuron that suddenly fires without cause at the moment of divine synergy, freedom, and stillness. Perhaps a small comment by one of the most renowned contemporary neuroscientists, Professor V. S. Ramachandran of the University of California, provides insight. In his book "Phantoms in the Brain", he writes that it is peculiar to overlook how certain areas of the brain involved in religious experience might support, rather than refute, the existence of God[31]. For example, most animals lack receptors or neural mechanisms for color vision. Only a select few can perceive color, yet this does not make color unreal. Clearly, it does not.

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28 *Balthasar.* Love alone is credible.

29 *Barth.* Op. cit.

30 *Zizioulas.* Op. cit.

31 *Ramachandran V. S., Blakeslee S.* Phantoms in the brain: Probing the mysteries of the human mind. William Morrow, 1998.

Even if we accept as a given that humans are biologically determined, the idea of freedom exists in the world and in consciousness, independent of our perception of it. Humans strive for freedom as both a gift and a good. Perhaps it is in this striving that humans can deeply realize and accept God, finding a chance for infinite progress toward the divine image within themselves. It may be that this idea of infinite progress is the true meaning of freedom. Thus, even if answers to questions about the existence and mechanics of free will are someday found, those answers are unlikely to satisfy us.

CONCLUSION

Undoubtedly, the problem of free will remains one of the most complex and contradictory issues in both philosophy and theology. This essay has attempted to examine the problem through an interdisciplinary approach, integrating the insights of the philosophy of mind, neuroscience, biology, and Christian theology.

By comparing philosophical and scientific perspectives on determinism with the Christian view formed in the works of St. Maximus the Confessor and subsequent theologians, this essay identifies an approach that combines scientific rigor, philosophical flexibility, antinomy, and rootedness in Christian tradition. This perspective reveals free will as a dynamic ontological property of being, manifesting in the reality around us within a defined "range of possibilities".

The synergy between theological tradition and contemporary empirical sciences offers the potential to expand our understanding of the complexity of human nature, encompassing not only biological and cognitive aspects but also the spiritual dimension. This synthesis opens new horizons for contemplating fundamental questions about human freedom and responsibility.

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Биологический детерминизм и христианский взгляд на свободу воли

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ДЛЯ ЦИТИРОВАНИЯ: *Будникова О.* Биологический детерминизм и христианский взгляд на свободу воли // Богослов. 2025. № 1 (5). С. 8–21.
DOI: 10.62847/BOGOSLOV.2025.74.91.001

АННОТАЦИЯ Статья представляет собой междисциплинарное исследование проблемы свободы воли через призму философии сознания, эмпирических наук и христианского богословия. Автор исследует концепции свободы и детерминизма и сравнивает идеи Роберта Кейна, Роберта Сапольски, Сэма Харриса, Жака Моно, Якоба фон Икскюля и Франса де Вааля с христианской точкой зрения, уходящей корнями в труды св. Максима Исповедника и расширенной трудами богословов XX в., таких как Ганс Урс фон Бальтазар, Карл Барт, прот. Иоанн Мейендорф, прот. Георгий Флоровский и митр. Иоанн Зизиулас. В статье предлагается синтетический христианский взгляд на свободу воли как на онтологическое свойство бытия с эсхатологическим измерением, определяемое взаимодействием естественной и гномической воли. Особое внимание уделяется современным открытиям в области нейробиологии и биологии, которые вносят вклад в богословское понимание свободы воли.

КЛЮЧЕВЫЕ СЛОВА: свобода воли, детерминизм, христианское богословие, философия сознания, нейробиология, философия биологии