

Article

Pantheism from the Perspective of Wittgensteinian Nonoverlapping Magisteria (WNOMA)

Gorazd Andrejč^{1,2} 

¹ Faculty of Religion, Culture and Society, University of Groningen, 9712 CP Groningen, The Netherlands; g.andrejč@rug.nl

² Institute for Philosophical and Religious Studies, Science and Research Centre of Koper, Garibaldijeva 1, 6000 Koper, Slovenia

Abstract: This essay examines pantheism within the framework of the ‘faith and reason’ field in the philosophy of religion, with an emphasis on the question of the relationship between pantheism and empirical–scientific rationality. I address this question from what I call the Wittgensteinian Nonoverlapping Magisteria (WNOMA) approach to religion and science. WNOMA affirms a categorical difference between religious and scientific language and attitudes. This difference is interpreted with the help of Wittgenstein’s distinction between religious and scientific beliefs and van Fraassen’s distinction between religious and empiricist *stances*. This means that WNOMA is antievidentialist regarding religious beliefs and sees the experiential and instinctive aspects of religion as more fundamental than the systematic–intellectual aspect. Part of the variety in contemporary pantheism relates to the question of whether the emphasis is on the experiential–spiritual side of pantheism or its intellectual side, i.e., whether pantheism is ‘hot’ or ‘cold’. I examine a few telling examples: Spinoza, Einstein, the World Pantheism Movement and a recent awe-some argument for pantheism by Ryan Byerly. The main contribution of this paper is a critical reading of these versions of pantheism from a WNOMA perspective, through which I hope to establish the plausibility and show some of the persuasive force of the WNOMA approach to pantheism, focusing on the relation of pantheism to scientific rationality on the one hand and felt experience on the other. I argue that hotter kinds of pantheism can be intellectually virtuous if they find a way to combine the empiricist stance and pantheist religious stance, even without a developed philosophical or theological system. I also argue that colder and philosophically rigorous pantheism can be problematic if it assumes religious evidentialism, neglects the experiential part of pantheism in favor of intellectualism or/and confuses the spheres of science and religion.

Keywords: pantheism; faith and reason; religion and science; Ludwig Wittgenstein; nonoverlapping magisteria



Citation: Andrejč, Gorazd. 2023. Pantheism from the Perspective of Wittgensteinian Nonoverlapping Magisteria (WNOMA). *Religions* 14: 1551. <https://doi.org/10.3390/rel14121551>

Academic Editor: Christine A. James

Received: 20 October 2023

Revised: 4 December 2023

Accepted: 8 December 2023

Published: 18 December 2023



Copyright: © 2023 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction: Pantheism and Lived Religion

Michael Levine touches on something important when he suggests that “it is difficult to regard pantheism as a religion” (Levine 1994, p. 67). This is especially true if by ‘religion’ we mean *lived* religion. With the exception of a few, modern-day—mostly online—communities, it is hard to identify what we could consider a religious community of believers who would be “organized around their common [pantheist] beliefs” as their central and defining doctrine (ibid., p. 289). If, for a start, we take a minimal definition of pantheism—the claim or belief that the cosmos as a whole displays some kind of unity and is in some sense divine—we quickly realize that pantheism can be part of drastically different forms of religious life, as well as some nonreligious ways of life.

An example of the latter is arguably Albert Einstein’s (philosophy of) life. Einstein was not practicing any religion as usually conceived, but his life attitude included a “deeply felt conviction of a superior intelligence that reveals itself in the knowable world . . . [and

which] ... one can describe ... as ‘pantheistic’ (Spinoza)” (Einstein 2011, p. 324). A different example is the living philosophy of “spiritual naturalists”, most of whom accept the worldview as “revealed by science”, just as Einstein did, but who also tend to engage in “specific contemplative practices designed to instill that philosophy into our intuitive way of being” (What Is SN? 2022). We could call the living philosophy of Tom Blake, one of the ‘saint-gurus’ of the modern movement of surfing spirituality or Soul Surfing, a version of spiritual naturalism (Taylor 2010, p. 109; 2007, p. 930). Describing himself as a pantheist, Blake often expressed his ecospirituality with the formula “nature=god” and practiced “this faith out-of-doors in what he called ‘The Blessed Church Of The Open Sky’”, an attitude and belief that influenced many other Soul Surfers after him (ibid.). Furthermore, for a small minority of liberal Christians, a pantheist interpretation of divinity can also become a part of the solution to the philosophical and/or ethical problems of the traditional or ‘classical’ theism in Christianity. An example of this is the Christian pantheism of Grace Jantzen (1998, pp. 265–74), who was a Quaker and a publicly engaged feminist (Carrette 2006). Finally, we should note that the founders of the Neopagan community the Church of All Worlds (CAW), a fiction-based new religious movement, have also expressed a pantheist theology, albeit with an emphasis that the pantheism of the CAW should not be taken as a creed (Cusack 2009, p. 91). Nevertheless, as Pagans, the members of the CAW are honoring or worshipping “many forms and levels of Divinity ... from the universal and cosmic ... to the polytheistic pantheons of various peoples and cultures, to the immanent divinity within each and every one” (Ferre 2017).

These wildly different examples of religious, spiritual and even some—in a certain sense—nonreligious forms of life of which pantheism can be a part, make up an odd and somewhat messy picture. However, the messiness should not discourage us from pursuing a careful philosophical analysis, not only of pantheism as a philosophical system but also of the ways in which pantheism can be, and is, an aspect of such different lived religions and life stances. An important aspect of this is the relationship between pantheism as religion (experiences, practices, believing and discourse) on the one hand and disciplined reasoning—conceptual clarity, logical rigor, scientific reasoning and evidence-based believing—on the other. The main aim of this paper is to introduce a particular reading of the relationship between these two sides of pantheism, a reading that is based on an approach to science and religion that I call Wittgensteinian Nonoverlapping Magisteria (WNOMA). Pantheism is often thought of as a religion of philosophers—meaning primarily an intellectual system rather than an approach to religion centered around its experiential, instinctive and practical aspects. By developing a Wittgensteinian reading of pantheism that focuses on the relationship between science and religion, this paper aims to introduce more nuance into the philosophy of pantheism and elucidate a way in which the felt-experiential side of pantheism in particular can be prioritized while coexisting with a commitment to scientific reasoning and intellectual rigor.

The discussion in this essay will proceed in the following steps: First, I introduce a heuristic distinction between ‘hot’ and ‘cold’ pantheism—in other words, between pantheism which emphasizes the experiential side of religion and pantheism which emphasizes the intellectual side. Next, I will compare the role of felt experience in Einstein’s and Spinoza’s pantheist perspectives. This will help us break down the question of the relationship between felt experience and intellectual reasoning in pantheism into a set of subquestions that address the nature of the belief–attitudes involved, as well as focus more directly on empirical–scientific reasoning. In order to address these questions about pantheism in light of the WNOMA perspective, I will first introduce the preceding view from which WNOMA partly obtained its name from Stephen Jay Gould’s Nonoverlapping Magisteria (NOMA). After explaining the difference between NOMA and WNOMA and developing WNOMA to a degree that will make it possible to apply it to my questioning of pantheism, I conclude this essay by analyzing, through the lens of WNOMA, two more examples of pantheist reflection: Ryan Byerly’s recent awe-some argument for pantheism and the exposition of pantheism and its values by the World Pantheist Movement.

2. Hot and Cold Pantheism

In his article on pantheism in the *Stanford Encyclopedia of Philosophy*, Bill Mander distinguishes between two kinds of arguments for pantheism: “arguments ‘from below’, which start from *a posteriori* religious experience, and arguments ‘from above’, which start from *a priori* philosophical abstraction” (Mander 2020). While the talk of ‘arguments’ already narrows the focus that I want to start with here too much, Mander’s remark is useful for reminding us of something that is often overlooked, namely that pantheism can be either of a more experiential kind, or ‘from below’, or of a more intellectual/abstract kind, or ‘from above’. Let us call, in the first approximation, pantheism ‘from below’ *hot* pantheism and the one ‘from above’ *cold* pantheism (this distinction is meant as a heuristic one, without aspiring to theoretical finality). Very often, hot pantheism goes hand in hand with experiential nature religion. According to Bron Taylor’s study of modern nature religion (Taylor 2010), such pantheism can be combined with animistic sensibilities and “Gaian Earth Religion”: the reverence for the ecosystem of our planet as a whole as something sacred and holy, as well as Deep Ecology, and sometimes with rituals centered around natural cycles and seasons. Of the four examples of pantheism given above, the Soul-Surfing pantheism of Tom Blake and the Neopagan pantheism of the Church of All Worlds are hot. At the front and center of both is experiential spirituality: they emphasize the felt kinship with nature; nature-oriented or nature-involving rituals; and enthusiastic, community-binding practices. Intellectual concerns with internal consistency, epistemic justification or the broader reasonability of pantheism or the discursive and other practices and ‘products’ related to those do not appear to be central to how such pantheisms are lived.

Cold pantheism puts much less or no emphasis on the ritualistic and experiential side of pantheism and focuses on intellectual understanding and epistemic legitimacy. Very often, it is expressed and developed by philosophers or scientists who are pantheists. It highly values the internal coherence of beliefs, compatibility with science, epistemic justification and intellectual virtues more generally, and the practices associated with these. As Mander explains, the reasoning of this kind of pantheism traditionally “starts from a relatively abstract concept whose application is taken as assured, but further reflection leads to the conclusion that its scope must be extended to include the whole reality” (Mander 2020). Western pantheists have often presented their position as the final logical implication of the ideas of divine omnipresence, divine omniscience, the divine necessary existence and other attributes that have been associated with the God of theism but have, in combination, given rise to philosophical problems (ibid.). For cold pantheists, pantheism is valued, first and foremost, as the most intellectually satisfying philosophical solution to such problems while retaining the meaningfulness of the concept of ‘god’. These features can be best appreciated, it would seem, from the vantage point of detached reflection about the nature of God and the world.

But maybe this is too simple. Is there a way for the colder kinds of pantheism to nevertheless take the experiential side of pantheism seriously? And maybe the lack of an intellectually admirable philosophical or theological system in hotter kinds of pantheism does not yet mean these are irrational or antiscientific. There could also be forms of pantheism that balance the experiential and intellectual in a way that you cannot fairly describe them as either hot or cold, but perhaps as ‘lukewarm’.¹ Let us try to gain further clarity on these nuances by comparing the relationship between reason and felt experience in Einstein’s pantheism and Spinoza’s pantheism, respectively—both of which seem to be on the colder side, at least at first glance.

3. Reason and Felt Experience in Einstein and Spinoza

There is no doubt that the life of the mind—especially of science but, to some extent, also philosophy—was central to Einstein’s life and work. But, while he was not a practicing religious person by most standards, Einstein repeatedly ascribed importance to something he called “cosmic religious feeling” (Einstein 2011, p. 329). In the language of the phenomenology of feelings, this feeling can be characterized as an instance of an

existential feeling, a category described by Matthew Ratcliffe as nonintentional feelings “which constitute a background sense of belonging to the world and a sense of reality” (Ratcliffe 2008, p. 37). For Einstein, being receptive to cosmic religious feeling and valuing this kind of experience is an important part of his philosophical and existential attitude. This feeling has a moral significance in that, according to the physicist, it rightly inspires humility in those who are receptive to it. Furthermore, it is significant not only in relation to interpreting and appreciating pantheistic belief, but also as the “strongest and the noblest driving force behind scientific research”, even if the feeling and its significance “is hard to make clear to those who do not experience it” (ibid., p. 330). But make no mistake, Einstein was not a mystic. He despises what was normally considered to be mysticism in his day, e.g., mysticism affirmed by theosophy and spiritualism. In order to distinguish his affirmation of the cosmic religious feeling from the ways in which these movements interpret religious experience, he characterizes humility in the face of the cosmos as “a genuine religious feeling that has nothing to do with mysticism” (Jammer 1999, pp. 124–25).

So, the pantheism of Einstein, while not embedded in practices that would be considered religious by most sociologists, is connected to affective experience that Einstein describes as ‘religious’. This means that it is not entirely cold. What about the pantheism of the most famous pantheist in Western philosophy, Baruch Spinoza, whose pantheism appears to be, at least according to a popular interpretation, constituted by a cold, intellectual philosophical system, “a particularly philosophical variation” (Levine 1994, p. ix), as far removed from lived religion as pantheism could get. In Spinoza’s *Ethics*, a valid affirmation of pantheism proceeds from a theoretical–metaphysical, not experiential, starting point: namely, from “the necessary existence of something he calls ‘substance’” (Mander 2020). As is well known, Spinoza argues that there exists only one substance, which is God or nature: both terms refer to the necessarily existent cosmos. While his “geometrical method” in *Ethics* is one of demonstration, not of discovery (Allison 1987, p. 43), it is nevertheless clear that the first fifteen propositions of Part One of *Ethics* are meant to constitute proof that God is the only substance there is. The pantheistic interpretation of God as nature/the world can, according to Spinoza, be rationally deduced from generally acceptable definitions, axioms and propositions—that is the main point of Part One of *Ethics* (Allison 1987, pp. 51–63; Nadler 2020).

But did Spinoza see any significance of emotional or existential feelings in his *philosophy of religion*? To answer this question appropriately, we first need to know that Spinoza has an evaluative attitude towards emotions: they can be good or bad, the latter being bad since they are contrary to reason while the former are good since they are in accordance with reason. Notably, it is among the *bad* emotions that he includes those most characteristic for religious life in his time: guilt, shame, repentance, fear, but also—and this may sound surprising—“hope” and “humility”². If we take the last one as an example, we can see that, contrary to Einstein who affirms humility as valuable in religion as well as in science, Spinoza places it in the same category as anger, revengefulness and hate and sees humility as something to overcome with reason. Humility, for Spinoza, belongs among the “passions”, i.e., those emotions that hamper reasoning and hence disturb the appropriate mental attitude in both religion and science (Allison 1987, p. 154). It is not an active but a passive mental–bodily phenomenon, meaning the person succumbing to humility is not an “adequate cause” of it (ibid., p. 156). More generally, all typical religious emotions are passions that have a natural cause—religious believers succumb to them because of their lack of knowledge and understanding of these passions and of God/Nature.

But even in Spinoza’s cold, rationalist system, things are not as straightforward as they might seem. First, some passions, or “affects”—like joy, but also sadness—can be good, i.e., active and coupled with a proper understanding of them. Pertinently for our topic, Spinoza singles out one particular emotion as the most elevated of all, an emotion he calls the *intellectual love of God*. This love, described in 5P32–33 of *Ethics*, is a higher-order and reasonable emotion that has nothing to do with the idea or expectation of God loving us—Spinoza’s God has no emotions, but we can have more or less appropriate emotions

towards God. Instead, it is the result of something Spinoza calls intuitive knowledge, from which

... there arises the greatest satisfaction of mind there can be, [namely] joy; this joy is accompanied by the idea of oneself, and consequently ... it is also accompanied by the idea of God, as its cause. ... [From this kind of knowledge], there necessarily arises an intellectual love of God. (Spinoza 1994, 5P32)

While it seems clear that Spinoza is describing something quite different than what ‘Love of God’ often means in traditional Jewish—or for that matter, Christian—theology, and that he considers the love of God to be “the most powerful and most stable form of joy” (Lloyd 1995, p. 110), the concept of such a love in the fifth book of *Ethics* has been a subject of very conflicting interpretations. This intellectual love of God is, according to those like Steven Nadler (2006, p. 120) who read Spinoza as an atheist, merely a religiously dressed-up term for understanding nature by applying the cold and entirely ‘secular’ faculty of reason. The fact that “Spinoza is at times capable of language that seems deeply religious” should not confuse us, argues Nadler, into thinking that expressions such as “love of God [amor dei]” have any religious meaning:

Spinoza’s naturalist and rationalist project demands that we provide these notions with a proper intellectualist interpretation. Thus, the love of God [turns out] to be simply an awareness of the ultimate natural cause of the joy that accompanies the improvement in one’s condition that the third kind of knowledge (*intuitus*) brings; to love God is nothing but to understand Nature. (ibid.)

On the other hand, and with more nuance, Genevieve Lloyd (1995) argues that the theory of the constructive relationship between emotions and reason in Spinoza’s philosophy of mind and ethics has a direct bearing on how we should interpret Spinoza’s pantheist philosophy of religion, at the center of which is not only the idea of *Deus sive Natura* but also of the emotion and the attitude of the mind that is *Amor intellectualis Dei*:

[The] movement of thought [in *Ethics*] ... will take us from the distortions of the imagination to the exercise of the highest form of knowledge in the intellectual love of God. ... [The] emotional resonances of this radical version of the consciousness of God are neither indifferent nor cynical. (ibid., p. 45)

It is true that, in the intellectual love of God, there is a close connection between the reasoned understanding of nature on the one hand and the affective side of this love on the other. But it is, nevertheless, an understanding of nature *as God*. The love of God is meant as a “dramatic high point of *Ethics* ... in which the passion of sadness must give way to the affect of joy” (ibid., p. 107). “Love is, by definition, joy accompanied by the idea of its cause. So to understand ourselves and our affects in relation to God is to experience a love of God” (ibid., pp. 110–11). In short, according to Lloyd, the intellectual love of God is not merely another word for the reasoned understanding of nature and its causal mechanisms, but a particular and active mental–bodily attitude that has affective, cognitive and imaginative components and a clear ethical import. Spinoza’s love of God is characteristic of somebody who has achieved both intellectual and personal/emotional maturity. Since I take Lloyd’s interpretation of *Ethics* to be more convincing than Nadler’s, I tend to read Spinoza’s ‘intellectual love of God’ as a higher-order, reflective (penetrated by reason), but still religious emotion. This love can only be a result of a long-term, rational and honest attitude towards the world—oneself, other people, the environment and ultimately towards nature *as God*. In short, Spinoza’s rationalist pantheism might not be against all kinds of religious emotions, and neither is it entirely irreligious, but it is still notably colder than Einstein’s.

By now, the complications that this short comparison has introduced into the hot–cold pantheism distinction have become clearer. Still, it is in the relationship between the affective and intellectual sides of pantheism that interesting differences become manifest. Neither Spinoza’s nor Einstein’s pantheism is completely devoid of a positive evaluation of the affective element in pantheism that they respectively affirm. However, Spinoza’s

predominantly negative attitude towards most religious emotions stands in some contrast to Einstein's attitude towards at least some such emotions, which is also reflective but more affirmative. Interestingly, while the former's 'love of God' arises only in tandem with sustained intellectual reasoning, the latter's 'cosmic religious feeling' and humility, in an important sense, *precede* rational reflection, scientific inquiry as well as religious reflection.

This difference calls for further development of our questioning of different pictures of the relationship between reason and affect in pantheism. Let us try to address them from a somewhat different angle and try to make them more precise. Most immediately, of course, one might be tempted to ask whether an intellectualist and rationalist pantheism like Spinoza's is in any sense 'more reasonable' or more credible than an intellectually minimalist and cosmic-feeling-based pantheism like that of Einstein. But this opens up larger questions, including those typical for a traditional subfield of Western philosophy of religion, the field of 'faith and reason'. True, cold versions of pantheism tend to be highly developed intellectual systems. They will likely (but not necessarily) manifest greater internal consistency compared to the hotter versions. This does not need to mean, however, that intellectualist pantheism is a result of a better understanding of what it means for pantheism to be a (part of lived) religion in the first place. After all, what we call 'religious belief' can be conceived in markedly different ways. What if intellectualist interpretations can obscure rather than help our understanding of the pantheist faith-attitude? Could an Einsteinian, cosmic-feeling-based pantheism be better suited to help us think about the relationship between felt experience and reason in a lived pantheism than the intellectualist approaches to pantheism?

There are also different senses, or at least aspects, of 'intellectual virtues' and 'reasonability' in relation to which pantheism can be examined. On the one hand, the inquiry can be about the place of intellectual complexity and argumentative reasoning typical of analytic philosophy—and the relationship of those to the feelings, attitudes, beliefs and practices—*within* a religious sphere, so to speak. On the other hand, however, we can ask a more particular and somewhat different question involving *scientific* rationality. In his intellectual and professional life, Einstein was, of course, primarily a physicist, steeped in the culture of scientific and mathematical theorizing that is strictly disciplined by evidence-based research, while Spinoza was a philosopher in a time and milieu less penetrated with an empiricist understanding of knowledge and technological mastery. Has Einstein's minimalist pantheism been crucially shaped by the need to coexist with a commitment to a modern "empiricist stance" (van Fraassen 2002), something that Spinoza's intellectually maximalist, rationalist pantheism had less pressure to adopt to? We cannot answer this question here in a historical sense, but thinking about this should sharpen our focus on different possibilities of interpreting 'intellectual virtues'. Perhaps a *hot* pantheism like that of Soul-Surfing spirituality can be understood and lived in ways that do not conflict with a serious commitment to scientific, evidence-based reasoning and, in this sense, with a serious commitment to intellectual virtues.

Those familiar with the debates in the field of science and religion in the last several decades will recognize that the language of the previous paragraph—especially the talk of science and religion as distinct 'domains'—gestures towards the approach in science and religion called the Nonoverlapping Magisteria, or NOMA. This approach was developed in the 1990s by the evolutionary biologist Stephen Jay Gould.³ Since the approach I am adopting in this essay—Wittgensteinian Nonoverlapping Magisteria, or WNOMA—is alluding to NOMA and borrows some ideas from it, and since NOMA has been controversial and heavily criticized, we have to briefly examine NOMA's basic characteristics and weaknesses before introducing WNOMA and eventually rethinking pantheism through the WNOMA lens.

4. S.J. Gould's Nonoverlapping Magisteria (NOMA)

According to NOMA, science and religion are two different *magisteria* that cover separate domains of understanding and employ different methods of inquiry. On the one

hand, the magisterium of science “covers the empirical realm: what is the universe made of (fact) and why does it work this way (theory)”; on the other hand, the magisterium of religion “extends over questions of ultimate meaning and moral value” (Gould 2002, p. 6). While this does not mean that there are no similarities between the magisteria, Gould explains:

Each domain of inquiry frames its own rules and admissible questions, and sets its own criteria for judgement and resolution. These accepted standards, and the procedures developed for debating and resolving legitimate issues, define the magisterium—or teaching authority—of any given realm. (ibid., pp. 52–53).

Gould claims that if religion and science keep to their appropriate domains and do not encroach on each other’s territory, then unnecessary conflict is avoided. To use an often-used example: if Christians refrain from making historical claims about the origins of species on the basis of religious sources (the Bible or tradition or religious experience), but instead keep those sources as inspiration for religious and moral guidance and meaning making, then there is no reason for Christianity to conflict with the well-established theory of evolution. In the ‘opposite’ direction, if evolutionary biologists use evolutionary explanations of human behavior as justifications for normative value claims and actions, i.e., as life-guiding ideas, evolutionary perspectives on human evolution encroach onto the terrain of the magisterium of religion. Clearly, NOMA itself is making normative claims about both science and religion: there are ways of arguing and reasoning, i.e., religious ways, that have no place in science, and vice versa: empirical–scientific ways of reasoning are not suitable for justifying religious and value claims. Stated more clearly, Gould explains that NOMA advances two “primary claims”:

[first], that these two domains hold equal worth and necessary status for any complete human life; and second, that they remain logically distinct and fully separate in styles of inquiry, however much and however tightly we must integrate the insights of both magisterial to build the rich and full view of life traditionally designated as wisdom. (Gould 2002, pp. 58–59)

We also notice that the separateness of the respective magisteria is meant in both descriptive and normative senses (ibid.; cf. de Cruz 2022). In what sense(s) is NOMA descriptive? First, the descriptive side of NOMA claims that this has, historically, been a *mainstream* position, at least in Western intellectual history, among both scientists and religious leaders (Gould 2002, pp. 75–89). But there are very good reasons to doubt this. Without going into details here, I suggest that this really depends on which scientists or religious leaders you ‘ask’, and Gould’s selection appears biased, to say the least.⁴ It is, of course, not hard to find *some* evidence of both major scientists and religious thinkers categorially distinguishing empirical–scientific claims and reasoning from the religious–moral claims and reasoning. But this is quite a different matter from the question of whether *most* scientists and religious leaders who were influential have done this consistently.

Second, the descriptive intention of NOMA is also, somewhat unusually, reflected in the fact that Gould calls the magisterium of religion ‘religion’. As an unpleasant surprise to many secular ethicists and some scientists, Gould claims that any discourse on values and/or moral guidelines falls within ‘religion’, something NOMA has been heavily criticized for (Gould 2002, p. 55). To be clear, Gould does not deny ethics a full autonomy from religion in principle and/or in his own belief system (ibid.). Although not religious himself, Gould does not see a problem with counting secular value systems under the magisterium of ‘religion’ due to the sociological fact that value systems are, in most cultures and apparently for the majority of humans, intertwined with religious beliefs and interpretations. The reason for Gould’s oversimplification of the relationship between religion and ethics in NOMA is the allegedly descriptive nature of NOMA. Notably, his broadening of ‘religion’ in a way that it includes “all moral discourse on principles that might activate the ideal of universal fellowship among people” (Gould 2002, p. 62) has been fiercely criticized also by theologians and religious philosophers. Alistair McGrath

deems Gould's "understanding of religion . . . clearly inadequate, not least in that it does not correspond to what most people understand by religion" (McGrath 2021, p. 557). Even if Michael Shermer might be exaggerating when he says that "most believers hold the tenets of their religion to be literally (not metaphorically) true, and they reject NOMA in practice if not in theory" (Shermer 2015), very many believers undoubtedly do understand their religious claims—for example, the belief of many members of ISKCON that "humans are eternal spiritual beings trapped in reincarnation" (Melton 2023), or the belief of many Christians that there will be a Second Coming of Jesus Christ—as facts or factual predictions about humans and (the future of) the world, respectively. Gould's tendency to collapse the distinction between scientific and religious claims into the fact/value distinction makes his ambition to hold NOMA as a *descriptive* position very problematic.

While the milieu that NOMA is rooted in the Western intellectual context, it is not meant to be limited only to Christianity or the Abrahamic religions. Gould's idea of the magisterium of religion includes "an astonishing diversity of approaches, . . . beliefs about the nature, or existence for that matter, of divine power; and all possible attitudes to freedom of discussion vs. obedience to unchangeable texts or doctrines" (Gould 2002, pp. 56–57). In relation to the last point, it is important to appreciate that the magisterium of religion is often (also) "a site for dialogue and debate, not a set of eternal and invariable rules" (ibid., p. 61). Debates take place both within a religious tradition—there is of course some ambiguity about what constitutes *a* tradition—as well as, to some extent at least, *across* traditions. For a debate to properly fall within religious magisterium according to Gould, it holds that it should not be about the truth or epistemic status of scientific or historical claims or explanations, but the truth and status of particular religious and ethical ideas and interpretations, which should be seen in the light of their appropriateness for life-guiding and meaning making. Many such claims probably cannot be *understood* across traditions (at least not fully), but some arguably can be, at least to a sufficient degree for a meaningful inter-religious *disagreement* (if not agreement) to be possible (cf. Andrejč 2016, pp. 118–25). Gould's idea, then, seems to allow for some, but not a very exact, criteriological framework in the magisteria of religion that can work across traditions (including nonreligious value systems).

Some scholars who use Ian Barbour's influential typology of models for the interaction between science and religion—i.e., conflict, independence, dialogue and integration models—have done some disservice to NOMA, not so much by making it a representative of the so-called *independence* model but by contrasting it to the *dialogue* and *integration* models (de Cruz 2022). Gould has been clear from the start that NOMA envisions an ongoing "dialogue" between the two magisteria, as well as "their necessary integration to infuse a fulfilled life with wisdom" (Gould 2002, p. 65), despite their nonoverlapping. This is recognized by an otherwise critical McGrath (2021) who has recently argued that, after Gould established the distinctiveness of the two magisteria in the *Rock of Ages*, he then turned his focus "on the positive benefits of [the] dialogical interaction" between science and religion (McGrath 2021, p. 557). While the earlier NOMA is mostly about the differences between the two in order to minimize the conflicts that, for the most part, result from misunderstanding and misapplication, Gould's later work, based on an interpretation of William Whewell's concept of 'consilience of equal regard', encourages "meaningful conversation" of equally important fields of reflection. It does not argue for either isolation or noninteraction, as McGrath explains: "Science and religion might not be in conflict, or be methodologically capable of contradiction; they could, however, certainly talk to each other". (McGrath 2021, pp. 558–59).

There are further problems with Gould's NOMA, however. They have to do with the cultural and educational context to which the model is trying to speak and appears decidedly to have formed it. Gould was concerned with alleviating the cultural clash between science and religion as this clash took shape in the United States in the late 20th century, in particular in relation to the place of religious teachings in public education and against the backdrop of the antievolutionary rhetoric of the US creationists. Gould's

strategy was to give a certain legitimacy and autonomy to religion in public education and universities by blending the question of the relationship between science and religion with the question of the relationship between humanities and sciences in modern universities (McGrath 2021, p. 556). While these two questions *can* be related in particular contexts, they are two separate questions. ‘Religion’ is not, as such, an academic discipline or research practice—in fact, most religious practices and interpretations are not academic and/or research practices, even if religious commitments can, in some contexts and in interesting ways, inform or inspire academic research and some religious reasoning does become academically complex and intellectually respectful. But fusing the philosophical question of the relationship between religion and science with the question of the relationship between humanities and sciences is bound to bring more confusion than clarity into our quest for understanding the science–religion relationship.

5. WNOMA

What I call Wittgensteinian Nonoverlapping Magisteria or WNOMA is, as the name suggests, decisively inspired by Ludwig Wittgenstein. Let us mention, in broad strokes, some important differences between NOMA and WNOMA before analyzing WNOMA in more detail. Instead of being directly concerned with the political concerns over the status of science in a largely religious society and the culture wars this gives rise to, as is Gould as he develops NOMA, Wittgenstein’s initial focus is simpler, narrower and decidedly philosophical: he is trying to show and establish, through a philosophical analysis, the nature of the linguistic or ‘grammatical’ difference between religious and scientific concepts, claims and discourses.

What the WNOMA approach to science and religion emphasizes is the categorial difference between the respective *belief-attitudes* in religion and in science. This difference might not, according to Wittgenstein, be immediately obvious. He contrasts an “ordinary” meaning of ‘belief’/‘believe’ with an “extraordinary” one, where both of these mean something quite particular. In Wittgenstein’s vocabulary in *Lectures on Religious Belief*, ‘ordinary’ believing stands for the kind of believing that is in-principle and genuinely open for empirical testing and falsification, while ‘extraordinary’ believing stands for a commitment, ‘holding on’ and ‘persisting in’ what is believed *in*, as a life-guiding picture (Wittgenstein 1970, p. 59). According to Wittgenstein, the categorial difference in belief-attitudes can be discerned through a ‘grammatical investigation’ of the place religious assertions and the related commitments have in people’s lives on the one hand and of scientific assertions and the ways these are argued for, contested and intrinsically related to empirical testability on the other. In other words, it is not the ‘surface-grammar’ but the “depth-grammar” of religious language that shows that religious belief is not an opinion or a hypothesis (Wittgenstein 2009, §664; 1970, p. 57), both of which are the terms we could use to describe ‘scientific beliefs’.

To be sure, the Wittgensteinian idea of science goes beyond the evidential testing of hypotheses. Often critical towards the use of the basic concepts such as ‘cause’, ‘law’ or ‘probability’ by other philosophers and some scientists of his time, Wittgenstein nevertheless understands the main goals of science to be establishing regularities and correlations among natural phenomena, but also, and perhaps ultimately, providing natural causal explanations of phenomena, i.e., following the “cause-effect language game” (Wittgenstein 1976, p. 373). For the purpose of WNOMA, I take this to be consistent with the understanding that science is a huge, multifaceted phenomenon that includes a wide array of ideas, values, commitments, goals, procedures, regulations, habits as well as material and technological artifacts and processes of various kinds—a phenomenon of enormous complexity that cannot be discussed here.⁵ In order to make WNOMA clearer and better defined, I expand the basic Wittgensteinian idea of science with the help of Bas van Fraassen’s understanding of science, itself influenced by Wittgenstein.

What is central to the scientific attitude, van Fraassen explains, is *objectification*. A scientific kind of investigation is an “objectifying inquiry” that normally involves “objective distancing” or

... ‘taking ourselves out of the picture’, so to speak, with both positive and negative connotations. ... The surgeon’s nurses ... prepare the patient for surgical inspection and treatment, thus constituting, one might say, a medical object. ... Somewhere along the long way of Western civilization we realized how much we could accomplish cognitively by taking ourselves out of the picture. (van Fraassen 2002, p. 157)

van Fraassen insists that we need to carefully distinguish the self-limiting, methodological objectivity “proper to scientific procedures” from reductive ontologies like metaphysical materialism, scientism or nonreligious naturalism, which, in analytic metaphysics, are often said to be the most compatible with the scientific method. In science understood as objectifying inquiry, however, the Wittgensteinian notion of ‘ordinary believing’ implies an adoption of *empiricism*, understood not as a set of beliefs about the world or a metaphysical theory or a dogma but a *stance*: a commitment to a set of attitudes which are “to some extent epistemic and to some extent evaluative”, i.e., upholding epistemic rationality guided by observation; rebelling against metaphysical theorizing and overspeculation; affirming a value of disagreement; and limiting itself to natural explanations (van Fraassen 2002, p. 47). The belief–attitude characteristic of science, van Fraassen explains, includes a radical readiness to give such beliefs up: “All our factual beliefs are to be given over as hostages to fortune, to the fortunes of future empirical evidence, and given up when they fail, without succumbing to despair, cynicism, or debilitating relativism” (ibid., p. 63).

If a belief in God—taking the example of theism—appropriate for the religious domain is taken as a scientific or ‘ordinary’ belief, we end up with the God *hypothesis*, a ‘secular’ interpretation of what it means to believe in God which is, according to Wittgenstein and van Fraassen, a categorical mistake. From this perspective, the belief in God is construed as an explanatory hypothesis that can only be held with a radical openness to possible falsification by ‘future empirical evidence’. As such, the God hypothesis becomes a “rival to the causal explanation, and the more satisfactory the latter, the less needed is the former” (van Fraassen 2002, p. 181). For Wittgenstein, however, a central point about a religious belief in God is that it is something quite different than a God hypothesis:

Whatever believing in God may be, it can’t be believing in something we can test, or find means of testing. (Wittgenstein 1970, p. 60)

Christianity is not based on a historical truth, but presents us with a (historical) narrative and says: now believe! But not believe this report with the belief that is appropriate to a historical report—but rather: believe through thick and thin and you can do this only as the outcome of a life. *Here you have a message!—don’t treat it as you would another historical message!* Make a quite different place for it in your life.—There is not paradox in that! (Wittgenstein 1998, p. 37)

Wittgenstein approaches religious statements more generally in the same way:

The point is that if there were evidence, this would in fact destroy the whole business. Anything that I normally call evidence wouldn’t in the slightest influence me. Suppose, for instance, we knew people who foresaw the future; make forecasts for years and years ahead; and they described some sort of a Judgement Day. Queerly enough, even if there were such a thing, and even if it were more convincing than I have described [...] belief in this happening wouldn’t be at all a religious belief. (Wittgenstein 1970, p. 56)

It is fair to say, then, that Wittgenstein has an “anti-evidentialist stance” towards religion (Andrejč 2016, p. 50). It is impossible to arrive from empirical data about the world to *any* conclusion about the divine, or souls, or afterlife or alike via the objectifying method of empirical science. Holding religious beliefs as ‘ordinary beliefs’ is to confuse religion with ‘superstition’ or to misunderstand it as pseudoscience. That is a notable categorical mistake,

a mischaracterization of both religion and science which results in serious confusion. The Wittgensteinian position is well expressed by the neuroscientist Kevin Nelson who, in the conclusion of his book on the neuroscience of near-death, out-of-body and mystical experiences, writes: "It's folly to expect that science can prove or disprove the truthfulness of [mystical] experiences. But spiritual hope based on *false* science is cruel. The nature of faith makes it immune to science's demands for consensus, verification, and prediction" (Nelson 2011, p. 260). Nevertheless, such confusion is characteristic, not only for many who do not partake in any religious form of life, but also for many believers, Wittgenstein argues. He was, of course, well aware that religious discourses sometimes apply terms like 'evidence' and 'proof' to religious arguments and beliefs. However, he adds that "asking [the believer] is not enough. He will probably say he has proof" (Wittgenstein 1970, p. 53). There have been plenty of quasiscientific attempts to legitimate religious claims and beliefs by believers. But, if Wittgenstein is right, such framing of religious assertions does not actually correspond with what people *do* with their religious assertions and beliefs.

While the later Wittgenstein "does not talk much explicitly about reason as a general concept" (Heal 2008, p. 47), in his lectures and remarks on religion, he normally uses 'reason' as denoting an empirical, evidence-based epistemic rationality aimed at well-supported claims about, and causal explanations of, the world. This also includes the way in which natural theology has usually been construed in analytic philosophy, namely as "the endeavor to support the truth or rationality of theism using only the resources of natural human reason" (Parsons 2013, p. 247). From the Wittgensteinian perspective, 'arguments for the existence of God'—and we can, for the purpose of this analysis, substitute 'God' here with other religious/spiritual concepts, including those from other traditions, such as 'Goddess', 'Soul', 'nirvana', 'moksha'—cannot mean a rationally compelling path of reasoning from *universally or widely acceptable true premises* to a necessary (deduction) or very likely (induction) conclusion, or to the best explanation (abduction), if those true premises are not in some way already 'religious assertions' themselves and hence 'true' for one after one is committed, and inhabits, a religious world-picture. Accordingly, Wittgenstein says, religious beliefs and assertions, as well as actions, are neither reasonable nor unreasonable. Those who understand the grammar of religion properly "don't treat this as a matter of reasonability" (Wittgenstein 1970, p. 58). Importantly, however, the position is not "that religious believers are unreasonable, but rather that religious beliefs (if not construed superstitiously) are neither reasonable nor unreasonable, as they are not rival scientific theories (for taken as such, they would come out 'ludicrous')" (Schönbaumsfeld 2023, p. 28).

At this point, we have to say a bit more about the Wittgensteinian concept of 'religion', at least according to my reading here, and hence also the idea of religion in the interpretation of WNOMA that I am suggesting. First, we should note that Wittgenstein applies the concept 'religion' beyond (traditionally) Western religions only—e.g., he sometimes also refers to African and Indian ritual practices, gestures and assertions. Does this mean he works with a notion of religion as *sui generis*, or with an illusionary idea of 'universal religion'? And second, given that he has so much to say about religious *believing*, is Wittgenstein guilty of an Enlightenment-Protestant bias according to which "religion is equated with, or reduced to, belief" (Lambek 2008, p. 124)?

To respond to the first question first: the Wittgensteinian use of 'religion' is complex, including both descriptive and prescriptive elements and—from certain angles—problematic, but it does not present religion as *sui generis*. At the level at which Wittgenstein's philosophy remains descriptive, i.e., committed to "not interfere in any way with the actual use of language" (Wittgenstein 2009, §124), it treats 'religion' as an intrinsically open-ended, family-resemblance concept without assuming any essence to it. In this mode, i.e., the mode of philosophy as 'descriptive investigation' (*ibid.*), Wittgenstein sometimes underscores "the importance of finding *connecting links*" (Wittgenstein 1993, p. 133) between forms of life, activities and the depth grammar of relevant utterances in different cultures. The connecting links allow the term 'religion' to find a sufficient foothold for Western speakers. That is made possible, not by a presupposition of religion's universality, but due

to the “shared human behaviour [which] is the system of reference by means of which we interpret an unknown language” (Wittgenstein 2009, §206). In other words, since the distances between human cultures are not radical or utterly unsurmountable, the term ‘religion’ finds its application in similar-enough phenomena across many cultures even without a clearcut definition of ‘religion’.

In response to the second worry—the apparent belief-focused bias—a closer examination shows that Wittgenstein does not ignore religious practices while, admittedly, focusing as a philosopher much more on the analysis of language, belief and alike. However, the anti-intellectualist streak in his philosophy of religion leads him sometimes to focus on practices even *at the expense* of beliefs:

Burning in effigy. Kissing the picture of one’s beloved. That is *obviously not* based on the belief that it will have some specific effect on the object which the picture represents. It aims at satisfaction and achieves it. Or rather: it does not *aim* at anything at all; we act in this way and then we feel satisfied. (Wittgenstein 1993, p. 123)

Given Wittgenstein’s emphasis and the corresponding reinterpretation of ‘belief’ in religious contexts, it becomes clear that

... far from endorsing a monodimensional understanding of religion in terms of beliefs *only*, [Wittgenstein] ... problematizes and subverts any intellectualist understanding [of religion]. ... [He] deconstructs and transforms, one might say, the belief-based understanding of religion *from the inside*: not by abandoning ‘belief’ as an important concept but by re-framing the meaning of ‘belief’ in religious contexts in comparison with the ‘ordinary’ uses of this concept. (Andrejč 2016, p. 60)

Nevertheless, it is also true that Wittgenstein’s use of ‘religion’ can be prescriptive, at times going beyond—maybe even violating—the commitment to doing philosophy as a descriptive investigation. For example, in the earlier period, Wittgenstein presents a specific picture of religious statements as intrinsically nonsensical, i.e., “run[ning] against the boundaries of language” (Wittgenstein 2014, p. 41). The later Wittgenstein, on the other hand, often claims or implies that religious statements work as ‘grammatical remarks’ as opposed to factual statements (Wittgenstein 1979, p. 32; 1970, p. 71). As we have already seen, the later Wittgenstein also claims that applying the ‘evidence game’ to religious assertions is a categorial misunderstanding, a “superstition” that amounts to nothing less than “cheating oneself” and is something to be “ridiculed” (ibid., p. 59). Such remarks are clearly normative.

Often, and most clearly in his remarks against J.G. Frazer’s intellectualized interpretations of ‘primitive’ religion and magic rituals, Wittgenstein presents religion as well as magic as closely tied to instinctive reactions, nonratiocinated gestures and other bodily expressions and movements (Wittgenstein 1993, pp. 123, 135). Wittgenstein’s anti-intellectualism regarding religion is intertwined with his aversion to metaphysical theories more generally, and his “instinctivist” and “existentialist” interpretation of religion applies also to major religions, such as Christianity (Andrejč 2016, pp. 42–49). Wittgenstein rejects the interpretations of Christianity that portray it as a system of “passionless... doctrines” (Wittgenstein 1998, p. 61), at one point even apparently disapproving of ‘philosophical theology’ *tout court* (Drury 1984, p. 90). He emphasizes the role of felt experiences and attitudes such as existential wonder, “absolute safety” and—certain kinds of—guilt (Wittgenstein 2014). The later Wittgenstein also explicitly affirms a Kierkegaardian approach to Christianity:

Amongst other things Christianity says, I believe, that sound doctrines are all useless. That you have to change your *life*. (Or the *direction* of your life.) ... For a sound doctrine need not *seize* you; you can follow it, like a doctor’s prescription—But here you have to be seized & turned around by something. ... Once turned round, you must *stay* turned round. Wisdom [i.e., intellectual understanding]

is passionless. By contrast, Kierkegaard calls faith a *passion*. (Wittgenstein 1998, p. 61; italics original)

The Wittgensteinian critique, then, aims more broadly against intellectualism in religion and not merely against evidentialism. Focusing on intellectual virtues *within* a religious framework is not rejected as such but is seen with suspicion because of its tendency to confuse religion with metaphysics. Intellectual work in religion—especially in philosophically more complex systems of thought, such as, say, Thomist Christian theology or Zen Buddhist philosophy—should never happen at the expense of an awareness of the primarily experiential and instinctive sources of religious meanings, pictures, language and beliefs.

Even in his prescriptive mode, Wittgenstein does not really push any single “strict criterion [or] . . . formalizable rule” that would prejudge the possibilities of the meaning of ‘religion’ “... *in advance or one and for all*” (de Vries 2008, p. 31). He does, however, depart from a descriptive approach in philosophy, let alone sociological or ethnographic interpretations and critiques of the concept of ‘religion’. The idea of religion outlined above is not, of course, prescriptive *unreflectively*. It takes responsibility for the meaning that it assigns to ‘religion’, rhetorically inviting us to see religion and what matters ‘in it’ in a certain way with an awareness that other meanings of, and perspectives on, ‘religion’ are not only possible but also widespread and popular. This is consistent with a Cavellian wisdom which, in broader terms, sees ‘religion’ as “what we are willing and able to take it to be” and according to which, as Hent de Vries explains, “the features and actual existence [of religion] for us will depend on the stakes we are willing and able to grant them” (de Vries 2008, p. 31).

Importantly, however, we need not go all the way with Wittgenstein’s conception(s) of religion in order to take the WNOMA approach to science and religion as a workable framework. The features of Wittgenstein’s philosophy of religion, which I suggest we do take on board in WNOMA, are 1. the basic idea of the categorial difference between religious assertions and believing on the one hand, and scientific on the other; 2. anti-evidentialism regarding religious beliefs; and 3. prioritization of the felt-experiential and instinctive aspects of religion as more primary than the systematic-intellectual aspect. In addition, I also include 4. an interpretation of the difference between religious and scientific attitudes in terms of van Fraassen’s difference between a religious and the empiricist *stance*.

In order to explicate the fourth point above a bit further, we should note that, for van Fraassen, the crucial characteristic of a religious stance is an ‘abiding astonishment’ (van Fraassen 2002, p. 182). Different from scientific curiosity, this is an existential ‘wonder . . . that does not cease with the conclusion of [empirical, causal] inquiry’ (ibid., p. 188). What, then, does it mean to say that a religious attitude is a stance? van Fraassen explains:

[What] distinguishes the secular from the religious is not the theories they hold, or beliefs about what the world is like, although those too are often found among the differences. The crucial distinction lies in a certain attitude, in how we approach the world and relate to our own experience. We can theorize about that, of course, but having a theory about a stance is no substitute for having it, and rejecting it won’t consist in disbelieving a theory. (van Fraassen 2002, p. 194)

Moral values and beliefs, of course, typically play an important part in religious thinking and ways of life. Nevertheless, WNOMA follows van Fraassen’s idea that ‘abiding astonishment’ is a more fundamental feature of religious stance than moral values. Accordingly, what becomes important from the WNOMA perspective is *preaching*, defined not in a narrow homiletic sense but in a broad sense as communicative acts that are meant to inspire and create an inviting pull into a particular perspective or stance. An important way in which stances—especially, but not exclusively, religious stances—are made persuasive is through preaching. This involves inviting one to adopt a certain attitude towards nature, humanity, culture and the cosmos, i.e., to see them in a particular light and through a particular set of evocative concepts, images or expressions. At a certain point, a Kierkegaardian leap of faith, perhaps a conversion, is an unavoidable step in the adoption of a religious

attitude and world-picture. This does not mean that no broader notion of ‘reasonability’ according to which religious beliefs can be a part of a more or less reasonable outlook on life is possible. According to the later Wittgenstein, our “need for some notions in the area of ‘reason’ and ‘rationality’ are rooted in our ability to engage in discursive and persuasive linguistic exchanges” (Heal 2008, p. 47), and since communicative aims, communities and discursive contexts vary significantly, so can the meaning(s) of ‘reason’ and ‘rationality’. In relation to the question of an ‘overall’ or meta-rationality of what it means to combine scientific and religious stances more or less reasonably, such reasonability must be cast in terms of an overall sensemaking and meaningfulness and as a pragmatic rationality instead of a narrowly conceived epistemic rationality.

Finally, and maybe most importantly, according to WNOMA, it is possible to be committed to both scientific rationality and a religious world-picture despite the categorical difference between scientific and religious reasoning and believing. In other words, it is possible for a person or a community to negotiate a deep commitment to science qua empiricist stance on the one hand and a religious stance with an “abiding wonder” on the other. Such negotiation can, of course, involve tensions and definitely requires some attitude switching, which can be psychologically difficult. The crucial condition for the coexistence of science and religion to succeed, from the WNOMA perspective, is, of course, resisting the temptation to take religion quasiscientifically or as an overintellectualized metaphysics, as well as the temptation to slide into understanding science as a metaphysical position. In practice and depending on, among other things, the domain of science in question—think of the important differences between cosmology, neuroscience and the history of the ancient world—the exact ways in which somebody negotiates science and religion with the help of the WNOMA framework will still vary significantly, and the particular ways of doing this can fare better or worse according to the most broadly defined, pragmatic reasonability.

6. WNOMA Approach to Pantheism

We are now ready to outline the basic features of the WNOMA approach to pantheism. These should not be hard to discern from what has been described and argued so far in this paper. The WNOMA perspective on pantheism insists on a clear affirmation of the categorical difference between pantheist assertions and believing on the one hand and scientific ones on the other. In line with its anti-evidentialism, WNOMA-informed pantheism will not aspire towards evidence-based epistemic warrant. Furthermore, pantheist religions that can live with WNOMA will value felt-experiential and instinctive, i.e., preintellectual aspects of religion as more fundamental than a cold intellectual system of beliefs. And finally, the difference between pantheist religious attitudes and picture of the world on the one hand and the scientific attitude and picture of the world (taken in as general terms as reasonably possible) on the other, will be seen in terms of van Fraassen’s difference between religious and empiricist *stances*.

Beyond these general contours, it is worth noting that it has been argued, even by nonpantheists such as Alasdair MacIntyre, that

...pantheism as a theology has a source, independent of its metaphysics, in a widespread capacity for awe and wonder in the face both of natural phenomena and of the apparent totality of things. It is at least in part because pantheist metaphysics provides a vocabulary which appears more adequate than any other for the expression of these emotions that pantheism has shown such historical capacity for survival. (MacIntyre 1967, p. 35)

Such a reading of pantheism is elegantly consistent with WNOMA. Along these lines, it could be argued—but this is not something I am attempting here—that pantheism is *more* consistent with WNOMA than perhaps most other religious stances. Returning to the comparison between Einstein and Spinoza, WNOMA appears to favor an Einsteinian pantheism of ‘cosmic religious feeling’ over a Spinozistic rationalist and heavily metaphysics-focused pantheism. As we have seen, for Einstein, the existential wonder *precedes* any rational reflection, be it theological or scientific. Does Einstein’s pantheism also work well with

WNOMA on other questions? While a full answer to this question cannot be attempted here, the answer seems to be ‘yes’, especially in relation to the central feature of WNOMA, anti-evidentialism. In *Einstein and Religion*, Max Jammer argues that Einstein’s theory of relativity has important implications for theology and the philosophy of religion, esp. the relationship between God, time and human beings (Jammer 1999, pp. 247–65). While this claim is not consistent with WNOMA, Jammer is careful to distinguish his own position from that of Einstein himself, reminding us that Einstein “never based his religion on logical inferences from his scientific work” (ibid., p. 11). Einstein’s pantheist interpretation of the world, as we have seen in the first part of this essay, is instead closely related to his notion of cosmic religious feeling and his belief in its religious–philosophical significance. To him, the commitment to scientific rationality and empiricism as a stance did not, however, appear incompatible with minimalist pantheism as a religious stance.

WNOMA, of course, puts some limitations on any interpretation of pantheism, colder or hotter, which some will find controversial. One is that pantheism, just like Christian theism, has to recognize its reliance on ‘preaching’ and give up natural theology as it has been traditionally conceived in analytic philosophy. Natural theology, in which the “[only] premises certifiable by the application of the usual tools, standards, and methods of intellectual inquiry are permissible” (Parsons 2013, p. 247), does not work for pantheism for the same reason it does not work for any other religious belief—according to WNOMA, there simply is no nonquestion-begging logical path from either ‘non-religious facts’ or ‘secular logical truths’ to any *religious stance*, pantheist or otherwise.

But it would be a misunderstanding to think that WNOMA deems careful and serious philosophical work on pantheism to be bad per se. WNOMA’s anti-intellectualism, as we have seen, consists of regarding the instinctive and experiential side of religion as primary over the intellectual side. Without a connection with the experiential and the instinctive, pantheist reflection cannot be religious at all and tends to lead to a misrepresentation of pantheism. But pantheism is, of course, more than a feeling or an instinct; it is an idea that demands at least some, however small, abstract step: it operates with an idea of the whole cosmos as a unity and regards it as divine. An instinctive worshipping reaction towards whatever one may encounter in one’s environment, for example, without any thought or interpretation, cannot be considered pantheist. WNOMA’s suspicion of intellectualism in religion does not mean denigrating intellectual virtues, such as curiosity, intellectual honesty, openness and intellectual thoroughness. What it comes down to is the way in which, and towards what, these virtues are applied. Here, the persistence of a critical awareness that pantheism as a religious stance is not to be confused for a ‘cold’ metaphysical system or scientific theory remains crucial. The pantheist assertions like ‘The Universe is divine’ or ‘There is a deep spiritual unity between us and the whole world’ can be sensibly affirmed and ‘held on to’ only as a consequence of seeing the world in a particular way or converting to a world-picture. Furthermore, making meaningful connections between general pantheist statements about the world on the one hand and more particular statements about humans and our interrelations with other beings and the environment—statements that can make use of concepts originating in scientific descriptions and such that inform moral concepts and claims—on the other is, according to WNOMA, itself a ‘religious undertaking’. In this way, maybe Spinoza’s pantheism, while not recognizing its own experiential source and presented as predominantly an intellectual system, could still plausibly be read as expressing (also) a religious stance. If read in this way, the pantheist stance underneath the metaphysical ‘ballast’ of Spinoza’s system would have an intellectual love of cosmos-as-God at its center—a love that is a culmination of an intellectually virtuous life, in which affective, cognitive and imaginative components come together in the highest possible harmony (Lloyd 1995, pp. 45, 109–14).

We shall end this essay by briefly examining two examples of contemporary pantheist discourse lens, one from analytic philosophy and the other from a popular website for general audiences that promotes pantheism as a living option. This will show how WNOMA can be applied in the contemporary discussion of pantheism.

The first example can be found in a recent essay by T. Ryan Byerly (2019), who presents a fresh version of an argument for pantheism from experience. Byerly starts his interesting argument by suggesting that the emotional experience of awe functions as a “fallible guide to the spiritual domain” similar to admiration, which, according to moral exemplarists, is a fallible guide to the truths of the moral domain (Byerly 2019, p. 1). The argument itself then includes a functional claim, an objectual claim and a conclusion: “That which most continues to elicit awe under critical scrutiny is most divine.” (functional claim); “The cosmos is that which most continues to elicit awe under critical scrutiny.” (objectual claim); “So, the cosmos is most divine.” (conclusion) (ibid., p. 3). In its full exposition, we find a carefully constructed argument in favor of pantheism where both the functional claim and the objectual claim are supported with further subarguments which, at least in part, rest on empirical claims. The argument also includes constructive conceptual work on the concept of awe itself. The objectual claim rests on the idea that anything that is awe-inducing must exhibit apparently directed complexity and beyondness—an idea which, Byerly claims, is supported by the empirical literature on awe (ibid., p. 7). He goes on to say that “the cosmos exemplifies these features *par excellence*; it is the most comprehensive entity that exhibits both apparently directed complexity and beyondness, and as such is the object for which awe will most survive critical scrutiny” (ibid., p. 11).

Due to space limitations, I focus in this essay only on the functional claim in support of which Byerly also refers to *empirical* evidence.⁶ In particular, he refers to connections made between awe and the affirmation of the holy in modern Jewish thought, some “experimental evidence linking experiences of awe and religious commitment” in psychology, a study in cross-cultural religious studies as well as “failures of non-spiritual [evolutionary] accounts of the function of awe” (ibid., pp. 4–5). Herein lies the crucial evidentialist step of the awe-some argument for pantheism: a step from descriptive, empirical claims about the world to a religious claim which affirms that something is “most divine” (the functional claim). If successful, this would constitute an epistemically legitimate path from the magisteria of science into the magisteria of religion—something that, according to WNOMA, can only be a result of confusion, a categorial mistake.

A closer reading, however, reveals that Byerly adds an important qualification that appears to throw the whole argument into a different light. He recognizes that, while the functional claim in this argument will probably be convincing to “at least some theists, some naturalists attracted to a naturalistic spiritual life” and “those who are antecedently attracted to pantheism”, it will probably not be convincing to the “naturalists not antecedently attracted to a spiritual life” (ibid., p. 6). In other words, the link between the empirical evidence and the claim that “that which most continues to elicit awe under critical scrutiny is most divine” will only be persuasive to those who *already* think that, crucially, the concept of ‘the divine’ is sensible; who affirm that the *divine* or at least spiritual domain is something real; and likely also *already believe* in some connection between experiencing awe and sensing the spiritual or divine.

In what sense, then, is the awe-some argument for pantheism *an argument*, and in what sense is the evidence presented for it actually ‘evidence’ as normally understood in science? The claim that the felt experience of awe is a fallible guide to legitimate or true beliefs in the spiritual domain, and the claim that “that which most continues to elicit awe under critical scrutiny is most divine” are claims that are made already fully within the religious domain, assuming a religious attitude. They could also function rhetorically as part of an inspirational discourse that ‘reaches out’ and invites those who do not yet believe in the divine or its connection with awe to leap, as it were, into a (particular) religious stance. But, as Byerly recognizes, the ‘evidence’ presented in favor of these claims will probably not be persuasive to those who are inclined to believe that awe is, say, a distraction to the proper functioning of our epistemic faculties. What Byerly calls ‘evidence’ does not work as scientific evidence at all. The ‘evidence’ presented is not used here as part of empirical–scientific—in this case, a combination of inductive and abductive—reasoning. Rather, the ‘evidence’ in the context of the awe-some argument for pantheism works *only*

in an already religious world-picture that recognizes the divine and already relates to awe: “given this argument, *divinity* is defined ostensibly as that which most continues to elicit awe” (Byerly 2019, p. 11). An empiricist who does not share a commitment to a religious stance will probably claim that any awe can and *should* be reduced to, or interpreted as a variant of, ‘scientific curiosity’, which goes away when we explain the awe-some natural phenomena causally, despite all the ‘evidence’ presented in the awe-some argument for pantheism. Now, what kind of further argument or additional evidence could Byerly, or any pantheist or theist, give in order to convince a person with such a conviction to ‘read’ the world and Byerly’s ‘evidence’ in a divine-affirmative way?

Again, from the WNOMA perspective, all one can do is present a pantheistic picture of the world evocatively, i.e., *invite* the readers to see the world as divine. In the case of the awe-some argument for pantheism, this would mean fully taking on board the understanding that affirming awe as a guide to the spiritual domain is *already* reasoning within the magisteria of religion. So, while Byerly’s awe-some ‘argument’ can add valuable conceptual work to pantheism as a religious stance and, from within this stance, describes and ‘narrates’ some features of the world in a persuasive and coherent way, it is not an instance of a natural-theological argument. The ‘evidence’ it presents is not, properly speaking, empirical evidence *in favor of* pantheism.

Let us now examine an example of ‘low brow’ pantheism, i.e., excerpts from the discourse of the most successful pantheist community—a ‘community’ at least in a linguistic, communicative and online sense—that operates in the English language and has international outreach: the World Pantheist Movement. The ideas of this community found the most influential expression in the words of its founder and president, the environmentalist Paul Harrison and the author of the book *Elements of Pantheism* (Harrison 2013). On the main website of the movement www.pantheism.net (last accessed on 9 December 2023), some of the discourse is an exposition and explanation of its beliefs, its attitude towards science and of how the naturalist pantheism of the WPM contrasts with Christianity and other theistic or supernaturalistic religions and theologies. A lot of this discourse, however, is what I have called ‘preaching’—it is clearly meant as evocative of the experience of the universe as divine, as that which deserves ultimate reverence. For example:

When you look at the night sky or at the images of the Hubble Space Telescope, are you filled with feelings of awe and wonder at the overwhelming beauty and power of the universe? When you are in the midst of nature, in a forest, by the sea, on a mountain peak—do you ever feel a sense of the sacred, like the feeling of being in a vast cathedral? Do you believe that humans should be a part of Nature, rather than set above it?

If you can answer yes to all of these questions, then you have pantheistic leanings. . . . We must relate to the universe with humility, awe, reverence, celebration and the search for deeper understanding—in many of the ways that [theistic] believers relate to their God, minus the grovelling worship or the expectation that there is some being out there who can answer our prayers. (Harrison 2022)

Looking a bit closer, we can find what seems to be roughly the same thought—namely the idea that we are a part of, and have come out of, the natural universe—but presented, first, as a scientific fact and later as a spiritual or religious truth. Despite the language of ‘creation’, the following reads like a basic scientific statement: “We are part of the universe. Our earth was created from the universe and will one day be reabsorbed into the universe. We are made of the same matter and energy as the universe” (Harrison 2022). Later in the same paragraph, however, the same train of thought and very similar statements acquire an increasingly evocative, aesthetic and religious tone:

The universe creates us, preserves us, destroys us. It is deep and old beyond our ability to reach with our senses. It is beautiful beyond our ability to describe in words. It is complex beyond our ability to fully grasp in science. . . . This

overwhelming presence is everywhere inside you and outside you and you can never be separated from it. (ibid.)

Combining such different kinds of discourse in the same text is not necessarily problematic, but it can be confusing if an impression is created that the religious claim at the end is derived from the more empirical statements at the beginning of the paragraph. The empirical claim that humans consist of the same chemical elements and are subject to the same physical forces and processes as the rest of the universe has no religious or moral significance *by itself* if taken as a scientific finding. The same statement, however, can be taken up and repurposed in the expression of a religious picture of the world, and of an existentially important kinship between us and all nature in particular—a picture that works as part of a religious stance, which is something quite different than a scientific hypothesis or explanation.

As mentioned above, ‘mixing’ scientific and religious discourse in a single text like this introduction to pantheism on the WPM’s website is not problematic per se. It is possible that most of Paul Harrison’s pantheist writings, as well as most of the pantheist discourses on the WPM’s website—including the statement of its ‘Principles’ ([Principles of Scientific Pantheism 2022](#))—are not mixing scientific and religious discourse in a confusing and misleading way. However, there are at least some statements that strongly suggest that science *legitimizes* pantheism, even in the description of the WPM’s very *raison d’être*: “The WPM was created to promote these Scientific Pantheist beliefs as a rational alternative to supernatural beliefs” (ibid.). Indeed, from the WNOMA perspective, the very term ‘Scientific Pantheism’, which seems to be the dominant term to distinguish the pantheism of the WPM from other kinds of pantheism, is a misnomer. But the ‘rationality’ of this alternative mostly boils down to the idea that the pantheism of the WPM has full “[respect] for reason, evidence, and the scientific method”, while itself, as a spiritual attitude and as an idea, is not epistemically grounded in science. Instead, the WPM’s claim is that the divine nature of the universe as “ultimate reality” can be experienced and understood by everyone via “direct access through perception, emotion and meditation” (ibid.). The latter claim certainly invites further philosophical questions, but as it stands, it does allow for a reading according to which scientific reasoning and investigation on the one hand, and the pantheist attitude on the other, remain separate magisteria. If we employ them together, but properly, i.e., as separate modes of understanding of what is still the same reality, science indeed can “greatly [enhance] our spiritual and esthetic responses to the world, and our awareness of cosmic and natural wonders at all scales” (ibid.). This is to say that there appears to be a plausible WNOMA-friendly reading of the pantheism offered and explained by the WPM.

Finally, it is significant that the pantheism of the WPM identifies itself as a nature religion, i.e., a kind of spirituality that most highly values a felt kinship with, and other kinds of experiences with/in/of, nature, especially the biological environments on Earth, but also abiota and the universe beyond this planet. In this sense, then, this pantheism appears to be considerably ‘hot’. It should be clear by now that this does not mean a lack of intellectual virtues. To the extent that the WPM’s pantheism works together with a commitment to evidential rationality and investigation (the empiricist stance) while *also* affirming pantheism as a religious stance, and to the extent that an awareness of the categorial distinction between the scientific and the religious magisteria is shown in its discourse and practice, the WPM’s pantheism is intellectually virtuous. In a similar way, other hot pantheisms, such as that of the ‘Soul Surfing’ spirituality or the pantheism of some Neopagan spiritualities, can also be intellectually virtuous without a complex philosophical theology.

The level of agreement with these conclusions will, of course, depend on how convincing we find WNOMA in the first place. In this article, I hope to have established some of the persuasive force of WNOMA and its approach to pantheism, demonstrating its interpretive power in relation to the question of how different versions of pantheism negotiate the relationship between—broadly speaking—felt experience and faith on the one hand and

reasonability and science on the other. But there are other important questions that have not been addressed here and which the WNOMA interpretation of pantheism would need to address. Some of them stem from the actively debated issues in the analytic philosophy of pantheism⁷ today—for example: the question of the meaning of the divine/world's unity; the question of whether pantheism should include the belief that God is or has a mind or not; the question of whether, according to WNOMA, pantheism can be affirmed together with ontological naturalism or not; and the question of the implications of the neuroscientific, naturalistic explanations of religious experience (including experiences of awe and wonder) for a WNOMA-interpreted pantheism. I hope to address these questions in future research.

Funding: This research was funded by Science and Research Centre of Koper and the Slovenian Research Agency (ARRS) grants J6-1813 “Creations, Humans, Robots: Creation Theology Between Humanism and Posthumanism” and P6-0434 “Constructive Theology in the Age of Digital Culture and Anthropocene”.

Data Availability Statement: Data are contained within the article.

Conflicts of Interest: The author declares no conflict of interest.

Notes

- ¹ This was suggested by Andrei Buckareff in a critical comment on an earlier version of this paper.
- ² While the boundaries of the meanings of these emotion terms in Latin and in other European languages have been shifting through centuries, I here assume that, between the 16th and 20th centuries in Europe, the meanings have not changed so completely or radically that they would make a comparative discussion of the feeling of humility between Spinoza's and Einstein's position meaningless or misguided.
- ³ Gould first proposed Nonoverlapping Magisteria in his 1997 paper with the same title (Gould 1997). Later, he developed and explained his position more fully in Gould (2002, 2011).
- ⁴ Gould (2002, pp. 75–82) claims that Charles Darwin, for the most part, abides by NOMA, but so does Pope John Paul II in his 1996 affirmative statement on evolution. Gould is, of course, aware that there were exceptions: he chides Isaac Newton who, despite his scientific genius and innovative success in theoretical and mathematical physics, nevertheless allowed for occasional supernatural intervention by God (ibid., pp. 84–89), which for Gould clearly means allowing religion to trod on the terrain of science.
- ⁵ This includes, of course, the technological developments in AI and big data, including deep learning, which in a bit more than a decade have transformed many areas of science (Gillies and Gillies 2022). While, at least for now, there is no AI that can do abductive inference which plays, together with induction, a crucial role not only in human common sense but also in science (Larson 2021), AI is also helpful in the exploratory phase of scientific discovery if it is made explainable (Zednik and Boelsen 2022). However, in this article, I am concerned with science as a human project: I am assuming that the agency of nonhuman actors, such as animals and AI machines, in all of its variety and transforming power for science, is, for better or worse, part of the vast social, historical and still essentially human institution of science.
- ⁶ For a recent discussion of the objectual claim, see Buckareff (2022, pp. 24–26).
- ⁷ A good overview of such questions can be found in Buckareff (2022).

References

- Allison, Henry E. 1987. *Benedict de Spinoza: An Introduction*. New Haven: Yale University Press.
- Andrejč, Gorazd. 2016. *Wittgenstein and Interreligious Disagreement: Philosophical and Theological Investigation*. New York: Palgrave MacMillan.
- Buckareff, Andrei. 2022. *Pantheism (Cambridge Elements in Philosophy of Religion)*. Cambridge: Cambridge University Press.
- Byerly, T. Ryan. 2019. The Awe-Some Argument for Pantheism. *European Journal for Philosophy of Religion* 11: 1–21.
- Carrette, Jeremy. 2006. Grace Jantzen. *The Guardian*, May 11. Available online: <https://www.theguardian.com/news/2006/may/11/guardianobituaries.gender> (accessed on 10 October 2023).
- Cusack, Carole. 2009. Science Fiction as Scripture: Robert A. Heinlein's Stranger in a Strange Land and the Church of All Worlds. *Literature & Aesthetics* 19: 72–91. Available online: <https://core.ac.uk/download/pdf/229421468.pdf> (accessed on 16 October 2023).
- de Cruz, Helen. 2022. Religion and Science. In *Stanford Encyclopedia of Philosophy*. Available online: <https://plato.stanford.edu/entries/religion-science/> (accessed on 16 October 2023).
- de Vries, Hent. 2008. Introduction: Why still 'religion'? In *Religion: Beyond a Concept*. Edited by Hent de Vries. New York: Fordham University Press, pp. 1–98.
- Drury, Maurice O'C. 1984. Some notes on conversations with Wittgenstein. In *Recollections of Wittgenstein*. Edited by Rush Rhees. Oxford: Oxford University Press.

- Einstein, Albert. 2011. *The Ultimate Quotable Einstein*. Collected and Edited by Alice Calaprice. Princeton: Princeton University Press.
- Ferre, Lux. 2017. The Church of All Worlds. *Occult World*, July 25. Available online: <https://occult-world.com/church-of-all-worlds/> (accessed on 16 October 2023).
- Gillies, Donald, and Marco Gillies. 2022. Artificial Intelligence and Philosophy of Science from the 1990s to 2020. In *Current Trends in Philosophy of Science*. Edited by Wenceslao J. Gonzalez. Synthese Library. Cham: Springer, vol. 462, pp. 65–80. [CrossRef]
- Gould, Stephen J. 1997. Nonoverlapping Magisteria. *Natural History* 106: 16–22. [CrossRef]
- Gould, Stephen J. 2002. *Rocks of Ages: Science and Religion in the Fullness of Life*. New York: Ballantine Books.
- Gould, Stephen J. 2011. *The Hedgehog, the Fox, and the Magister's Pox: Mending the Gap between Science and the Humanities*. Cambridge, MA: The Belknap Press of Harvard University Press.
- Harrison, Paul. 2013. *Elements of Pantheism: A Spirituality of Nature and the Universe*, 3rd ed. Scotts Valley: CreateSpace Independent Publishing.
- Harrison, Paul. 2022. Scientific pantheism: Reverence of Nature and the Cosmos. World Pantheism. Available online: <https://www.pantheism.net/paul/> (accessed on 16 October 2023).
- Heal, Jane. 2008. 'Back to the rough Ground!' Wittgensteinian reflections on rationality and reason. In *Wittgenstein and Reason*. Edited by John Preston. Oxford: Wiley-Blackwell, pp. 47–64.
- Jammer, Max. 1999. *Einstein and Religion: Physics and Theology*. Princeton: Princeton University Press.
- Jantzen, Grace. 1998. *Becoming Divine: Towards a Feminist Philosophy of Religion*. Manchester: Manchester University Press.
- Lambek, Michael. 2008. Provincializing God: Provocations from an Anthropology of Religion. In *Religion: Beyond a Concept*. Edited by Hent de Vries. New York: Fordham University Press, pp. 120–38.
- Larson, Erik J. 2021. *The Myth of Artificial Intelligence: Why Computers Can't Think The Way We Do*. Cambridge, MA: The Belknap Press of Harvard University Press.
- Levine, Michael. 1994. *Pantheism: A Non-Theistic Concept of Deity*. London: Routledge.
- Lloyd, Genevieve. 1995. *Routledge Philosophy Guidebook to Spinoza and the Ethics*. London: Routledge.
- MacIntyre, Alasdair. 1967. Pantheism. In *Encyclopedia of Philosophy*. Edited by Paul Edwards. New York: Macmillan and Free Press, pp. 31–35.
- Mander, William. 2020. Pantheism. In *Stanford Encyclopedia of Philosophy*. Available online: <https://plato.stanford.edu/entries/pantheism/> (accessed on 12 March 2023).
- McGrath, Alister. 2021. Consilience of Equal Regard: Stephen Jay Gould on the relation of Science and Religion. *Zygon: Journal of Religion and Science* 56: 547–65. [CrossRef]
- Melton, J. Gordon. 2023. Hare Krishna. In *Encyclopedia Britannica*. Available online: <https://www.britannica.com/topic/Hare-Krishna> (accessed on 27 September 2023).
- Nadler, Steven. 2006. *Spinoza's Ethics: An Introduction*. Cambridge: Cambridge University Press.
- Nadler, Steven. 2020. Baruch Spinoza. In *Stanford Encyclopedia of Philosophy*. Available online: <https://plato.stanford.edu/entries/spinoza/> (accessed on 12 March 2023).
- Nelson, Kevin. 2011. *The God Impulse: Is Religion Hardwired into the Brain?* London: Simon and Schuster.
- Parsons, Keith. 2013. Perspectives on Natural Theology From Analytic Philosophy. In *Oxford Handbook of Natural Theology*. Edited by Russell Re Manning. Oxford: Oxford University Press, pp. 247–61.
- Principles of Scientific Pantheism. 2022. World Pantheism. Available online: <https://pantheism.net/manifest/> (accessed on 16 October 2023).
- Ratcliffe, Matthew. 2008. *Feelings of Being: Phenomenology, Psychiatry, and the Sense of Reality*. Oxford: Oxford University Press.
- Schönbaumsfeld, Genia. 2023. *Wittgenstein on Religious Belief*. Cambridge Elements in The Philosophy of Ludwig Wittgenstein Series. Edited by David Stern. Cambridge: Cambridge University Press.
- Shermer, Michael. 2015. Science, Religion and the Meaning of Life. *Scientific American*. August 1. Available online: <https://www.scientificamerican.com/article/science-religion-and-the-meaning-of-life/> (accessed on 10 October 2023).
- Spinoza, Baruch. 1994. *A Spinoza Reader: The Ethics and Other Works*. Translated and Edited by Edwin Curley. Princeton: Princeton University Press.
- Taylor, Bron. 2007. Surfing into Spirituality and a New, Aquatic Nature Religion. *Journal of the American Academy of Religion* 75: 923–51. [CrossRef] [PubMed]
- Taylor, Bron. 2010. *Dark Green Religion: Nature Spirituality and the Planetary Future*. Berkeley: University of California Press.
- van Fraassen, Bas. 2002. *The Empirical Stance*. Princeton: Princeton University Press.
- What Is SN? 2022. Spiritual Naturalist Society. Available online: <https://www.snsociety.org/what-is-sn/> (accessed on 10 October 2023).
- Wittgenstein, Ludwig. 1970. *Lectures and Conversations on Aesthetics, Psychology and Religious Belief*. Oxford: Wiley-Blackwell.
- Wittgenstein, Ludwig. 1976. Cause and Effect: Intuitive Awareness [1937]. Edited by Rush Rhees. Translated by Peter Winch. *Philosophia* 6: 392–430.
- Wittgenstein, Ludwig. 1979. *Wittgenstein's Lectures, Cambridge 1932–35*. From the Notes of Alice Ambrose and Margaret Macdonald. Edited by Alice Ambrose. Oxford: Blackwell.
- Wittgenstein, Ludwig. 1993. Remarks on Frazer's Golden Bough. In *Philosophical Occasions: 1912–1951*. Edited by James Klagge and Alfred Nordmann. Indianapolis: Hackett, pp. 119–55.
- Wittgenstein, Ludwig. 1998. *Culture and Value*, rev. ed. Edited by G. H. von Wright. Oxford: Blackwell.

- Wittgenstein, Ludwig. 2009. *Philosophical Investigations*, rev. 4th ed. Translated by G. E. M. Anscombe, P. M. S. Hacker, and J. Schulte. Revised and Edited by P. M. S. Hacker and J. Schulte. Oxford: Blackwell.
- Wittgenstein, Ludwig. 2014. *Lecture on Ethics*. Edited by Edoardo Zamuner, Ermelinda Valentina Di Lascio and D. K. Levy. Oxford: Wiley-Blackwell.
- Zednik, Carlos, and Hannes Boelsen. 2022. Scientific Exploration and Explainable Artificial Intelligence. *Minds & Machines* 32: 219–39. [[CrossRef](#)]

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.