

PANENTHEISM, TRANSHUMANISM, AND THE PROBLEM OF EVIL: FROM METAPHYSICS TO ETHICS

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Abstract. There is a close systematic relationship between panentheism, as a metaphysical theory about the relation between God and the world, and transhumanism, the ethical demand to use the means of the applied sciences to enhance both human nature and the environment. This relationship between panentheism and transhumanism provides a ‘cosmic’ solution to the problem of evil: on panentheistic premises, the history of the world is the one infinite life of God, and we are part of the one infinite divine being. We ourselves are therefore responsible for the future development of the life of the divine being. We should therefore use the means provided by the natural sciences to develop the history of the world in such a way that the existence of evil shall be overcome and shall no longer be part of the divine being in whom we move and live and have our being. The metaphysics of panentheism leads to the ethics of transhumanism.

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I. ALL-ENCOMPASSING METAPHYSICAL THEORIES

The world is constituted both by entities that are possible objects of inner and outer experience and by entities entailed by these. The goal of metaphysics is to develop and justify a theory of the essence and existence of the world and the place of rational agents in it that, in terms of ultimate and universal principles, categories, and entities, explains why the world exists, is as it is, and is experienced as it is.¹

Traditionally, we engage in metaphysics to further understanding and to enable a rationally examined life directed towards the good. To achieve this, any metaphysics develops an ontology specifying what kind of entities there are and how they are causally and logically related, an epistemology indicating what, in principle, may be known about the existence and essence of the world by rational agents possessing our transcendental constitution, and a particular axiology that accounts for the meaning and purpose of existence, including the existence of rational agents. Based on its ontological, epistemological, and axiological principles and other commitments, a metaphysics is a theory of everything as a *system of philosophy*.

I.1 *Systems of Philosophy as Explanatory*

A system of philosophy putatively possesses maximal explanatory power: everything relevant to understanding the existence and essence of the world and our place in it is, in principle, accounted for by the system. The explanatory power of a metaphysics may *prima facie* be divided into three dimensions:

The *atemporal-systematic* dimension of a metaphysics is an approach to the existence and essence of the world as if the world were atemporal and without value. It analyses what can be said about the constitution of the world if the flow of time and ethical and aesthetic values are bracketed.

¹ Peter van Inwagen, *Metaphysics* (Westview Press, 2002), 1 is right in arguing that ‘metaphysics is the study of ultimate reality’. As David Chalmers, “Introduction: A Guided Tour of Metametaphysics”, in *Metametaphysics: New Essays on the Foundations of Ontology*, ed. David Chalmers, David Manley and Ryan Wasserman (OUP, 2009), 1 states, ‘metaphysics is concerned with the foundations of reality’. According to Michal Loux, *Metaphysics: A Contemporary Introduction* (Routledge, 2002), 10–11, ‘traditional metaphysicians [...] insist that we manage to think and talk about things — things as they really are and not just things as they figure in the stories we tell’.

The *historic-systematic* dimension is an approach to the world as a historical phenomenon, but as though it had no ethical and aesthetic value. It is concerned with what, if anything, can be known about the course of the world from its beginning to its possible end.

The *axiological* dimension is an approach to the world as something of value. It deals with the historical existence and essence of the world as subject to ethical and aesthetic values and therefore as something with meaning and purpose.²

The atemporal-systematic, the historic-systematic, and the axiological explanatory dimensions of a metaphysics must, first, be mutually supportive parts of a system of philosophy and, second, be consistent with scientific knowledge.

First, from what is known about the atemporal-systematic constitution of the world, consequences regarding what is claimed to be known about the historical course of the world and its meaning and purpose follow, and *vice versa*. The reason for the mutual support between these dimensions consists in the fact that the assumption *that the existence and essence of the world is a unified phenomenon* is itself a necessary condition for the possibility of any system of philosophy that has to be mirrored in the explanatory unity of the system in question.

Second, as an all-encompassing metaphysical theory, any suggested system of philosophy has to account for the very possibility of scientific knowledge and has to integrate this knowledge in such a way that it coheres with the ontological, epistemological, and axiological principles of the system itself and therefore contributes to the overall plausibility of the system in question.³

2 Because the whole history of the world could only be accessed *sub specie aeternitatis*, and therefore is not available as an object of investigation for temporal beings like us, a system of philosophy can only provide an interpretation of the whole of the history of the world based on what is known of its constitution, its value, and its past, present, and future state.

3 Although science always entails metaphysical assumptions, scientific theories are consistent with more than one metaphysics. Any candidate system of philosophy therefore has to show that it provides a coherent integration of scientific knowledge. Cf. Willem B. Drees, "Panentheism and Natural Science: A Good Match?" *Zygon* 52, no. 4 (2017): 1077 "Science provides constraints, but cannot determine our choice for a particular worldview or metaphysics. A preferred interpretation of a particular worldview of religious vision will have to be argued

1.2 Metaphysical Theories and Worldviews

A metaphysics is the core of a particular worldview. A worldview is a set of assumptions, a unifying picture or narrative that shapes the way in which we understand what is taking place in our lives and in the world as a whole.⁴ A worldview provides an account of the basic nature of the world, of its origin, future and purpose, and therefore is always built around a particular philosophy, whether or not this philosophy remains implicit, or is explicitly reflected upon.⁵

Evaluating a metaphysics requires showing whether it is an adequate account of the world and its history as a whole, able to integrate what we know through the sciences in a way that enables a successful practical and theoretical orientation for human beings, and therefore a plausible worldview to live by.

An all-encompassing theory of the world, its history, and our place in it is true if and only if it corresponds to the way the world really is, albeit human beings are unable to directly confirm whether a theory corresponds to the way the world really is. Therefore, the best we can do is establish a metaphysics that corresponds to the criteria of truth that have proven historically and systematically reliable for a successful theoretical and practical orientation in the world.⁶ These normative criteria for evaluating a philosophy provide a matrix to judge the adequacy of any suggested metaphysics, both on its own and in relation to alternative systems of philosophy.

with philosophical arguments and moral and existential preferences, though intelligibility and consistency with science are relevant too.

4 Cf. Benedikt P. Göcke, "The Existence of Evil in Christian and Naturalistic Worldviews", *Synthesis philosophica* 32, no. 1 (2017) for a further analysis of the concept of a worldview and its importance for philosophy.

5 Leo Apostel and Jan van der Veken, *Wereldbeelden: Van Fragmentering naar Integratie* (DNB/Pelckmans, 1991), 29–30 specify essential questions in the analysis of worldviews as central elements of any all-encompassing metaphysical theory: '(a) What is? Ontology (model of being), (b) Where does it all come from? Explanation (model of the past); (c) Where are we going? Prediction (model of the future); (d) What is good and evil? Axiology (theory of values), (e) How should we act? Praxeology (theory of action)' (trans. in Diederick Aerts et al., *World Views: From fragmentation to integration* (VUB Press, 1994), 25, quoted from Clément Vidal, "Metaphilosophical Criteria for Worldview Comparison" 43, no. 3 (2012): 309.)

6 For a further analysis of the justification of different normative criteria and their historical development, cf. Benedikt P. Göcke, "Theologie als Wissenschaft: Allgemeine wissenschaftstheoretische Grundlagen der Diskussion der Wissenschaftlichkeit christlicher Theologie", in *Die Wissenschaftlichkeit der Theologie: Band 1: Systematische und historische Perspektiven*, ed. Benedikt P. Göcke (Aschendorff Verlag, 2018).

Popular criteria are consistency, coherence, inclusiveness, and warrant. A system of philosophy is *consistent* if and only if it does not entail any contradiction. Two assumptions are *coherent* if and only if there is mutual logical or semantic support between them, that is, entailment or sharing of key terms. The condition of coherence entails that the assumptions constitutive of a philosophy form an organic whole in which, ideally, every assumption is interwoven with every other assumption on a logical and semantic level.

In addition to being consistent and coherent sets of assumptions, a system of philosophy should be *inclusive*. Inclusiveness is a system's ability to explain new phenomena in its own terms. If some event occurs that previously was unheard of, then the system should be able to account for the phenomenon in its own terms. If the system is not able to account for the new phenomenon in question, then it has to be extended in a way that respects the conditions of consistency and coherence. If successful, the system adapts to the new situation. If, however, the system of philosophy in consideration is not able to account for the new phenomenon on the terms specified, then it will collapse in the light of the new phenomenon.⁷

Finally, *warrant* is justification. An assumption is justified either if (a) it is empirically verified, or (b) it is not empirically falsified, or (c) it is rationally justified, or (d) it is self-evident, or (e) it is revealed, or (f) it is properly basic.

II. PANENTHEISM AS A METAPHYSICAL THEORY

Panentheism is a metaphysical theory that, based on particular ontological, epistemological, and axiological assumptions, constitutes a system of philosophy explaining the meaning and purpose of the existence and essence of the world, its history, and our place in it.⁸ However, there is no single system of

7 For a further analysis of this point cf. W. V. Quine, "Two Dogmas of Empiric", *The Philosophical Review* 60, no. 1 (1951) and Thomas Kuhn, *The Structure of Scientific Revolutions* (The Univ. of Chicago Press, 1996).

8 'Panentheism' was introduced by the German philosopher Karl Christian Friedrich Krause in 1828 but not 'to delineate Spinoza's alleged pantheism from the pantheist framework of the triad of German Idealism: Johann Gottlieb Fichte, Georg Wilhelm Friedrich Hegel, and Friedrich Wilhelm Joseph Schelling' (Harald Atmanspacher and Hartmut von Sass, "The Many Faces of Panentheism: An Editorial Introduction", *Zygo* 52, no. 4 (2017): 1032). Krause introduced the term as the name adequate to his own system of philosophy. Ff. Benedikt P. Göcke, "On the Importance of Karl Christian Friedrich Krause's Panentheism", *Zygon*

panentheism to which the term unambiguously refers.⁹ ‘Panentheism’ refers to a family of metaphysical theories, constituting a research tradition based on these ontological, epistemological, and axiological assumptions:

- (1) Human beings are able to rationally access, at least partly, the world and its ultimate ground. Human beings are able to deploy metaphysical theories to provide a theoretical and practical orientation in the world. These have a justified claim to truth, and make possible a good and valuable life.
- (2) The existence and essence of the world is neither self-evident nor self-explanatory. An adequate metaphysics therefore has to entail a single ultimate ground that accounts for the existence and essence of the world, its history, and our place in it.
- (3) By recourse to the existence and essence of the ultimate ground and its relation to the world, the existence and essence of the world and its history is ultimately explained.
- (4) The existence and essence of the world, although not identical to the existence and essence of the ultimate ground, is not an external counterpart to the ultimate ground. The existence and essence of the world is part of and interwoven with the existence and essence of the ultimate ground and therefore is ‘in’ the existence and essence of the ultimate ground.¹⁰

48, no. 2 (2013) and Benedikt P. Göcke, *The Panentheism of Karl Christian Friedrich Krause (1781-1832): From Transcendental Philosophy to Metaphysics* (Peter Lang, 2018).

9 For more on the difficulties in demarcating panentheism from other systems of philosophy, cf. Benedikt P. Göcke, “Panentheism and Classical Theism”, *Sophia* 52, no. 1 (2013) and Benedikt P. Göcke, “There is no Panentheistic Paradigm”, *The Heythrop Journal* 32, no. 1 (2015).

10 Cf. Atmanspacher and Sass, “The Many Faces of Panentheism”, 1031: ‘Here is a list of possible and actually defended versions [of different interpretations of the world’s being ‘in’ God]: *spatial or local*: panentheism entails a localization of literally everything, insofar as everything is in God and God serves as something like a container. *Mereological*: the duality of parts and wholes helps to clarify God’s relation to His creation; everything is part of Him, and all parts together either constitute God [...] or God transcends the creational entirety that is itself part of the divine whole. [...] *metaphysical*: the ‘en’ in panentheism might also mean that God is the essence or the nucleus of everything. This can lead to vitalist versions: God as the movens of and in everything. It can also amount to a causal version: God as the cause of everything. And it may signify a transcendental version: God as the condition of the possibility of everything.’

- (5) Because the existence and essence of the world is part of and interwoven with the ultimate ground, the ultimate ground itself permeates the existence and essence of the world and therefore is present 'in' the world.
- (6) The ultimate ground of the existence and essence of the world is adequately referred to as 'God' or 'the Absolute' or 'the divine Being'.
- (7) The purpose and meaning of the existence of the world and of rational agents is to enjoy the beauty and goodness of the world and to realize it where- and whenever possible.

Although different systems of philosophy are consistent with some, but not necessarily all, of these principles and assumptions, any system of philosophy that does agree at least on these axioms, from a systematic point of view, belongs to the research tradition of panentheism, irrespective of whether the system is called "panentheism". Anyone who agrees that the world is 'in' God, while God is 'in' the world, though not identical to the world, whoever agrees that we should enjoy and realize beauty and goodness, and whoever agrees that we can use this thought to develop metaphysical theories conducive to worldviews to live by, is working within the panentheistic research tradition.¹¹

II.1 The Attractiveness of Panentheism

Panentheism is a scientifically, philosophically and theologically more adequate all-encompassing metaphysics than any alternative because it better corresponds to the normative criteria for evaluating the plausibility of any philosophy.¹²

11 Cf., for instance, Atmanspacher and Sass, "The Many Faces of Panentheism", 1030: 'Panentheism oscillates between the idea that God is nature itself (pantheism) and the idea that God is ontologically different from nature (theism), that is, between an identification of God with His creation and an 'ontological difference' where God is a real counterpart to His creation.' Cf. also Roderick Main, "Panentheism and the Undoing of Disenchantment", *Zygon* 52, no. 4 (2017): 1105: 'Unlike atheism and agnosticism, panentheism affirms the existence of the divine. Unlike theism and deism, panentheism considers the divine not to be separated from the world and even to be affected by the world (immanent and passible as well as transcendent). And unlike pantheism, panentheism considers the divine to be more than the world (transcendent as well as immanent).' For different classifications of panentheistic theories, cf. Philip Clayton, "How Radically Can God Be Reconceived before Ceasing to Be God? The Four Faces of Panentheism", *Zygon* 52, no. 4 (2017).

12 As Philip Clayton, *Adventures in the Spirit: God, World, Divine Action* (Fortress Press, 2008), 121 argues: 'Perhaps the best case for panentheism, then, would be a cumulative one.'

First, based on the concepts of substance and the infinity of the divine being, the existence and essence of the world cannot be a direct counterpart to the divine being, but is part of the divine being itself.¹³ Second, panentheistic theories avoid major problems of other metaphysics: for instance, panentheism avoids the difficulty of explaining what it means for the world to be created *ex nihilo* because panentheism is not committed to the assumption that the world is created *ex nihilo*.¹⁴ Panentheism is not committed to this assumption precisely because on panentheism the existence of the world is part of the eternal divine being, which is to say that on panentheism the world is not created at all.¹⁵ Third, recent developments in the sciences, philosophy, and

It goes something like this: because there are so many difficulties and dissatisfactions with [alternative systems of philosophy] today, and because panentheism offers a more attractive response to various (theological, philosophical, ethical, socio-political) difficulties, it provides the more compelling overall model of the God-world-relation.

13 For instance, based on the assumption that a substance is ‘that which is in itself and is conceived through itself’ (Baruch Spinoza, *Complete Works, with Translations by Samuel Shirley* (Hackett publishing Company, 2002), 217 [Def. 3]) Spinoza argued that ‘there can be, or be conceived, no other substance but God’ (Spinoza, *Complete Works, with Translations by Samuel Shirley*, 224 [Proposition 14]). This led Spinoza to the pantheistic conclusion that ‘whatever is, is in God, and nothing can be or be conceived without God’ (Spinoza, *Complete Works, with Translations by Samuel Shirley*, 224 [Proposition 15]). As a consequence, given a particular interpretation of the principle of sufficient reason, the universe had to ‘unfold’ or proceed necessarily from the nature of God, and so eventually become part of God; that is, God could not be ‘God’ without producing the universe. As Charles Hartshorne, *A Natural Theology for our Time* (Open Court, 1967), 64 argues: ‘God requires a world, but not the world.’ For a further justification of panentheism, cf. Benedikt P. Göcke, Yujin Nagasawa, and Erik Wielenberg, *A Theory of the Absolute* (Palgrave Macmillan, 2014), Benedikt P. Göcke, “The Paraconsistent God”, in *Rethinking the Concept of a Personal God: Classical Theism, Personal Theism, and Alternative Concepts of God*, ed. Christian Tapp, Veronika Wegener and Thomas Schärfl (Aschendorff Verlag, 2016), Benedikt P. Göcke, “Concepts of God and Models of the God-world relation”, *Philosophy Compass* 12, no. 2 (2017), and Benedikt P. Göcke and Christian Tapp, *The Infinity of God: New Perspectives in Theology and Philosophy* (Notre Dame Press, 2019).

14 Fichte famously argued that the concept of creation *ex nihilo* is the ‘absolute basic error of each and every metaphysics and theology’ (Johann G. Fichte, “Die Anweisung zum seligen Leben, oder auch die Religionslehre”. In *Fichtes Werke: Bd. 5. Zur Religionsphilosophie*, ed. Immanuel H. Fichte (Berlin 1971), 479) since ‘we cannot conceive creation properly — that which is called “conceiving” adequately — and thus no human has ever conceived it properly.’ (Fichte, “Die Anweisung zum seligen Leben, oder auch die Religionslehre” in *Fichtes Werke*, 479, translation BPG).

15 Philip Clayton, “Open Panentheism and Creatio ex Nihilo”, *Process Studies* 37, no. 1 (2008) argues that panentheism is consistent with *creatio ex nihilo*. Whether panentheism is consistent with creation out of nothing depends on the precise understanding of this difficult

theology show the need for panentheistic theories of the relation between God and the world. Alternative theories, committed to a radically transcendent God, to whom the world is an unaffected counterpart, are not able to integrate scientific and philosophical discoveries about the evolving history of a world in which everything is connected as good as panentheism.¹⁶ The reason is that in contrast to alternative theories, panentheism entails that across different levels of ontological constitution everything in the world is essentially, metaphysically and epistemologically, connected not only with everything else in the world, but ultimately also with God: the divine being is an organic whole that of necessity is connected to its parts. On panentheism, it is only to be expected that philosophical and scientific discoveries mirror this unity of reality that grounds in the unity of the divine being.

II.2 *The Monistic Implications of Panentheism*

Although much speaks in favor of panentheism, and it has gained in popularity amongst philosophers, scientists, and theologians, its radical metaphysical implications remain largely implicit.¹⁷ The panentheistic research tradition entails a monistic metaphysics on which there is one and only one all-including

concept and the overall metaphysical framework deployed. The only conception of creation *ex nihilo* that is consistent with panentheism, however, seems to be a conception on which creation out of nothing is conceptualized as a free self-transformation of the divine being itself, and not as the creation of a world ontologically separated from the divine being.

16 Cf. Arthur Peacocke and Philip Clayton, "Introduction: In Whom we Live and Move and Have our Being", in *In Whom We live and Move and Have our Being: Panentheistic Reflections on God's Presence in a Scientific World*, ed. Philip Clayton and Arthur Peacocke (William B. Eerdmans, 2004), XIX: "The factors which have together provoked the current revival of the term 'panentheism' are in fact extremely significant for our understanding of God's relation to the world, including humanity. Broadly they all point to the need to accentuate, in light of contemporary knowledge of the world and humanity, a much stronger sense than in the past of the immanence of God as in some sense 'in' the world — without, for most authors, demeaning from or qualifying God's ultimate transcendence, God's ontological ultimate "otherness".

17 Many philosophers, scientists, and theologians, in a first step, pledge allegiance to the panentheistic research tradition and affirm that the world is in God while God is more than the world. However, in a second step, they continue to speak of distinctions between God and the world, and partly even of relations of mutual causal influence between God and the world, as if, after all, God and the world were two entities that could be distinguished or could mutually influence each other. This is why, very often, there is a close proximity between what is called 'open-view theism' and panentheism. On open-view theism there is indeed causal interaction between God and the world because on open-view theism God and the world are thought of as two distinct entities between which causal interaction is possible.

and ultimate metaphysical substance — God. The existence and essence of the world, its history, and our place in it, are grounded in God. Panentheism therefore entails the need to radically change the way we understand and conceptualize the existence and essence of the world, its history, and our place in it.¹⁸

II.2.1 God-as-such and God-in-Himself

Since, ultimately, only God exists and since the world is not a counterpart to God, we have to introduce an epistemological distinction to differentiate between God as the one ultimate and infinite substance to which there is no external counterpart on the one hand, and God as the ultimate ground of the existence and essence of the world, but who is distinct from the world, on the other: after all, God and the world are not, according to panentheism, identical.

A useful distinction to achieve this is between God-as-such and God-in-Himself.¹⁹ ‘God-as-such’ refers to the ultimate ground as both the one, ultimate, infinite, divine Being to which there is no external counterpart and which is considered without reference to the existence and essence of the world that in fact is part of the divine Being. In talk about God-as-such, any distinction between God and the world is bracketed, which is to say God is considered as a whole without recourse to its (metaphysical) parts.

18 Two important discussions surrounding the evaluation of the pantheistic research tradition are on metaphysical grounding and monism, e.g. priority monism and existence monism. Panentheism entails both the doctrine of priority monism and the doctrine of existence monism, and entails that all that is not God is metaphysically grounded in God and, in this sense, is a metaphysical part of God. Cf. Jonathan Schaffer, “Monism”, <https://plato.stanford.edu/entries/monism/>: ‘Existence monism targets concrete objects and counts by tokens. This is the doctrine that exactly one concrete object token exists. Priority monism also targets concrete objects but counts by basic tokens. This is the doctrine that exactly one concrete object token is basic, and equivalent to the classical doctrine that the whole is prior to its (proper) parts.’ Cf. Kit Fine, “Guide to Ground”, in *Metaphysical Grounding: Understanding the Structure of Reality*, ed. Fabrice Correia and Benjamin Schnieder (CUP, 2012), 37: ‘A number of philosophers have recently become receptive to the idea that, in addition to scientific or causal explanation, there may be a distinctive kind of metaphysical explanation, in which explanans and explanandum are connected, not through some sort of causal mechanism, but through some constitutive form of determination. I myself have long been sympathetic to this idea of constitutive determination or “ontological ground”’.

19 This distinction was introduced by Karl Christian Friedrich Krause. He used it to distinguish between the Absolute as such and the Absolute as constitutive of the existence of the world, cf. Göcke, *The Panentheism of Krause*.

In contrast, ‘God-in-Himself’ refers to God as the ultimate ground of the essence and existence of the world, distinct from but related to the world. The relation between God-in-Himself, as the ultimate ground of the existence and essence of the world, and the world, as that which is ultimately grounded in God, cannot be a causal relation, as this would entail a real distinction between God and the world. Rather, God-in-Himself metaphysically grounds the existence and essence of the world. Whenever we talk about God-in-Himself, we therefore consider God as a whole, distinct from but related to the parts that are metaphysically grounded in God.

The epistemological distinction between God-as-such and God-in-Himself entails that depending on how we approach the divine being, either as a whole without recourse to its parts or as a whole that is distinguished from but related to its parts as their metaphysical ground, different aspects of the existence and essence of God are recognized: God-in-Himself is distinct from the world as that which metaphysically grounds the world, while God-as-such is not distinct from the world, but is the one infinite substance that, as a whole, includes the existence and essence of the world as part of its own existence and essence. The world is ‘in’ God, as God-as-such, but the world is ‘outside’ God — God is ‘more than’ the world — as God-in-Himself.²⁰

II.2.2 History and the Self-Awareness of God

Because God-as-such is the only entity that ultimately exists, anything that exists that is not identical to God-as-such exists only because it is a finite (metaphysical) part of God-as-such and therefore is metaphysically grounded in God-in-Himself. That is, anything that exists apart from God-as-such is part of the one infinite divine Being and can only be distinguished from God-as-such if it is considered to be grounded in God-in-Himself. If it is not considered to be grounded in God-in-Himself, but in God-as-such, it plainly belongs to the existence and essence of the divine Being itself.²¹

20 Therefore, it is not true without qualification when Ted Peters, “Models of God”, *Philosophia* 35, no. 3-4 (2007): 285 argues that ‘according to panentheism, God loses aseity, loses independence. The world and God are mutually interdependent.’ God-as-such possesses aseity and independence because God-as-such is the one infinite substance to which there is no external counterpart. God-in-Himself, however, considered as the ultimate ground of the existence and essence of the world is related to the world via metaphysical grounding.

21 As Michael Silberstein, “Panentheism, Neutral Monism, and Advaita Vedanta”, *Zygon* 52, no. 4 (2017): 1123 argues, ‘panentheism also allows us to think differently about our relation-

Because only God-as-such ultimately exists and anything else exists only because it is a part of God-as-such, any existing subject of experience and any existing object of experience that is not identical to God-as-such exists only because it is part of the existence and essence of God-as-such and therefore, in its existence and essence, is itself divine. It follows that every experience by a finite subject of experience of a finite object of experience, on panentheistic premises, is one of the experiences of the infinite divine Being. In our experiencing the world, the divine Being experiences itself. Consequently, any item of knowledge, ultimately, is knowledge of God-as-such by God-as-such. Statements of the form ‘A knows B’ therefore should be read as ‘God-as-A knows God-as-B’: Anything we know, is knowledge of God-as-such. Anybody who knows, is God-as-such knowing.²²

Based on this conclusion, scientific and metaphysical knowledge, and their growth, turn out to be growth in knowledge of the existence and essence of the one divine Being of itself.²³ Since the development of scientific and metaphysical theories itself is historical, the human development of scientific and metaphysical theories is a process in which the divine Being becomes aware of itself in and through the existence and history of rational agents, that is, in and through what belongs to its very own existence and essence.²⁴

ship to the universe as a whole.’

22 Cf. Main, “Pantheism”, 1111: ‘In general terms, pantheism undoes the metaphysical skepticism of disenchantment because the coinherence of the divine and the world allows for the possibility of knowing the divine through the empirically given — albeit not exclusively, because of the divine’s also being more than the world.’

23 Cf. Jan-Olav Henriksen, “The Experience of God and the World: Christianity’s Reasons for Considering Pantheism a Viable Option”, *Zygon* 52, no. 4 (2017): 1083: ‘As humans we partake in different realms of experience. Science has taught us to distinguish these from each other, and we do so due to the differentiations of the different sciences. We speak about the physical world, the social and cultural world, the inner world of humans. All these realms of experience are researched by the sciences. Theology would say that God as a creator is the condition for all of these realms, and pantheism will say more: that God is present, and working in and through all these realms, and that it is by partaking in these realms that humans also participate in the life of God as it manifest itself in human experience.’

24 David R. Griffin, “Pantheism: A Postmodern Revelation”, in *In Whom We live and Move and Have our Being: Pantheistic Reflections on God’s Presence in a Scientific World*, ed. Philip Clayton and Arthur Peacocke (William B. Eerdmans, 2004), 36 argues for a similar thesis: ‘My thesis is that pantheism is the content of a divine revelation that has been occurring in the cultural life of the West, primarily through religious, moral, scientific, and philosophical experience, roughly over the past two centuries.’

Finally, because the history of the world itself exists only because it is a part of the one infinite divine being, it is, on panentheistic premises, nothing over and above the history of the existence of God-as-such, and can be rightly considered as the one life of the infinite divine Being. That is, the history of the world is not ‘over and against’ the existence and essence of God-as-such but is a constitutive part of the one infinite divine Being itself.²⁵

On the assumption that human beings are able to act freely in a libertarian way and therefore can influence the course of history, it follows that human beings are a constitutive part of the determination of the history of the life of the divine being. Therefore, because they are nothing ‘over and against’ the divine being, they are responsible for the future development of the one life of the divine being they constitute.²⁶

III. TRANSHUMANISM AND THE ENHANCEMENT OF THE WORLD

Transhumanism is both a metaphysical thesis about the place of rational agents in the world and a normative thesis about the future development of humanity. As a metaphysical thesis, transhumanism entails that man is an autonomous and free being whose current biological embodiment, classified as *homo sapiens*, is the contingent product of an evolutionary process extending

25 This is how we should understand Drees, “Panentheism and Natural Science”, 1065, when he argues that ‘God must be envisaged as involved in creative processes in the world, the process through which life evolves and complex new realities emerge.’ Cf. also Catherine. Keller, *The Cloud of the Impossible: Negative Theology and Planetary Entanglement* (Columbia Univ. Press, 2015), 35: ‘And in this world-transforming entanglement, let us note that the ethic does not arise as *just do it*, but from a full fledged relational ontology of which there may be no more important wording than this: “all life is interrelated, and we are all caught in an inescapable network of mutuality, tied to a single garment of destiny”’.

26 Cf. Keller, *The Cloud of the Impossible*, 33: ‘God’s own experience, God’s open becoming, depends upon the becoming of creatures.’ Cf. also Henriksen, “The Experience of God and the World”, 1086: ‘What do these considerations entail for a panentheist position? First and foremost, I would argue that it means that we need to see the relationship between God and the world as manifesting itself in all realms of human experience. Because all these realms are constituted as relational and thereby pointing beyond themselves, we could claim that the openness implied in this relational character [...] means that all that is exists in a creative space that allows for a multitude of dimensions in human life to display themselves creatively. This “space” or “field” [...] is God as the infinite ground of this field or “outside” of it. That does not mean that what manifests itself within this field is *the field*.’

over millions of years: if we could turn back time to the initial singularity of the universe, to the so-called Planck era, then we could not be sure that man would develop again. That *homo sapiens* exists in its present form is therefore the contingent product of the universe's cosmological and biological evolution from the beginning to the present state.

On this assumption, transhumanists argue that due to our natural and social environment, accidental mutations, genetic drift and adaptation, the biological nature of human beings will continue to change in the future. In fact, it is likely that our offspring will change so much in the course of natural evolution that they turn into a new species, with which *homo sapiens* can no longer produce reproductive offspring. Although human beings are currently free and autonomous beings with a particular biological embodiment, it cannot be ruled out that, over millions of years, *homo sapiens* will develop into one or more new species that could have completely different characteristics from today's man.²⁷

Transhumanism takes up these considerations and concludes that there is no reason to assume that human beings should or must have a certain embodiment, i.e. a fixed genome: the current biological embodiment of human beings is the contingent product of an evolutionary process that will continue to change the biological nature of man in the future either way. Based on this, transhumanists, draw the following metaphysical conclusion: it is not the case that there is a biologically fixed, intrinsically valuable biological embodiment of man that could be used to justify the normative claim that the current biological condition of *homo sapiens* is worth protecting against accidental or intended changes of the human genome or the human body. From the point of view of transhumanist anthropology, we are therefore free to change the biological nature of man, at least if it can be excluded that moral principles are violated by the intended changes.²⁸

27 As Eric T. Juengst, "What's Taxonomy Got to Do with It? 'Species Integrity', Human Rights, and Science Policy", in *Human Enhancement*, ed. Julian Savulescu and Nick Bostrom (OUP, 2013), 50 argues, 'species are not static collections of organisms that can be "preserved" against change like a can of fruit; they wax and wane with every birth and death and their genetic complexions shift across time and space'.

28 There is a difference between the 'metaphysical' and the 'biological' nature of human beings. The metaphysical nature of human beings is that which is conceptually independent of their biological nature, for instance, their autonomy and self-consciousness, that is, those properties that could be exemplified even if the biological nature of human beings were dif-

III.1 Transhumanism as a Normative Thesis

As a normative thesis about the future development of humanity, transhumanism entails that, for the first time in its history, humanity has reached, or soon will reach, a stage of scientific development enabling it to actively intervene in the course of its own biological evolution, in order to change its biological embodiment in a controlled manner. While cosmological evolution over many billions of years has not produced life according to our knowledge, transhumanism recognizes a contingent cosmological development from non-conscious, to conscious, to self-conscious, life, which can now change its own biological constitution.²⁹

Although this stance on the scientific state of the development of humanity is the scientific consensus, the decisive characteristic of transhumanism as a normative thesis about the future course of the history of humanity is that it quite specifically *demand*s the implementation of anything scientifically possible to change the biological nature of man. For normative transhumanism, man is not the crown of cosmological evolution in virtue of his present biological embodiment, but because he is a being that can, and indeed should, determine his own embodiment through the use of the technologies developed by him.³⁰ From the point of view of transhumanism, the history of humanity has reached a level of development at which it becomes a normative demand to exceed the contingent biological nature of man in order to become a self-determined designer of one's own biological constitution.

ferent from how it actually is. Being autonomous and self-conscious does not entail the possession of a particular biological nature. Transhumanism does not intend to change this metaphysical nature of human beings, but only to change the biological nature of human beings. Cf. Benedikt P. Göcke, "Christian Cyborgs: A Plea For a Moderate Transhumanism", *Faith and Philosophy* 34, no. 3 (2017) for a further analysis of transhumanism.

29 Cf. John F. Haught, *The New Cosmic Story: Inside our Awakening Universe* (Yale Univ. Press, 2017), 14: 'As the cosmos has developed over billions of years, entirely new kinds of being — most notably life and thought — have emerged. [...] For all we know, more impressive developments, some of them enabled by human technology, lie ahead. The universe, no matter how you look at it these days, is more than a stage for the evolution of life and setting for human history. It is a continuing drama that keeps unlocking previously unpredicted possibilities.'

30 As Hava Tirosh-Samuelson, "Engaging Transhumanism", in *Transhumanism and its Critics*, ed. Gregory R. Hansell and William Grassie (Metanexus-Institute, 2011), 19 states, 'technology is transforming human life at a faster pace than ever before. The convergence of nanotechnology, biotechnology, robotics, information and communication technology, and applied cognate science poses a new situation in which the human has become a design object.'

III.2 *The Motivation behind Transhumanism*

From a transhumanist perspective, a good life, amongst other things, depends on the greatest possible well-being, and the ability to set and realize one's goals in the course of life. Both depend on the kind of embodiment human beings have.³¹

With regard to well-being: transhumanism is based on the meta-ethical assumption that there is an obligation to help people suffering from disease, or other impairments of well-being. Based on this assumption, it is argued that any modern medical therapy is an enhancement of human well-being by technical means. Since, according to the transhumanist, there is no normative upper limit to the enhancing of the well-being of human beings (because there is no clearly defined standard of normal well-being sufficient for a good life) transhumanists conclude that we should deploy the means of the applied sciences to enhance the well-being of human beings *to the highest degree possible* — if this is feasible, taking all factors into account, and does not contradict any other moral principles.³² Since the products and possibilities of new technologies, in particular synthetic biology, can lead to a targeted and controlled enhancement of human well-being, the transhumanist concludes that it is morally required to maximally enhance human well-being with the help of these new technologies.³³

31 Cf. Patrick Hopkins, "A Moral Vision for Transhumanism", *Journal of Evolution and Technology* 19, no. 1 (2008): 4. „The first element of a transhumanist moral vision is that the effort to address the human condition requires that we change the physical facts that in part generate the human condition. Curing the human condition requires altering the ‘human’ part of the equation’.

32 For more on the means to enhance human nature, cf. Göcke, "Christian Cyborgs". As Nick Bostrom, "A History of Transhumanist Thought", *Journal of Evolution and Technology* 14, no. 1 (2005): 1 argues: 'This vision, in broad strokes, is to create the opportunity to live much longer and healthier lives, to enhance our memory and other intellectual faculties, to refine our emotional experiences and increase our [...] well-being, and generally to achieve a greater degree of control over our own lives.'

33 Nick Nick Bostrom, "In Defense of Posthuman Dignity", in *Transhumanism and its Critics*, ed. Gregory R. Hansell and William Grassie (Metanexus-Institute, 2011), 55 describes the agenda of transhumanism as follows: "Transhumanism is a loosely defined movement that has developed gradually over the past two decades and can be viewed as an outgrowth of secular humanism and the Enlightenment. It holds that current human nature is improvable through the use of applied science and other rational methods, which may make it possible to increase human health span, extend our intellectual and physical capacities, and give us increased control over our own mental states and moods. According to Sky Marsen, "Playing by the Rules-or not?"

With regard to setting and realizing goals in life: transhumanism is based on the idea that man, because of his individual embodiment, can only set goals within a framework restricted by the potential of his own body: not everyone, for example, has a musical or sporting talent, which means that some people, given their contingent embodiment, are only able to enjoy the values associated with these talents to a relatively low degree. Transhumanism entails that this setting of fate, which is nothing more than a consequence of contingent social, genetic, and epigenetic factors, does not have to be accepted: new technologies will enable man to lift the barriers set by the limits of his embodiment in order to expand his scope of action. As an autonomous and free being, he can then better realize the purposes which he wants to set himself.

Since the means of the applied sciences can also be used to enhance the surrounding world, and since human beings are part of and interwoven with their environment, transhumanism is not restricted to the enhancement of human embodiment, but naturally leads to the further demand to use the means of the applied sciences to enhance the world surrounding us.³⁴

Because transhumanism is based on the assumption that there is a continuous growth of scientific knowledge, at least in enabling a continuous increase in our ability to control nature, transhumanists are optimistic that, in

Constructions of Identity in a Posthuman Future”, in *Transhumanism and its Critics*, ed. Gregory R. Hansell and William Grassie (Metanexus-Institute, 2011), 86, ‘transhumanism [...] a set of dynamic and diverse approaches to the relationship between technology, self, and society. Since transhumanism is not a crystallized and static doctrine, my use of the term requires definition. The working definition that informs the subsequent discussion is this: transhumanism is a general term designating a set of approaches that hold an optimistic view of technology as having the potential to assist humans in building more equitable and happier societies mainly by modifying individual physical characteristics’. Cf. Bostrom, “A History of Transhumanist Thought”, Tirosh-Samuels, “Engaging Transhumanism”, Katherine Hayles, “Wrestling with Transhumanism”, in *Transhumanism and its Critics*, ed. Gregory R. Hansell and William Grassie (Metanexus-Institute, 2011) and Jean-Pierre Dupuy, “Cybernetics is Antihumanism: Advanced Technologies and the Rebellion against the Human Condition”, in *Transhumanism and its Critics*, ed. Gregory R. Hansell and William Grassie (Metanexus-Institute, 2011).

34 Cf. Mark Walker, “Ship of Fools: Why Transhumanism is the Best Bet to Prevent the Extinction of Civilization”, in *Transhumanism and its Critics*, ed. Gregory R. Hansell and William Grassie (Metanexus-Institute, 2011), 101: ‘It will be helpful to contrast world engineering and person engineering. Person engineering refers to remaking of the biology of persons, which, for our purposes here, we may think of as coextensive with the use of technology to remake human biology. World engineering refers to any nonperson engineering use of twenty-first-century technologies.’

the long run, the means provided by the applied sciences, if used responsibly, can contribute to an overall increase of well-being in the universe and to an increase in the number and diversity of goals rational agents can realize.³⁵

IV. PANENTHEISM, TRANSHUMANISM, AND THE PROBLEM OF EVIL

Transhumanism is often discussed only because it entails an ethical demand regarding the use of the means provided by the applied sciences. However, because it entails a particular normative stance on the future development of the history of the world as a whole, it cannot be reduced to a purely ethical agenda, but has to be seen as embedded in a larger metaphysical context. In particular, there is a systematic relation between panentheism as an all-encompassing metaphysical theory about the existence and essence of the world, and our place in it, and transhumanism as the demand to enhance human beings and the world surrounding us. This systematic relation provides a cosmic solution to the problem of evil.

IV.1 Panentheism and Transhumanism

Transhumanism is not only consistent with panentheism as a system of philosophy, but in fact coheres well with panentheism as an all-encompassing metaphysical theory: on panentheism, the history of the world is nothing over and above the history of the life of the one divine being that is distinct from the world only if considered as God-in-Himself. Because of this, each and every existing entity is a (metaphysical) part of God-as-such, and belongs to the very essence and existence of the divine being. Because panentheism entails that the axiological value of the history of the world is to realize the good, and since the good is that which should be realized in the course of the history of the world, if it is possible to realize it, it follows that panentheism

35 Cf. Ted Peters, “Transhumanism and the Posthuman Future: Will Technological Progress Get us There?”, in *Transhumanism and its Critics*, ed. Gregory R. Hansell and William Grassie (Metanexus-Institute, 2011), 147: ‘What we find in transhumanist prognostications is reliance on the doctrine of progress. Transhumanists assume that progress, understood as betterment over time, is inherent in nature and inherent in culture. Evolution constitutes progress in biology. Technological advance constitutes progress in culture. Betterment is inevitable as the inexorable wheels of progress keep turning. The direction is set, and the task of transhumanist technology is to increase the speed forward!’

entails the transhumanist agenda of enhancing the world in order to increase the well-being of the cosmos insofar as it is sentient, and to increase the range of possible goals rational agents can set themselves in their lives simply because this is a good thing to do.

Pantheism goes beyond the transhumanist agenda because, on panentheistic premises, transhumanism should not be understood as a demand concerning the enhancement of an otherwise profane world but should be seen as a metaphysical demand to contribute to the overall life of the one divine being we are part of. Pantheism thus integrates the transhumanist agenda into its all-encompassing metaphysical context in a coherent way and agrees that we should use the means provided by the sciences to contribute to the overall well-being of the cosmos.

IV.2 *A Cosmic Solution to the Problem of Evil*

The problem of evil is often said to be the most decisive argument against the existence of God. The common ground of most arguments from evil is the apparent conflict between a particular philosophical concept of the divine being and our experience of a large variety of kinds of evil in a world created *ex nihilo*. In the discussion, this common ground is taken as a starting point for the formulation of many versions of the argument from evil that concern both animal and human suffering. The standard version of the problem of evil runs as follows: the existence of an omnipotent, omniscient and morally perfect being that creates the world out of nothing and is able to causally intervene with the world is inconsistent with, or at least highly improbable in the light of, the huge amounts of gratuitous evil in this world.³⁶

Because pantheism does not entail that the world is created *ex nihilo* by an omniscient, omnipotent and morally perfect God who is able to caus-

36 Cf. J. L. Mackie, "Evil and Omnipotence", *Mind* 64, no. 254 (1955): 200 for a classic formulation of the logical problem of evil. As David R. Griffin, *Pantheism and Scientific Naturalism: Rethinking Evil, Morality, Religious Experience, Religious Pluralism, and the Academic Study of Religion* (Process Century Press, 2014), 17 argues, that assumption that such a God created the world *ex nihilo* entails 'that any evil that has occurred — from the rape of a child to the Nazi Holocaust — could have been unilaterally prevented by God. This doctrine also implies that all the structural causes of evil in the world — such as the fact that birth defects, cancer, and nuclear weapons are possible — were freely created by God, even though God, by hypothesis, could have created a world having all the positive values of this one while being free of all these evils.' Cf. also Göcke, "The Existence of Evil in Christian and Naturalistic Worldviews".

ally act in the world, panentheism is immune to standard versions of the problem of evil. However, panentheism *prima facie* is confronted by another problem of evil: because history is nothing over and above the divine life itself, it seems that panentheism leads to the conclusion that the existence of the divine Being entails the existence of evil as part of the history of the existence of God-as-such.³⁷

This alleged panentheistic version of the problem of evil, however, is not a problem, but a consequence of panentheism as an all-encompassing metaphysical theory. Panentheists are able to accept that the existence of evil *de facto* is part of the history of the existence of God, even if, considered counterfactually, this is not of necessity the case. The reason is that in and through the entities that exist in the course of the history of the world, the life of the one divine Being that is directed upon the realization of the good and the beautiful is determined: if there is ontological chance and freedom in this world, then it is only to be expected that evil states of affairs obtain as part of the history of the world — chance and freedom entail the possibility that evil states of affairs obtain. A divine Being could only prevent this possibility if it could annihilate chance and freedom altogether. Since chance and freedom, however, are fundamental parts of the essence of the divine Being itself, the panentheistic God cannot prevent the possibility that evil states of affairs obtain in this world and contribute to the history of the one divine life, even if the goodness of God does not want evil to be a determining factor of the one divine life. Because of this, it is only to be expected that the good and the beautiful, upon the realisation of which the cosmos and hence the divine life is directed, are not yet realized. Whether this state will ever be reached depends, from our perspective, on the further free development of the cosmos, to which we can contribute by realizing the good and the beautiful ourselves.³⁸

37 This is a weaker version of what Yujin Nagasawa, “Modal Panentheism”, in *Alternative Concepts of God: Essays on the Metaphysics of the Divine*, ed. Andrei A. Buckareff and Yujin Nagasawa (OUP, 2016), 101 refers to as the problem of evil for modal panentheism: ‘Modal panentheism says that God is identical with the totality of all possible worlds. However, the totality of all possible worlds includes all possible instances of evil, including the worst possible instances of evil, and God is not an evil being. Therefore, modal panentheism is false’.

38 Framed within a Christian context, John Bishop and Ken Perszyk, “Concepts of God and the Problem of Evil”, in *Alternative Concepts of God: Essays on the Metaphysics of the Divine*, ed. Andrei A. Buckareff and Yujin Nagasawa (OUP, 2016), 121 argue that it is yet already eschato-

But: if the history of the world is part of the one infinite divine Being, and if the development of the history of the world, amongst other things, depends on the free decisions of free beings, then it follows that we should engage in the transhumanist agenda to enhance the well-being of human beings and the world surrounding them to contribute to the realization of the good and the beautiful. We should, in other words, live and act in such a way that the existence of evil will be overcome on a cosmic scale and will no longer be part of the divine being in whom we move and live and have our being. This panentheistic solution to the problem of evil is thus a practical one that directly calls on us to participate in the realisation of the purpose of the universe, and that shows how the metaphysics of panentheism leads to the ethical demands of transhumanism.³⁹

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logically realized from the point of view of God-as-such: “The divine may be identified, not just with Love as the supreme good which is the ultimate *telos* of all that exists, but, at the same time, with reality at its most profound or ultimate — that is to say, with reality as inherently directed upon the supreme good, and actually existing only because that end is fulfilled’.

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