Naturalism—as Religion, within Religions, without Religion

with Willem B. Drees, "Naturalism and Religion: Hunting Two Snarks?"; Ursula W. Goodenough and Jeremy E. Sherman, "The Emergence of Selves and Purpose"; Matthew D. MacKenzie, "Spiritual Animals: Sense-Making, Self-Transcendence, and Liberal Naturalism"; Curtis M. Craig, "The Potential Contribution of Awe and Nature Appreciation to Positive Moral Values"; Mark E. Hoelter, "Mysterium Tremendum in a New Key"; Charles W. Fowler, "The Convergence of Science and Religion"; Todd Macalister, "Naturalistic Religious Practices: What Naturalists Have Been Discussing and Doing"; Paul H. Carr, "Theologies Completing Naturalism's Limitations"; James Sharp, "Theistic Evolution in Three Traditions"; Alessandro Mantini, "Religious Naturalism and Creation: A Cosmological and Theological Reading on the Origin/Beginning of the Universe"; and Willem B. Drees, "When to Be What? Why Science-Inspired Naturalism Need Not Imply Religious Naturalism."

WHEN TO BE WHAT? WHY SCIENCE-INSPIRED NATURALISM NEED NOT IMPLY RELIGIOUS NATURALISM

by Willem B. Drees 🕩

Abstract. In *The Aristos*, John Fowles imagined the human situation as that of a diverse group of people on a raft, apparently between a wreck in the past and a shore where they will land. But there was no wreck, there is no shore. The conference on which this thematic set of papers draws was about a similar multitude of perspectives. Some identify as religious naturalists, others as naturalists without religion, while others respect science but identify with a historic tradition. In this contribution, I defend the intellectual and moral value of science-inspired naturalism. But I also offer a variety of reasons why naturalism may not be all. In philosophical anthropology and in life, whether religious or nonreligious, dualistic and pluralist perspectives are appropriate, while one may be agnostic on ultimate questions.

Keywords: agnosticism; dualism; Immanuel Kant; naturalism; philosophy; pluralism; religious naturalism; science

Willem B. Drees is Professor Emeritus of Philosophy of the Humanities, Tilburg University, Tilburg, the Netherlands; e-mail: w.b.drees@tilburguniversity.edu.

[Zygon, vol. 56, no. 4 (December 2021)]

www.wileyonlinelibrary.com/journal/zygon

Fowles' Wreck and Raft

The British author John Fowles, known for novels such as *The French Lieutenant's Woman* and *The Magus*, has written a brief book with aphorisms, *The Aristos*. In the first chapter, there are reflections on the human condition titled "The Wreck and the Raft" (Fowles 1980, 15f.).

The Wreck and the Raft

(11) Humanity on its raft. The raft on the endless ocean. From his present dissatisfaction, man reasons that there was some catastrophic wreck in the past, before which he was happy; some golden age, some Garden of Eden. He also reasons that somewhere ahead lies a promised land, a land without conflict. Meanwhile, he is miserably, *en passage;* this myth lies deeper than religious faith.

(12) Seven men inhabit the raft. The pessimist, for whom the good things of life are no more than lures to prolong suffering; the egocentric, whose motto is *Carpe diem*—enjoy today—and who does his best to get the most comfortable part of the raft for himself; the optimist, always scanning the horizon for the promised land; the observer, who finds it enough to write the logbook of the voyage and to note down the behavior of the sea, the raft, and his fellow-victims; the altruist, who finds his reason for being in the need to deny himself and to help others; the stoic, who believes in nothing but his own refusal to jump overboard and end it all; and finally the child, the one born, as some with perfect pitch, with perfect ignorance—the pitifully ubiquitous child, who believes that all will be explained in the end, the nightmare fade and the green shore rise.

(13) But there was no wreck; there will be no promised land.

Just as the people on the raft have different stances, there is a multitude of perspectives and strategies with respect to science and religion. Some articulate a naturalistic religious view shaped by a scientific understanding of reality. Others hold that a more traditional religious view may coexist with the acceptance of science as a valuable window on reality. In this contribution, I will offer philosophical reflections on the variety of human perspectives, arguing that naturalism as an interpretation of our scientific understanding of reality may be combined with dualist, pluralist, and agnostic views in other spheres of life.

The Intellectual and Moral Value of Science-Inspired Naturalism

In the context of Western discussions on religion and science, naturalism arises primarily in opposition to "supernaturalism," the idea that occasionally the Divine acts within reality and, hence, that our scientific understanding of the world we live in, is fundamentally flawed or, at least, incomplete. As an understanding of reality, a science-inspired naturalism seems to me more reasonable than such an interventionist one. I will start this part of the argument on the side of the physical sciences, thereafter speak of humans and of alternatives to science-inspired naturalism.

All entities in the world consist of the same constituents, best described by physics. This is depicted in the Periodic Table of Elements, that begins with hydrogen and helium, depicted on posters in many classrooms. In chemistry, this scheme brings order in the world of substances that we encounter. In physics, the study of isotopes of these elements is a window on underlying reality, as atomic nuclei consist of protons and neutrons, circled by electrons. Underlying this model of atoms, scientists have postulated W- and Z-bosons that mediate the weak interactions, quarks and gluons that make up protons and neutrons, a Higgs boson that introduces mass in the model. Additional particles such as muons—particles resembling electrons but much heavier—were discovered and incorporated in the model. This has resulted in the Standard Model of elementary particles. It works extremely well.

But Recently, in some experiments at CERN in Geneva, not yet confirmed with sufficient significance, muons showed up in lower numbers than the Standard Model predicts. This is an example of an anomaly—something that seems to be at odds with the law, a-nomos. Perhaps this anomaly is merely a statistical fluctuation. Perhaps there is a minor glitch in the experimental set-up. Perhaps calculations based on the Standard Model are incomplete. Or, an exciting possibility, the anomaly indicates that the Standard Model needs to be modified. Or, more radical, it may need to be replaced by a rather different model, which should explain the outcomes of the recent experiments, while also reproducing all the previous results that were explained by the Standard Model.

To envisage this last option, a radical revision, think of ideas about gravity. Newton's theory (1687) treats gravity as a force operating between two masses. It was the successful core of the physical sciences for many centuries. Einstein's General Relativity Theory (1915) treats gravity as a consequence of curved space-time. The image of reality, the ontology, is fundamentally different. But Einstein's theory did reproduce all corroborated results of the Newtonian theory of gravity, while it also offered an explanation of an anomaly—something that until then did not seem to fit, about the observed orbit of the planet Mercury. It also resulted in new predictions, for example, on the way light might be bent by heavy objects, a prediction tested a few years later during a solar eclipse. And by now, Einstein's theory is relevant in our technology; the Global Positioning System would not work correctly if this theory would not be taken into account.

Missing muons are a puzzle, for now. Science does not know the answer, yet. Above, possible resolutions were alluded to: more experiments improving the data; checking the experimental set-up and the calculations, expanding the model or a more radical revision. Some other responses are not available to the scientists. In the light of an anomaly, they will not conclude that nature is incoherent, and abandon the scientific effort to understand. Nor will they explain the shortage of muons as the result of magic, by someone, somewhere, who is out to challenge them. They assume that the observations, if corroborated, provide insight into reality.

This is an example of *methodological naturalism*—assuming that unexpected and as yet unexplained results will be integrated in the scientific understanding of reality, either by improved calculations with current theories, by paying attention to some of the initial conditions or boundary conditions that may have been neglected, or by modifying the theories themselves (Perry and Ritchie 2018). The physical sciences are naturalistic. This has a methodological side to it; future explanations may draw only on natural factors. And it has an ontological side; we approach reality as a coherent whole, assuming observations and experiments to provide insight into reality. However, such ontological insight is provisional. Future theories may have rather different ontologies, as happened when we moved from Newtonian to Einsteinian ideas about gravity.

In the sphere of the life sciences, we may need concepts that do not belong to the vocabulary of fundamental physics (emergence), but we find that these phenomena are realized by physical processes (reduction). Science-inspired naturalism need not claim that the language of physics is adequate at all levels of reality. Certain phenomena may appear to be challenging evolutionary explanations, as they seem to require foresight. Such were the examples pushed by advocates of Intelligent Design. But apparent exceptions have been addressed, and they all seem to be explainable.

We, humans, are no exception to the natural world either. John Dewey (1934, 3, also quoted in Drees 1996, 1) used mountains as an analogy.

Mountain peaks do not flow unsupported; they do not even rest upon the earth. They *are* the earth in one of its manifest operations.

Our mental and cultural life, made possible by our brains and our social environments, reveal possibilities of the natural world. Matter, properly organized, has been Isaac Newton and Albert Einstein, Henrik Ibsen and Rembrandt van Rijn, Siddhārtha Gautama, Jesus of Nazareth, Muḥammad ibn ʿAbdullāh, and all those other women and men, who have contributed, significantly or modestly, to our intellectual, cultural, and religious history. A science-inspired naturalist can appreciate epithets such as the Buddha, the Christ, or the Prophet as honorific titles, given by humans. However, these terms do not set those persons apart from the human community.

There is no scientific reason to set humans apart from the natural world. A dualism of a natural body and a nonnatural soul runs into many difficulties. It is more adequate to understand language about the soul as language

about important facets of human existence. Human phenomena such as individual consciousness and collective culture arise in complex organizations. Some argue that consciousness is such that it cannot emerge, and hence must be a feature of matter all the way down to electrons, quarks, and beyond. Such a panpsychism seems to me not at all helpful in understanding mental phenomena. It does not do justice to our current experience with the layered structure of reality, from physics via chemistry to molecular biology, and within that later sphere the emergence of neurological systems and psychological phenomena. Panpsychism seems to underestimate the potential of the emergence of new forms of behavior out of underlying processes. But if the case for panpsychism were to be strong, that would be an ontological revision of the radical kind alluded to above. The mental would be part of the natural too. This is not an article about the pros and cons of panpsychism. As long as importing a mental dimension into the lower level understanding of reality does not give rise to anti-science stances, it may fit in a science-inspired naturalism.

I want to reflect briefly on a few alternatives to naturalism: interventionism, appeals to divine omnipotence, and empiricism. On miraculous interventions, the Christian philosopher, William Alston wrote thirty years ago:

The odd miracle would not seem to violate anything of importance for science. It would be quite a coincidence if a miracle should be among the minute proportion of cases of X that are examined for scientific purposes. (1991, 244; Drees 1996, 94)

Conservation of energy is a successful scientific idea, but precisely where and when we did not look, God may have intervened, violating conservation of energy. Hidden interventions would not violate any observations, though assuming those would go against the spirit of science—what we discover on day one, we assume to be valid on day two as well.

Rather than appealing to the occasional, undetectable character of interventions, some have appealed to divine omnipotence. In the early seventeenth century, Galileo Galilei was defended the heliocentric model of our solar system as the way things were. Pope Urbanus VIII, who as cardinal Barberini had praised Galileo, had told Galileo in a private visit in 1624 that, given divine omnipotence, God can do things in ways we cannot imagine. Hence, God could have made the world such that it seems to us to be the case that the Earth rotates around the Sun, whereas in reality the Earth is stable at the center of it all. The heliocentric model could at best be presented as a mathematical device, not as the truth. When the pope found his argument in Galileo's book *Dialogue on the Two World Systems* advanced by a figure called *Simplicius*, that did not help Galileo.

Another example, from the nineteenth century: Edmund Gosse argued that God could have created Adam, the first human, with a navel—suggesting that he had had a mother, though there had been none, and hence no umbilical cord. Gosse also envisaged that God might have put fossils in the soil, suggesting an old earth, as a challenge to the faithfulness of the scientists.

Appeals to divine omnipotence or interventions hidden where we did not look, may be logically consistent. However, they undermine science as a practice; if we are fooled, why invest our energy in it. And it undermines the result of science as a coherent understanding of reality. Furthermore, religiously speaking, such strategies undermine a religiously meaningful idea of the Creator, by envisaging God to be dishonest. And such clever strategies may undermine policies that build upon scientific insights, say regarding the causes of diseases and ways to prevent those, and thus increase unnecessarily human suffering.

Rather than suggesting that there are moments when science would be suspended or misleading though apparently true, one might also play down the significance of the scientific understanding of reality. Nicholas Copernicus' 1543 book on the structure of the solar system had a preface that served its acceptance at that time. It presented the heliocentric model as one that would be easier for instrumental purposes than the geocentric one, when doing calculations, but that it was not presented here as true. The preface was anonymous, but has since been discovered to have been by a Lutheran theologian, Andreas Osiander.

Such a modest approach seems to me reasonable. All our models are ways of representing reality, not reality itself. Quantum physics has made many aware that excellent theories may allow for multiple interpretations. Furthermore, our current theories are not the final answer; our ideas about the way the world is, may change. Deep down, beyond the Standard Model of elementary particles, we do not know what reality is like. Thus, a philosophically sound case for empiricism, rather than naturalism, can be made (Van Fraassen 1980, 2002). Rather than science telling us how the world is, the scientific image is one of how the world might be. We should avoid metaphysical overstatement, taking our theories with too much seriousness, and be more modest empiricists, as those theories help us navigate our lives.

I have sympathy for an agnostic, empiricist stance regarding the truth of our scientific insights. But there is a risk involved in playing down current scientific insights. It may have grave social consequences, for example, when doubting or denying the viral basis of AIDS and hence the benefits of antiviral drugs, playing down the causal relationship between smoking and cancer, or the reality of human induced climate change. Such are not merely philosophical issues, they are political issues, as can be uncovered by studying commercial interests and the funding of such research. Naomi Oreskes and Erik Conway (2010) titled their study on such debates: *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues* *from Tobacco Smoke to Global Warming*. Playing down science may also become part of struggles over the interests and identities of particular groups, as exemplified by the symbolic role that anti-evolution ideas have in certain circles (Drees 2008, 2010, 11–38).

Thus, even while we should acknowledge that current science is incomplete and hence that our ideas about the world may be revised in years or centuries to come, it seems wise to take science very seriously. The natural sciences provide a coherent understanding of reality, corroborated by very precise measurements. Science satisfies our thirst for intelligibility, for seeing the world as open to reason. Science also offers an understanding of reality that has allowed for impressive applications. As I see it, we should accept a "science-inspired naturalism," at least as *naturalism about the world*. Such acceptance is not only an intellectual obligation, but also a moral one; we need to draw upon the best available knowledge to serve each other and to counter unnecessary suffering.

Naturalism, as inspired by science, is a philosophical stance. It aligns well with a more general naturalistic orientation in philosophy, the desire to understand reality as a coherent *whole*, a reality that can be understood as "one," despite the multitude of manifestations within it. The assumption is that reality is *rational*, that a coherent understanding is possible. Some take such a philosophical stance *a priori*—Spinoza might be a classic example. Others come to this on the basis of the success of science. For this philosophical stance, one might also use the label *monism*, the conviction that in some deep sense, reality is a coherent and rationally structured whole. It is not chaotic, nor a loose collection of elements.

Monism is intellectually attractive. It aligns well with science. It has a clear sense of priorities—looking for coherence, for the way different facets of reality fit together; not giving up, nor suspending the rules, by adding *ad hoc* nonnaturalistic, miraculous factors to the natural process. But there may be also concerns about whether one should to expand the scope of naturalism beyond the science-inspired naturalism defended so far. Which brings us to the second part of this contribution.

What Else? Challenges to All-Encompassing Naturalism

Science-inspired naturalism is the view that all events in the world can be understood along the lines of science or future science. Assuming this to be convincing, a subsequent question is whether such a naturalism covers everything. Perhaps, naturalism might not be all. I will discuss this thesis in four steps. First, three philosophically interesting issues seem not to be covered, as these are not about empirical reality as studied by science: mathematics, morality, and the mystery of ultimate origins. Second, there seems to be a fundamental dualism in anthropology, between a third person perspective, an outsider perspective, and a first-person perspective, an insider perspective. Third, we are involved with particular persons and causes; alongside universal moral principles, we are driven by "reasons of love." Hence, there is a case for social and political pluralism. Fourth, naturalism seems to be too optimistic with respect to evil, suffering and meaninglessness.

Categorically different seem to be a few issues on which science-inspired naturalism need not pronounce. *Mathematics* is a major example. Pure circles and triangles do not exist in the world as experienced. Nonetheless, we have knowledge of the properties of such objects. Genealogically, mathematics might be understood as the limiting case of abstract reasoning that begins with measuring and counting. Whatever its temporal origins, in the process of abstraction, mathematics has become a sphere of its own. Empirical research may inspire mathematical insight, but mathematical ideas form a conceptual landscape that is not given to scientific research. Mathematicians test ideas by looking for internal consistency, the "pen and paper" of calculations, while physicists test against the real world.

Morality is categorically different too. All social behavior is an appropriate object of empirical scientific study, including our habit of judging behavior as moral or immoral. But the judgment itself is not *justified* via observations. Moral judgments are social facts, but their morality seems to be of a different kind. The eighteenth-century philosopher David Hume spoke of the distinction between "is" and "ought." Descriptions are not thereby prescriptions; the two belong to different categories. Immanuel Kant developed this as a fundamental distinction between theoretical reason and practical reason, between science and ethics. A science-inspired naturalist need not be a philosophical naturalist with respect to mathematical entities or normative standards. In light of such challenges to scientific naturalism, Mario De Caro and David Macarthur (2010, 9-16; also 2004, 13-17) have spoken of "liberal naturalism" in their introduction to *Naturalism and Normativity*.

Categorically different is also *the mystery of existence*, the persistence of mystery about ultimate origins. If one wants to predict the weather for tomorrow, one begins with the weather today, and calculates how it is expected to develop. The weather of an earlier day is assumed, as are the laws. Of course, those earlier realities may be traced to realities that are in a farther distant past, and the laws embedded in meteorological models may be traced back to more fundamental laws. But this is like a horizon; it recedes but does not disappear. Furthermore, any understanding of reality assumes alongside the existence of reality also certain concepts. In his *Critique of Pure Reason*, Immanuel Kant (1997) called such categorical assumptions about space and time, causality, and substance, "transcendental." Scientific explanations need something that exists to work with, something itself not explained in that explanation, while existence is not given just by theories, by ideas. The question "Why is there something, rather than nothing?" is

not one that a scientist, or a science-inspired naturalist, can answer within the context of his understanding of science.

Thus, there seems to be various dualisms that are persistent, about the coexistence of physics and mathematics as reality and ideas, of science and morality as is and ought, and of theories of physics and physical existence. There seem to be domains of philosophical reflection about reality that are not handled adequately by a science-inspired naturalism.

Humans can be studied scientifically. They are no exception to reality. That was part of the case for science-inspired naturalism, the first part of this contribution. But still, there is something about us as humans who study humans that is exceptional: we are both the object of study and the subjects who study. We are objects of study: There is a meaningful descriptive and analytical discourse about humans, just as there is in zoology or botany about other organisms. In terms of the grammar of language, this is a *third-person* perspective, about "them." But we are also subjects, those who study humans or anything else. And we are subjects when we act, for reasons. Grammatically speaking, there is a *first-person* perspective, an "I," alongside the objectifying third person perspective, "they."

Above, I mentioned the late eighteenth-century philosopher Immanuel Kant. His Critique of Pure Reason, originally from 1781, considers the conditions for the development of knowledge of reality. In that context, determinism is assumed. When explaining phenomena, we assume natural laws to be valid. A few years later, Kant published his Critique of Practical Reason. "Practical" is not necessarily practical. Calling it "practical philosophy" means that this branch of philosophy reflects on practices, on humans as actors, and in particular on morality, the ideas that should guide our actions. In this context, a basic assumption is human freedom; we are free to act in ways guided by reason, by the moral law, rather than puppets whose actions are determined by natural laws and environmental conditions. The distinction between theoretical reason, that treats humans as elements in the natural world, and practical reasons, that considers ourselves as actors in the world, is fundamental to philosophical anthropology. In the context of science, theoretical reason, we are naturalists, but upon a Kantian perspective, we must be "idealists," driven by reason, when we are moral actors.

Let me introduce two more recent German philosophers, who are also of some interest on this topic, the coexistence of two perspectives. A collection of philosophical essays by Jürgen Habermas has been published in English as *Between Naturalism and Religion*. The essay "Freedom and determinism," his Kyoto prize address, contrasts a neurological study of human action and our self-understanding. "In everyday life, we cannot avoid provisionally attributing responsible authorship for our actions to one another. The prospect of our actions being explained scientifically by means of natural laws cannot seriously challenge our intuitively anchored understanding of ourselves as accountable agents that is confirmed by practice" (2008, 152). Habermas defends a "perspectival dualism, which is itself compatible with a monistic view of natural evolution" (153). Voices such as those of Habermas are not in direct conflict with naturalism, but they do point to a more dualistic anthropological discourse.

More science-like seems to be Helmuth Plessner's Levels of Organic Life and the Human: An Introduction to Philosophical Anthropology (2019 in English; 1928 in German). Plessner introduces his own conceptual language to speak of the particular richness of the human experience of the world, and with that of human agency, as a possibility within natural reality. As a first step, one might say that each living organism is characterized by a metabolism, taking food in and pushing waste out, and with that by a permeable boundary between inside and outside. Thus, with life there arises an inner world, while the organism is within its outer world, its environment. Such a *positionality* becomes a characteristic of life. This works out differently for different kinds of organisms. Schematically, Plessner distinguishes plants, animals, and humans. Plants have no center that coordinates actions, and hence no relationship to their own positionality. Animals are aware of their environment and their own position in it as they move around; they have a *centric* positionality. Thus, for an animal one might say that it has a body, while it also is that body. With humans, a further step is made with the emergence of self-awareness, awareness of one's own center, and of the possibility that one could have been at a different place or time. Humans not only have experiences, but they also experience that they have experiences. Plessner speaks of persons as having an *ex-centric* positionality, given their ability to engage in self-reflection, to consider their own actions as if from an external perspective. And in this self-reflective process as ex-centric beings, we also encounter others, and hence participate in a shared historical, cultural, and social world. We are products of this shared world that precedes us and shapes us, but we are also its creators. Plessner's imagery and language, is just one conceptual vocabulary for philosophical anthropology; others have done it differently. They offer naturalistic ways of describing and explaining the personal character of existence.

Both ethics and science-inspired naturalism reflect key ideas from the European Enlightenment. At the end of his *Critique of Practical Reason*, originally from 1788, Immanuel Kant wrote of two awe-inspiring themes: our knowledge of nature and our awareness of moral obligations. Those lines have been inscribed on his grave in Königsberg, now Kaliningrad.

Two things fill the mind with ever new and increasing admiration and reverence, the more often and more steadily one reflects on them: *the starry heavens above me and the moral law within me*.

The starry heavens: The natural world about which we have been able to discover so much. We discovered laws of nature, regularities that are the same everywhere and for everyone, whether one is in Japan, in Europe, or in Africa, or even on the Moon. The sciences are a great model of universality and of cross-cultural collaboration and comprehension. The moral law within me: the basis for our duties, located in the person but also reasonable and hence valid for all. Modern aspirations include knowledge and moral values that are universal. The natural sciences, dealing with "the starry heavens above," are an extremely successful global phenomenon. Moral claims articulated as universal human rights have been attractive in their global appeal, though in practice, we have fallen short of their ambitions, at first with respect to the position of women and of slaves, and in our time still too often with respect to persons with other backgrounds. Nonetheless, I consider universal aspirations with respect to knowledge and morality indicative of deep values. The passage cited speaks of the heavens above and the moral law within.

The emphasis on *universality* does not work equally well in all domains of life. The dream of a universal language such as Esperanto, a language that would not be the language of any particular culture, failed. So too has the desire to create a religion of humanity acceptable to all, such as universal Sufism and Baha'ism. Each time, such languages and religions became one more alongside others. Rightly so; some ambitions are too ambitious to live by. Humans are diverse in their ways of living, and such diversity is to be appreciated.

Particulars are the material of human identities. Identities, whether religiously articulated, defined by citizenship, skin color, political preferences, family relationships, or other features, can be considered human constructions. This does not deny their reality, as constructions can be very real. Identities are constructions. The philosopher Kwame Anthony Appiah (2018) gave a book on identities the title *The Lies that Bind: Rethinking* Identity. Identities relate to our understanding of reality and to our values, but also to the heritage that formed us, the repertoire of stories that we use to educate and motivate, the music that moves us, the language, rituals, and symbols we might use, the ways in which we dress ourselves. The identities we ascribe to others shape the ways we approach them, the assumptions we bring with us when we encounter them. Thus, identities are about the question with whom we identify, and with whom we are identified. Identities are individual but also communal; they may be religious or secular; they may be historically definite or fluid. They may appear to be more or less given, as gender and race, or defined politically or socially, as nationality and class. As human identities, these all may be contested and shown to be naive, also those initially treated as "naturally given." We have become aware of the social character of the simple binary assumption of two genders, male and female. Even at the biological level,

it is not as simple as it may seem, and the social and cultural expectations associated with the distinction between men and women are clearly those of humans, rather than unavoidably facets of reality. Identities need not be *lies*, as Appiah's title provocatively states, but they are not objective truths either.

Each of us has multiple identities, as humanity can be clustered in various ways—by nationality, by gender, by age, by musical preference, and much else. Identities are labels, and with those labels come ideas about the people to whom a particular label does apply and to whom it does not. It includes and it excludes. An identity provides reasons; as a Hindu, one might prefer not to eat beef; as a Jew or Muslim, pork will be excluded. Identities affect how others treat you; often with solidarity by those who belong "to the same group," sometimes through exclusion by those who have a different identity.

We humans have habits, passions, and convictions, a particular identity or even more than one. And if we consider ourselves not to be overly committed to a particular identity, we might be committed to a liberal, open-minded attitude; this would be an element of who we are. We cannot have a "view from nowhere," to draw on a book title from Thomas Nagel (1986), but always live with a view from now and here.

Not all that is important is universal. A person, a piece of music, or some pursuit, may be important to me. One may be tempted to grant universal values priority over personal concerns. But if moral values always take precedence over other values, there is no end in sight to the moral demand upon us. In a world that still has poverty and injustice, it would be inappropriate to invest any time and energy in creating art, making music, engaging in sports, reading novels, writing books, or attending IRAS conferences. "Moral saints," so the analysis of philosopher Susan Wolf (1982), are missing out on much that makes life interesting.

I want to have my dinner tonight; I am driven by selfish motives. And I am convinced of the moral importance of human rights, for all humans, whether I like them or not. However, I care existentially about my friends, my wife, my children, and grandchildren. Susan Wolf adds in her *Meaning in Life and Why It Matters* (2010, 4) "reasons of love" alongside reasons that would qualify as selfish or as moral.

When I visit my brother in the hospital, or help my friend move, or stay up all night sewing my daughter a Halloween costume, I act neither for egoistic reasons not for moral ones. (...) I act neither out of self-interest nor out of duty or any sort of impersonal or impartial reason. Rather, I act out of love.

My relation to specific persons is important to who I am, even when it is accidental that my life has become interwoven with precisely these fellow humans. So too for certain pursuits that are important to me, pursuits that make me who I am, as a person, a subject and an actor. And for my identity, the language that happens to be my own, the stories that inspire me, the way I celebrate and the way I mourn, the way I relate to my family, and the legacy I received. Such "loves" and other markers of identity are my particular way of being in the world. I do not speak language; I always speak a particular language. Adherents of a religion do not believe in religion; they are involved in particular rituals and stories; they participate in a community and its music. We have to balance two contrasting interests: universal ambitions, in knowledge and morality, and the worthwhile plurality of particular identities and loves. Naturalism seems to favor the universal. That is fine when we deal with science, but would it also be the proper emphasis when we deal with personal orientation? "Religious naturalism" seems to answer this question in the affirmative, but to me, that seems to expect too much of naturalism. Our lives are characterized by valuable forms of *pluralism*.

"Naturalism" focuses on that which is. It may be hard to deal fully, in a naturalistic way, with mathematical truths that in their abstraction appear to be imaginary and with universal norms that surpass empirical reality. But aside of that which is not real but nonetheless of great value, there may also be *that which is real, though it should not be*. The reality of evil, of suffering, of meaninglessness. Traditionally, monotheism has been challenged due to the problem of evil: How can there be evil and suffering in this world, if God is good, all-knowing, and omnipotent? Is there a similar challenge for naturalism? Nature is that which is. Nature is our only source of religious inspiration. Does this leave any basis for a critique of pointless suffering and horrendous evil? Religious naturalism seems to emphasize in particular the awesome, the sublime, the greatness of the cosmic perspective, mediated by the sciences. That might align with a mystical form of religiosity, our sense of belonging in the larger whole. But what about the prophetical, the critical, the antagonistic stance? Are these not equally important elements of a religious stance?

In line with photographs such as Earth Rise and Pale Blue Dot, some authors stress how much we are together in this. One example is *Journey of the Universe*, a film and multimedia project overseen by Mary Evelyn Tucker, a religious studies scholar, and evolutionary cosmologist Brian Swimme. They present scientific information in the form of a grand evolutionary narrative, weaving together scientific knowledge and humanistic concerns, thereby seeking to evoke wonder and a sense of connectedness and responsibility. In doing so, they see this as a science-based creation story for our time, similar to the way the various world religions offer narratives that may help us understand ourselves and frame our responsibility (Tucker, 2019).

The turn toward a new cosmology as a science-based and morally motivating creation stories has been challenged by Lisa Sideris (2017) in her book *Consecrating Science: Wonder, Knowledge and the Natural World.* Although in the new grand narratives wonder seems to be mediated by scientific knowledge—putting scientists in a priestly role—, Sideris prefers to envisage wonder as rooted in immediate personal experiences, in all their diversity—Rachel Carson is her inspiration. As Sideris sees it, Tucker seeks to "tell a convincing story" as people want big stories. In doing so, she draws on her knowledge, on science and on the world religions to offer myths and metaphors, images and poetry that may inspire to promote ecological consciousness. In contrast to such a use of human traditions as resources, Sideris positions the humanities as critical discourse, as posing questions, as challenging the visionary discourse. A critical engagement that is also typical of the humanities. In religious terms, she gives priority to prophetic voices rather than priestly ones. According to Sideris, Tucker "insists that the worldview at the heart of the *Journey* is not anthropocentric but what she calls anthropocosmic. Anthropocosmism is defined by Tucker in this form as the understanding of 'the human as that being who completes the cosmos (my [Sideris] emphasis). ... This sounds awfully grandiose. ... Anthropocosmism, then, is no garden variety anthropocentrism. It is anthropocentrism on steroids." (Sideris, 2019, 446).

The anthropologist Clifford Geertz (1966) distinguished between "models *of* the world" and "models *for* the world," between a worldview and an ethos. In religions, those are intertwined, whereas philosophically, those are distinct—and science as it professionally developed in the last two centuries with great success, has aligned itself with philosophy in this respect. In the grand narrative, science is used to offer moral orientation and motivation. It grants humans a prominent place in the cosmic scheme. To speak of it as a journey, gives it coherence and focus, even a sense of a destiny. Does this not overdo the marginal role of humans, the contingent nature of evolutionary development? Does it not close the eyes for the absence of a promised land where we will arrive one day? I wonder whether religious naturalism, by anchoring its overarching story in a naturalistic understanding of reality, is not asking more—in terms of human meaning and morality—of the scientific image than it can ever provide.

A brief recapitulation. When we are in the sphere were science is our best guide, a naturalistic emphasis on science is convincing and valuable. But is naturalism the most satisfactory view in all domains of life? Here, I suggest that mathematics, values, and the limit questions about ultimate origins are not addressed thereby. Besides, naturalism seems to pass by the two perspectives that characterize human existence, as subjects and objects. And it seems to give precedence to that which is common to all, to universal aspects of existence, though we live particular lives and have particular loves. Last but not least, it might risk being too optimistic about the cosmic journey and its relevance for humans. This brings me to the concluding part of this article, "When to Be What?"

WHEN TO BE WHAT?

Modern science is remarkably successful. Not only is scientific knowledge instrumentally remarkably useful, but the understanding of nature it offers is also convincing in its coherence. When challenges arise, scientists use the tool box of science-improving measurements and calculations, looking for neglected factors, and in the end also developing further basic theories-to address anomalies. There are theories that are wellconsolidated at their own level of application. For instance, for chemistry as we know it, the Periodic Table is beyond doubt. If we ever were to encounter alien scientists, I expect that they have a similar understanding of chemical substances at that level. But deep down, we do not know what matter is. And complex systems may need different concepts. Our knowledge is not complete, nor will it ever be. Though unfinished—justifying an agnostic stance on the nature of nature—, a science-inspired naturalism is the most convincing view of reality. As such, it should inform policyin public health, in climate policy, and all such domains where policy has to relate to the way things are.

Philosophically and anthropologically, science-inspired naturalism might not be sufficient. There are limit questions, about ultimate origins or the nature of substance and the character of regularities "deep down." There are important facets of human reflection, in particular mathematics and ethics, that are not the fruit of empirical and experimental research, but of abstract reflection. Thus, various dualisms might be worth maintaining, such as the one of "is" and "ought," the one between physical reality and pure mathematics, the one between theories and existence. Anthropologically, we understand ourselves, our own point of view, "from the inside," as our own. The distinction between me and the world, between the subject and the object, challenges us to recognize the coexistence of a naturalistic understanding of reality and of our self-understanding as subjects, authors of our actions. If naturalism is liberal enough to incorporate such dualisms, it goes beyond the science-inspired naturalism that relies solely upon science. Such a liberal naturalism becomes an encompassing philosophical scheme that gives up some of the clarity and sharpness of a more harsh "scientistic" naturalism.

Naturalism seems to aspire to be an encompassing view of reality, within which all inhabitants of the vast zoo of organisms, practices and beliefs have their place. In that sense, it might be considered as pretentious as religious traditions that incorporated all in their scheme, including nonbelievers—as anonymous believers or as heathens, as lost tribes or lost people. But those others need not see their situation that way. Just as there are multiple languages, that do not translate one-toone into each other but offer different ways of being in the world, so too are there multiple worldviews and life orientations, and individual variants of those. In living together, one has to deal with such a plurality, without subsuming it under one's own view. In living together, the aim is not conversion—having the others adopt my point of view—but coexistence. That requires a deliberative democratic public sphere, a willingness to work together and compromise. "Politics," in the respectable sense of living together and managing together our affairs, is not a matter of theoretical reason—where the discussion of naturalism is at home—but one of practical reason.

Existentially, multiple stances are possible, such as *faith*, trust in the ultimate meaningfulness of reality, and as nihilism and indifference. "Faith" is not used here to refer to a confessional stance, as "belief that ...," but as trust, as an affective attitude. William James (1902) in his Varieties of Religious Experience defined religion as "the feelings, acts, and experiences of individual men in their solitude, so far as they apprehend themselves to stand in relation to whatever they may consider the divine." Think of those seven persons on the raft. They do not necessarily differ in knowledge, but they do relate rather differently to their situation.

In the end, I consider myself an agnostic on ultimate metaphysical issues, the ground of values and of existence; I do not think that we can reach that high. If religious naturalists are eager to distance themselves from any form of theism, with the grand distinction between reality as created order and the creator as the ground of that created order, they do not position themselves as agnostic, but rather as people who know that there is no such ground. I find a kind of naturalistic theism a genuine possibility, philosophically and personally, but equally under the verdict of "not proven" (Drees, 2006, 116f). As I see it, for all practical purposes it is wise to take a science-inspired naturalistic stance in daily life, for instance when one needs medical assistance. I consider Kantian constructivism our best hope when it comes to a philosophical justification of values. And I appreciate the motivating power of traditional religious narratives that integrate ethos and worldview, and especially some of the Christian parables and hymns that have stayed with me from my liberal protestant upbringing, and the communities that sustain such orientations (Drees, 2020).

Acknowledgments

A version of this article was presented online at the Sixty-Sixth Annual Summer Conference of the Institute on Religion in an Age of Science (IRAS) entitled "Naturalism: *As* Religion, *Within* Religions, or *Without* Religion?" held at Star Island, New Hampshire, from June 27 to July 3, 2021.

References

- Alston, William P. 1991. *Perceiving God: The Epistemology of Religious Experience*. Ithaca, NY: Cornell University Press.
- Appiah, Kwame Anthony. 2018. The Lies that Bind: Rethinking Identity. London: Profile Books.
- De Caro, Mario, and David Macarthur, eds. 2004. *Naturalism in Question*. Cambridge, MA: Harvard University Press.
 - . 2010. Naturalism and Normativity. New York: Columbia University Press.
- Dewey, John. 1934. Art as Experience. London: Allen & Unwin.
- Drees, Willem B. 1996. *Religion, Science and Naturalism.* Cambridge: Cambridge University Press.
- ———. 2006. "Religious Naturalism and Science." In *The Oxford Handbook of Religion and Science*, edited by Philip Clayton and Zachary Simpson, 108–23. Oxford: Oxford University Press.
 - —. 2008. "Academic Freedom and the Symbolic Significance of Evolution." In *The Study of Religion and the Training of Muslim Clergy in Europe: Academic and Religious Freedom in the 21st Century*, edited by Willem B. Drees and Pieter Sjoerd van Koningsveld, 59–90. Leiden: Leiden University Press.
- _____. 2010. Religion and Science in Context: A Guide to the Debates. London: Routledge.
- 2020. "Why I Am a Science-Inspired Naturalist, But Not a Philosophical Naturalist Nor a Religious Naturalist." In *Issues in Science and Theology: Nature and Beyond. Transcendence and Immanence in Science and Theology*, edited by Michael Fuller, Dirk Evers, Anne Runehov, Knut-Willy Saether, and Bernard Michollet, 31–37. Cham, Switzerland: Springer.
- Fowles, John. 1980. The Aristos. Revised edition. Falmouth: Triad/Granada.
- Geertz, C. 1966. "Religion as a Cultural System." In Anthropological Approaches to the Study of Religion, edited by M. Banton, 1–46. London: Tavistock. Reprinted in Geertz C. The Interpretation of Cultures. New York: Basic Books.
- Habermas, Jürgen. 2008. Between Naturalism and Religion: Philosophical Essays. Cambridge: Polity.
- James, William. 1902. Varieties of Religious Experience. New York: Modern Library.
- Kant, Immanuel. 1996. *Practical Philosophy*. Translated and edited by Mary J. Gregor. Cambridge: Cambridge University Press.
 - ——. 1997. *Critique of Pure Reason*. Translated and edited by Paul Guyer and Allen W. Wood. Cambridge: Cambridge University Press.
- Nagel, Thomas. 1986. The View from Nowhere. Oxford: Oxford University Press.
- Oreskes, Naomi, and Erik M. Conway. 2010. Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming. New York: Bloomsbury.
- Perry, John, and Sarah Lane Ritchie. 2018. "Magnets, Magic, and Other Anomalies: In Defense of Methodological Naturalism." Zygon: Journal of Religion and Science 53:1064–93.
- Plessner, Helmuth. [1928] 2019. Levels of Organic Life and the Human: An Introduction to Philosophical Anthropology. New York: Fordham University Press.
- Sideris, Lisa H. 2017. Consecrating Science: Wonder, Knowledge, and the Natural World. Oakland, CA: University of California Press.
- 2019. "Wonder Sustained: A Reply to Critics." Zygon: Journal of Religion and Science 54:426-53.
- Tucker, Mary-Evelyn. 2019. "Journey of the Universe: Weaving Science with the Humanities." Zygon: Journal of Religion and Science 54:409–25.
- Van Fraassen, Bas C. 1980. The Scientific Image. Oxford: Oxford University Press.
- . 2002. The Empirical Stance. New Haven, CT: Yale University Press.
- Wolf, Susan. 1982. "Moral Saints." *Journal of Philosophy* 79: 419–39. Reprinted in Wolf, Susan. 2015. *The Variety of Values: Essays on Morality, Meaning, and Love*. Oxford: Oxford University Press, 11–29.
 - . 2010. Meaning in Life and Why It Matters. Princeton, NJ: Princeton University Press.