Of Facts, Values, and Other Modern Myths: Can Scientific Naturalism Explain Ethics?

Introduction

We live in a time in which it simply is taken for granted that science gives us knowledge of the facts of reality, but disciplines like ethics, religion, and, perhaps to some, even the rest of the humanities, give us just personal preferences, values and opinions. This, of course, is commonly known as the fact-value split. If taken in a strong sense, science uniquely gives us knowledge of the facts, which is called strong scientism. Alternatively, ethics, religion, etc., may give us a kind of knowledge, but it is of a vastly inferior sort to that of science; call this view weak scientism.

Now, while the fact-value split seems as ubiquitous in western cultures as the air we breathe, it is not the way things always have been. Roughly speaking, until the Enlightenment, ethics was seen as a domain of knowledge. But the fact-value split arose in light of a series of historical and philosophical moves made in our past. For example, the universe came to seen as a closed, mechanistic, and material system. Science also came to be seen as the pinnacle of the disciplines, such that theology too was to be done scientifically with an empirical method. But the stress on empirical knowledge was further restricted with the rise of empiricism, especially through David Hume and Immanuel Kant, and science also was given philosophical justification as the unique set of disciplines that gives us knowledge of facts.

Empiricism is more restrictive than empirical knowledge, limiting all knowledge to what comes by way of the five senses. So, by drawing upon his empiricism, Kant taught us that we cannot know things as they are in themselves (which he called the noumena), but only as they appear to us (the phenomena). So, all we could really know was limited to what we can
experience with the senses. While Kant did not intend to relegate ethics to the realm of the personal and private, nevertheless historically that is how ethics and religion, including God’s existence, came to be viewed, as things we’d have to act as if these things were real - but we could not know them to be so.

But due to the ascendancy of Darwinian evolutionary thought, the split now presupposes today’s scientific orthodoxy, which must be naturalistic. Now, naturalism, a philosophical view of the nature of reality, is the claim that all that exists is the natural (which usually is explained in terms of the physical); there is no supernatural, immaterial stuff. But, strictly speaking, scientists themselves do not have to be naturalists in this sense; they could be religious believers. But in terms of the practice of science, they must be methodologically naturalistic. Nevertheless, scientific claims drawn from an orthodox, naturalistic perspective must bracket (or deny the existence of) any immaterial entities or agents, including human souls; mental states such as thoughts, beliefs, or experiences used as observations; and of course God.

And, until the Enlightenment, generally people considered moral principles and virtues to be immaterial kinds of things, but thereafter they had to be reconceived as some other kind of thing, usually as something that could be experienced by the five senses and/or explicable as physical kinds of things. But perhaps this move should be reconsidered, for a number of reasons. For one, can we adequately account for some core morals we seem to know are true if they are nothing but these kinds of things? For another, though the fact-value split is one of our most deeply held assumptions, is it in fact true? For instance, how we know something seems to depend upon the kind of thing something is. We do not come to know the anatomy of a dog merely by abstract theorizing about it. Nor do we come to know what a person really is like merely by performing scans of that person’s brain. While it is true as a descriptive matter of fact
that science has given us much knowledge of reality and thus much resulting technology, is it possible to have such knowledge if what naturalism says is real is in fact real?

Despite numerous alternatives about the nature of morals proposed after the fact-value split and by naturalists (e.g., that morality is a matter of behavior; morals are just a biological adaptation; and more), I will argue that naturalism utterly lacks the ontology to make sense of some core ethical principles and virtues we all seem to know to be true, even real. But that is not all; I also will argue that the fact-value split is false – that if naturalism is true, we cannot know anything (even in science, business, etc.). But, we do in fact know many things, whether that be in science, business, and even ethics, and so both the fact-value split and naturalism must be false. But that means a radically different worldview, and ontology (i.e., view of the nature of what is real), must be true. To start, I will survey the various, major developments in ethics in the west that brought us to our naturalistic versions, and then I will focus on these issues with naturalism and ethics, and the fact-value split.

A Brief History of Ethics after the Medieval Era

While it is a generalization, nevertheless there are discernable patterns in ethics before the Enlightenment. These can be seen, for example, in the biblical authors, Plato, Aristotle, Augustine, the Islamic philosophers, such as Avicenna and Averroes, the Jewish philosopher Maimonides, Aquinas, and even Luther and Calvin. Even though they differed in particulars, they still continued to develop the view in ethics we can have knowledge of objective truth. Moral principles and virtues were seen as being objectively real. They also were understood to be universally valid, and epistemically, they could be known as such, though they differed over special revelation. Generally, they were seen as transcending us and were not human products.
There also was another pattern, although some deviated in various ways. In terms of what kind of thing morals and human beings are, they generally agreed that morals are immaterial things. Moreover, they also seemed to be *universals* – that is, the one and the same virtue or principle could be multiply instanced. This is how they tended to explain that justice, for example, is one thing, yet could be present in many people. Moreover, humans were a unity of both material and immaterial aspects, with an *essential, immaterial nature* to them, which often was called the soul. Humans could have various kinds of properties present in them, such as body parts, yet also immaterial ones, like thoughts, beliefs, moral and intellectual virtues, etc.

But as we started to shift into the Enlightenment, there were a number of key shifts that took place, both metaphysically and epistemologically and therefore also morally. For example, Thomas Hobbes wrote during the English Civil War, and he was deeply influenced by the ideas of the times, such as: 1) we may know things, even universal truths, by unaided human reason (a view called *rationalism*); 2) all knowledge comes by way of the five senses (*empiricism*); and 3) human beings are mechanisms, or matter in motion. Hobbes departs from the general ancient and medieval view that there are real, immaterial souls, morals, and other essences.

On these kinds of views, morals would have to be construed in some other way than generally they had been in the ancient and medieval times. So Hobbes proposed that *bodily motions* toward something were good, whereas motions away were bad. Such a focus fit well with his empiricism and mechanistic views. Influenced by his times, he also emphasized the importance of human reason as adequate to know various “natural laws” (which he understood, not as the medievals or ancients, but as maxims for action) and to reason how to form a basis for morality and society, by agreeing to a social contract that established a sovereign ruler (a
Leviathan) who would legislate for the good of his people. But there were no moral laws apart from the contract; morals started to become what human beings would develop.

Following Hobbes, Hume pushed empiricism for greater consistency. If all knowledge comes by way of the senses, then there are no knowable immaterial entities. In fact, he thought that all we experience are discrete, particular sense impressions – like, a particular color patch; a specific smell; a particular shape; etc. For him, “Nothing is ever really present to the mind, besides its own perceptions.”¹ In experience, there is a flux of many particular sense impressions, but not wholes like people, desks, or trees. Moreover, there are no two sense impressions (or anything else) that are identical; everything is particular, for that is all that is experienced by the senses. We cannot see identities themselves with our eyes. Why? For two things to be identical, they would have to have all their features, or properties, in common. For the ancients and many medievals, this could be solved by appealing to metaphysically abstract universals (i.e., things that are one kind of thing, but they themselves are not located in space and time; yet, their many instances are spatially and temporally located). For them, there is the number five itself, which would be immaterial, but there can be many instances of it in sense-perceptible symbols written on paper, such as the numeral 5 written out many times. All these numerals have the number five (itself) in common, making them identical in that respect.

But if we cannot sense an immaterial universal, then we cannot know it on empiricism. And, being consistent, Hume held that any so-called identities are just our projections.² Instead, literally everything is particular. So, Hume was a nominalist.

Since morals cannot be empirically knowable for him, they must be something of an entirely different kind. For him, morality is not subject to reason. Reason deals with relations of

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² These are products of the imagination.
ideas, and matters of fact. Still, reason cannot tell us what is moral or move us to action. The prospects of pleasure or pain move us, and reason is powerless to incite or move us to action. Thus, *facts are distinct from morals*. However, reason can help us determine how to achieve what we want. Therefore, *reason is slave of the passions.*

What is the consequence of his view for what morals are, metaphysically? First, morality is not something propositional. While sentences are empirically knowable, their content, propositions, are not. Thus, the contents of moral principles (e.g., murder is wrong) are not items of knowledge. Nor are morals knowable as immaterial entities (e.g., universals). As such, morals are not a subject of rationality.

Second, however, for Hume what is key for morality is the *moral sense*, that is, sentiment, or feeling, which seems to be what makes an action moral or not. If we follow his empiricism consistently, all sense impressions are discrete. Thus, I may have some particular feeling for wanting something, but another person may have a specific feeling for something else. They are discrete feelings and passions of a given individual. Hence, these moral sentiments become highly individualistic.

Kant tried to rebut Hume’s moral theory, as well as the skepticism that arises from his epistemology. Kant conceived of morals as being necessary and valid independently of experience. They are commands that are universal absolutes. But, that meant they could not be part of the empirically known phenomenal realm, in which things constantly change. Instead, they had to be part of the noumenal realm, of things as they really are in themselves, which he thought of as unchanging and valid independently of experience, consequences, or our desires.

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4 Hume’s views seem to be like a kind of *emotivism*. On such a view, moral statements would be just expressions of feelings and therefore cannot be true or false. Thus, they do not have cognitive content – they are *non-cognitive*. Moreover, morality is highly individualistic, at least from what we have seen thus far.
But as an empiricist, he also did not think we could know universal truths or immaterial things; so he too thought all that we experience is particular. He too was a nominalist.

If we cannot sense morals empirically, but they are real, what kind of thing are they for Kant? Morals are universal maxims that we autonomously self-legislate. That is, we are to will that which would be universally the case for all people. But morals are not universals metaphysically, nor do they exist in a mind-independent way. They are our constructs, or products, which we will to apply to all people.

After Kant, people continued in the empiricist trajectory. Historically, the utilitarians, such as Jeremy Bentham and John Stuart Mill, arose to prominence then. They applied empiricism to observing the consequences of actions to determine their morality. Following Mill, we should do the action that maximizes the greatest good for the greatest number, which he thought we could know empirically. Since there are no knowable essences, there are no actions that are intrinsically right or wrong; their moral status depends upon the results of a utilitarian calculation.

But after Darwin published his *Origin of the Species*, people seemingly no longer needed God to explain nature or even morality. With the application of evolutionary, naturalistic thought to a number of fields, naturalism became the universities’ dominant paradigm. This has led to a variety of attempts to explain ethics in naturalistic ways. Yet, they all hold a rejection of any real, intrinsically valid moral facts or properties, because there are no essential natures.

For example, some naturalists, like A.J. Ayer, are noncognitivists; they think there is no cognitive content to morals, so moral statements are neither true nor false, and thus there is no moral knowledge. For Ayer, moral statements simply express our feelings about something, like “hurray, justice!” Another noncognitivist, Simon Blackburn, embraces quasi-realism, which is an
anti-metaphysical, linguistic thesis that seeks to “‘earn the right’ for moral discourse to enjoy all the trappings of realist talk,” including truth predicates in moral sentences. From the surface grammar of such sentences, they may be considered to be (or, treated as) true or false. Such sentences mimic moral realist assertions, yet do not really mean the same thing. The focus here is completely on moral discourse (a linguistic emphasis) and not about a moral property being instanced in some action (which would be a metaphysical focus) - for they are not real.

Blackburn also clearly expresses a problem for naturalistic ethics of any kind: “The problem is one of finding room for ethics, or placing ethics within the disenchanted, non-ethical order which we inhabit, and of which we are a part.”

Other naturalists are moral cognitivists, who affirm that there is cognitive content to moral statements. They are truth-apt; but, cognitivists differ about the object that the content describes. They may convey information about the speaker (subjectivist theories), or they may state facts about (a) moral acts themselves, or (b) objects that are said to have moral value (objectivist theories). There are two main subjectivist options: 1) on private subjectivism, we can reductively paraphrase a moral statement as simply stating the likes and dislikes of a speaker (e.g., “murder is wrong” means “I dislike murder”). 2) On cultural relativism, a moral statement just conveys a sociological fact that in some cultural, the people like (or dislike) some action or object. Yet, subjectivism has an obvious, general problem – such views reduce normative claims to descriptive ones, thereby not being adequate in terms of the meaning of moral statements.

Now, consider objectivist theories. On ethical naturalism, moral statements are about facts about (1) objects thought to have moral value, or (2) moral acts. On it, we can reduce moral

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7 Ibid., 400.
terms to natural properties, so that morals are located in space and time. Here I will look at two examples of ethical naturalists.

First, Michael Martin endorses a kind of objective morality. In general, on ethical naturalism, moral properties or facts are reducible to just scientific kinds of properties that we can study empirically, such as what most people desire. The laws of chemistry and physics can describe them, since mechanistic causation can explain them. On the other hand, if morals are emergent properties that depend completely for their existence on the physical, they still are just by-products of the chance arrangement of matter. Thus, though we have thought that moral principles, such as murder is wrong, are intrinsically wrong, they really are nothing of the sort. It just so happens that these moral principles emerged from matter, but conceivably, a different arrangement of matter would have yielded different (if any) morals.

Thus, we can reduce what is moral to things like biological, psychological, sociological, or scientifically measurable explanations. Consider the proposition that \( x \) is morally right. Maybe rightness is a statistical result; e.g., what most people approve. We would conduct a survey and find out what in fact most people do approve, and, by definition, that is what is right. Other possible reductive paraphrases of \( x \) is right might include 1) what most people desire; 2) what an impartial observer approves; 3) what maximizes desire or interest; or 4) what furthers survival.

Consider the first reduction. Maybe most people desire the absence of pain and the presence of pleasure. We would try to define these qualities physiologically, so we can measure them scientifically. Perhaps these qualities are certain heart rates, or the absence (or presence) of certain impulses in the nervous system. Pleasure might be the eating a steak and saying, "Umm – good!" Or, we could define the presence of pain as saying "ouch!" after being stuck with a pin.

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Second, there are the Cornell Realists such as Richard Boyd, Nicholas Sturgeon, and David Brink. On their view, all observations in science, ethics, and other fields are theory-laden and confirmed in light of their relationship to the whole body of beliefs and observations we have (i.e., a kind of conformational holism). Our ethical beliefs are justified in light of their coherence with our whole body of beliefs. Still, such holism and coherentism need not lead to a thoroughgoing anti-realism; rather, just as in scientific reasoning, “if there are grounds to believe moral reasoning starts out approximately true, we can legitimately view the presupposition-heavy method of reflective equilibrium as one of discovery and not merely construction.”

On their kind of view, there are moral explanations of natural facts, such as that Hitler was morally depraved, or that slavery was wrong. When we make moral judgments, we bring to bear our presupposition-laden background beliefs about morality. Therefore, to assert that there are no moral facts lacks independent rational force against the realist’s web of beliefs. Instead, for the Cornell Realists, our moral beliefs and theories give us approximations to the truth, but not direct access to any intrinsically moral properties (for moral properties are natural properties); they still are made from the standpoint of a particular “web” of beliefs. Thus, on this view, it seems we could have moral knowledge. Yet, consistent with naturalism, such knowledge would not be of some intrinsically moral properties.

There still are some other options for naturalists. For example, there are error theorists like J.L. Mackie, who argued for moral error theory from two arguments – the argument from

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relativity, and the argument from queerness.\textsuperscript{11} The former is based in part upon empirical observations that there are widespread differences in moral views, \textit{and} the best explanation of these is that moral judgments “reflect adherence to and participation in different ways of life.”\textsuperscript{12} The argument from queerness claims that objective moral properties, if real, would be “entities or qualities or relations of a very strange sort, utterly different from anything else in the universe.”\textsuperscript{13} Moreover, to be aware of any such real things would require some unique faculty “utterly different from our ordinary ways of knowing everything else.”\textsuperscript{14}

On moral error theory, we still may \textit{talk} morally.\textsuperscript{15} But we should not forget that when doing so, we are not claiming (at least, consistently) that real moral properties exist. On such a view, there is no \textit{real} moral knowledge, for there is nothing \textit{truly moral} to be known.

Second, Gilbert Harman embraces a kind of constructivism. He seemingly reduces moral facts to facts of nature.\textsuperscript{16} Yet, he does not thereby deny that there are \textit{any} moral facts. Rather, these are mind-dependent constructs we make by ascribing them to relational facts about natural facts related to the aims or goals of persons.

Third, some have embraced sociobiology in regards to ethics, like Michael Ruse, who is a kind of subjectivist. He thinks that the meaning of morality (in moral statements) “is that it is \textit{objective}.”\textsuperscript{17} For him, morality is part of biology, such that we should understand social norms


\textsuperscript{12} Mackie, 36.

\textsuperscript{13} Ibid., 38.

\textsuperscript{14} Ibid.

\textsuperscript{15} Richard Joyce helps defend these ideas.


by their evolutionary emergence.\textsuperscript{18} Moreover, insights from sociobiology have shown us that adaptation is required in action, such that even moral behavior is an adaptation.\textsuperscript{19} Furthermore, social cooperation, which can be a direct result of natural selection, “can be a good biological strategy” in the struggle for survival.\textsuperscript{20} For Ruse, it is a descriptive, biological fact that nature has made us self-centered, but since we have adapted through the “route of sociality, we need a mechanism to make us break through that self-centered nature on many, many occasions.”\textsuperscript{21} That is what morality is – a mechanism that has been selected for cooperative behavior.

Like other naturalists, for him there are no intrinsically moral aspects of reality that exist apart from the natural. Morality and its normative prescriptions are just part of biology. Normative ethics is a “collective illusion of the genes,” which thereby meets the biological purpose of our surviving and reproducing.

To summarize, there were significant shifts in ethics, especially metaphysically and epistemologically, largely after the medieval period ended. These included a shift toward privileging empirical knowledge, which then was transformed into empiricism. Metaphysically, people shifted away from thinking reality is made up of material and immaterial aspects (with universal features such as essential natures, even to morals) to a more mechanistic, materialist ontology, with the concomitant move toward everything being just particular and discrete – that is, nominalism became the default view.\textsuperscript{22}

There are some general insights we may draw from these moves in terms of moral knowledge. First, if all knowledge comes by way of the five senses, then morals as traditionally

\textsuperscript{20} Ibid., 651-52.
\textsuperscript{21} Ibid., 656.
\textsuperscript{22} Of course, Ockham’s nominalism occurred toward the end of the Middle Ages.
conceived (as universal, immaterial, objectively real, essentially moral properties) simply could no longer be known. Second, if everything is made of matter, then there simply is no room for intrinsic moral qualities, for there are no essences; this is a major lesson from Darwin. So it seems morals would need to be some sort of human construct, a way of conceiving or interpreting something physical as moral. Third, if everything is particular, there are no identities; strictly speaking, no two things, regardless of what they are, could be the same, nor could they have the same property in common.

When naturalists speak about morality, often they speak with the authority and prestige of science, such that they uniquely know the truth morally speaking, or at least they have knowledge of a vastly superior sort. This same prestige accompanies their claims about other disciplines and areas of life, too, including religion. However, perhaps we should test their claims to knowledge. After all, just like if there are no intrinsic moral properties, there can be only our conceptions of natural properties as moral, so if there are only natural properties, then it also seems there are no intrinsically mental properties (e.g., beliefs, thoughts, concepts, and experiences) in reality either. In that case, we would be conceiving of natural properties as beliefs, thoughts, and even knowledge.

Yet, the standard definition of knowledge is justified true belief, and without real beliefs (i.e., states that, just due to what they are, are beliefs), it seems we might not have any knowledge whatsoever, a thoroughly perplexing position. Thus, we should see if on naturalism, we could have knowledge about morality and any knowledge period. Also, this conclusion might apply not only to naturalists who are realists about knowledge, but anti-realists as well (such as in philosophy of science). For they too think they can know things (such as that we should embrace their anti-realism).
Can We Have Knowledge if Naturalism is True?

Before I proceed, let me clarify: I am exploring the prospects for our having knowledge if naturalism is right about what is real. This would apply to all disciplines, for we would be working within a reality that is simply physical (or, in some variations, with some emergent mental states that depend for their existence upon the physical). So, my findings would apply not just to philosophy, but just as much to the practice of science, business, and any other endeavor, even the abilities to have interpersonal relationships.

So, as a first argument, if everything that is real is physical, then in principle it is sense perceptible. Now, empirical knowledge (as opposed to empiricism) is a valuable source of knowledge about the real world. How do I know that there is a bottle of water near me on the table? By my sense experiences of it, which justify my belief it is there, and that belief counts as knowledge (justified true belief). Now, in its strong form, scientism holds that only what science tells us is true and reasonable is in fact true and reasonable – and what orthodox science should use is restricted to the empirical and physical, not the metaphysical.

But is it true that all knowledge comes by the five senses? Consider numbers; here are some different ways to represent the number five:

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\text{V} \quad \text{v} \quad 5 \quad \text{“five” “cinco”}
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We can sense these representations, whether they are displayed on my computer monitor, or printed on paper, or said aloud. But, suppose we deleted or erased all of them; would that destroy the number five itself? It does not seem so. Yet, we can know this about the number five.

The same applies to scientific theories and business principles. While we can express them in written or oral forms, which are sense perceptible, they do not seem to be merely physical things. Even if we destroyed all these tokens of a theory, that does not seem to destroy
the theory itself. Moreover, the very same theory can be before multiple peoples’ minds at the same time. Yet, that does not seem possible if everything literally is particular.

Consider too moral principles, like murder is wrong. What if there were no examples of murder now? Or, what if we destroyed all sentences that contain the clause, “murder is wrong”? Would murder still be wrong? It surely seems it would. But if so, it seems that murder’s being wrong is something other than just physical stuff. Likewise, laws of logic (like, the law of noncontradiction) also seem able to be expressed by sense perceptible word tokens, but they are not the same thing as them. They too seem to be non-physical. Yet, we can know these things.

If these things are so, then literally there are more things we can know to be real than meets the eye (or other senses). Empiricism is false. Moreover, strictly speaking, based on these examples, strong scientism cannot be true either, for while we do know these things (numbers, theories, morals, laws of logic), we do not know them by empirical means. Strong scientism cannot be true for another reason, too: it is self-refuting. That is, it cannot meet its own standards of acceptability. For strong scientism itself is not knowable by science. It is, however, a philosophical claim about science, yet one that fails to meet its own criterion.

Second, let us probe the resources naturalists have to enable us to have knowledge. Naturalists divide into two main “camps.” In one camp, there are “direct realists” like Michael Tye and Fred Dretske. On Tye’s view, there are real mental states (thoughts and beliefs, with their concepts; experiences used to make observations; etc.); moreover, they really can be of, or about, things (objects, people, animals, etc.) in reality, so that we can know them directly.23 Now, this feature of mental states’ being of or about things is called their intentionality – they

23 E.g., my thought is of what I am going to write next. I am having an experience of the letters being displayed on the screen as I type. I am having a sensory experience (taste) of a sandwich, too. I have a belief about our pet rabbit, which is resting on the floor. For Tye, see his Ten Problems of Consciousness: A Representational Theory of the Phenomenal Mind (Cambridge, MA.: Bradford Books, 1995). See also Fred Dretske, Naturalizing the Mind: The 1994 Jean Nicod Lectures (Cambridge, MA.: Bradford Books, 1995).
have a representational quality to them, and it seems virtually all mental states have intentionality.\textsuperscript{24} Some even have claimed intentionality is the \textit{hallmark of the mental}.

Intentionality has some interesting features. We can think, believe, have experiences, form concepts, and more about many kinds of things, which can include even things that do not obtain in reality. I can think about Pegasus or the king of the United States. But, my thought gets no further, for there is no real king of France today, or Pegasus. Intentionality enables us to think about “what if” scenarios, to test if certain ideas are true, as in the case of scientific hypotheses. But it also helps us in mundane situations, like finding where I left my eyeglasses. I can think of the likely place I last placed them, and then I can check by looking there. But if my glasses are not there, my thought of them being there gets no further – it does not match up with what is the case. But I can keep checking, and when I do see them, my thought about what it would be like if my glasses were there matches up with what is the case, given in experience.\textsuperscript{25}

But for Tye, while mental states are real, nonetheless they are reducible to particular brain states. What then about intentionality? For him, it is a registration, representation, or indication of some property, which is linked to causal covariation, or correlation.\textsuperscript{26} For example, causal covariation between physical factors can be seen in a thermometer in which the height of the mercury represents temperature. There are causal correlations between these two factors under optimal conditions.\textsuperscript{27} So, intentionality also has to be explicable physically.

\textsuperscript{24} JP Moreland has observed to me that some experiential states, like being in pain, do not seem to have intentionality. That is why I qualified experiences as ones that we use to make observations – those are of or about something. But I think this apparent exception to all mental states’ having intentionality is small and narrow.\textsuperscript{25} Notice this is an analysis of what occurs in such cases. But as we mature, we often can walk through such a process without \textit{having} to call such a thought to mind (though we could). So, one night, I looked for my daughter’s eyeglasses around her bed, and when I looked in one spot, instantly I recognized them as such.\textsuperscript{26} Tye, 101-102.\textsuperscript{27} Now, for him, while representation as causal covariation under optimal conditions will not work for all kinds of beliefs, Tye does think it will work well in the case of simple perceptual sensations.
Now, there is a standard objection to this physicalist account of how our mental states can be together with things in reality. Say I am seeing a red rose on the table. What is involved in my seeing it? On a physicalist view, there is a potentially infinite series of physical states between me and the rose. I can see it because light waves are bouncing off the rose, causing a long chain of physical states, with each one causing the next, that impinge upon my retina, then my optic nerve, and on to the appropriate part of my brain. All this seems correct in terms of being a necessary condition for me to see the rose. There is a physical story to be told involved with sensory experience.

So far, we have considered (just) the physical story involved with how some object can be represented in me. Spatially, the flow of the physical process is all from the outside into me. But when I direct my attention on the rose, I am noticing it actively - and so I can see the rose. If my sensory experience can be exhaustively described by nothing but a physical, causal story, then how is it that I can traverse the physical, causal chain and arrive at the originating object? In other words, how do I know that the rose is causing this experience in me, and not (in fact) something else? Or, how do I know that there really is a rose there at all?

It seems that if all that is involved in experiencing the rose is a causal chain of physical states that impinge upon my sensory and neural apparatuses, then I cannot traverse the chain. I (whatever “I” am on a physicalist view) have access only to the last state in the chain. But how do I know that it matches up with the source, the rose?

But Dretske has given a thoughtful reply to this objection. For him, if my belief that what I am seeing is a rose is reliably caused by the information that it is a rose, “then you don’t have to ‘traverse’ the causal chain resulting in the belief in order to have knowledge of the external
cause. All that is required is that the belief, in fact, be the result of some reliable process.” For him, while we are not directly aware of what is going on in our heads, we are directly aware of the external object (the rose) in cases of veridical perception (when I really am seeing the object and not hallucinating). He contends that the rose is directly present to us via experience. Thus,

> there is no problem of “traversing” the causal sequence leading back to the external object. We are directly aware of the cause … and can see (hence, know) that it is … [a rose] because this information (about the … [rose]) is being transferred in the perceptual process to the representation (experience) of the … [rose].

If he’s right, then Dretske has overcome this standard, principled objection. And there are several aspects to his argument that do make sense. For example, with instruments, we do not have to know that an instrument is in fact functioning properly in order to know that what it indicates is so. I do not verify that my clock is working properly each time I look at it before I am entitled to believe that what it indicates is indeed correct. This is a good assumption, and we live on this kind of basis. We presuppose we live in a lawlike world, with dependable regularities. We have developed reliable indicators (e.g., thermometers) which we rely upon to give us accurate information. We also rightly trust the reliability of our senses, even though we learn of conditions in which they might not be so trustworthy.

Nevertheless, Dretske and Tye still fail to rebut this objection. In a physical, causal chain, a physical state that causally interacts with another inevitably modifies that next state. At the end of the chain, the brain too is modified. In the case of veridical perception, a relation of correspondence allegedly obtains between the experience and the originating physical object. But with these modifications having taken place, how can the person know that the rose actually is what caused this experience? If the process is at root entirely physical, then though we talk of

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28 Dretske, private e-mail, Feb. 10, 2007 (bracketed insert mine).
29 Ibid. (bracketed inserts mine).
intentionality as ofness, aboutness, or directedness that brings together experience with its object, we simply cannot be directly aware of the object as it truly is in itself.

Moreover, as Tye admits, using the language of intentionality and other mentalistic terms is a way of speaking about brain states. To think of any mental state is a way of conceiving of a brain state; i.e., it is an interpretation thereof. So, we can conceive of brains (or computers, robots) as thinking, believing, desiring, experiencing, etc. by employing this interpretive scheme.

But when we do this, we do not create or add any new qualities to brain states (or other physical states). So, the intentionality of any mental states still would have to be explained in terms of physical stuff, and this is where we run into the causal chain problem. But there is a second camp of naturalists that might seem to be able to avoid this issue.

Daniel Dennett is a philosopher of neuroscience, and I think he is highly consistent in his understanding of naturalistic evolution and its implications. For instance, there are no souls, and there are no real non-physical things like thoughts, beliefs, or experiences. While Tye would agree that at the end of the day, mental states are not real as immaterial things, Dennett simply would deny their reality, period. For him, there is only physical stuff, including brains that do the hard work of processing our senses’ inputs.

Moreover, natural selection is totally a blind process: it has no intentions, plans, or goals, and it does not represent something to be a certain way. That is, intentionality is not real. There are only brains, physical patterns, and behavior we take, or interpret, to be about something.

Dennett also denies that there are any essences whatsoever, which is a commitment of naturalism. If they were real, they would be something non-physical that is true of something else (e.g., a person, a dog, a plant, or even a thought or a meaning) just because of what kind of thing it is – i.e., due to its essential nature. Take thoughts; suppose I am thinking about going for

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30 E.g., see Tye, 172-79.
a walk soon. That thought could not be about something else (say, what my wife is doing, or what is happening in the Middle East now) and still be the thought that it is. That is, it seems to have an essence to its intentional contents (what it is about). So, for Dennett, an implication is this: if essences were real, there could be a “deeper fact” (beyond just behavior) of the matter of what our thoughts (or concepts, beliefs, experiences, etc.) are really about. Without such essences, our thoughts (or other mental states, including what I mean right now as I speak) would be subject to indefinite interpretation.

Dennett also realizes the relevance of Jacques Derrida’s deconstructionist implications – if there is not an intrinsic meaning in a text – what an author or speaker had in mind - due to there no being any essences, then it will be interpretation all the way down. 31 Nothing in reality will be immune from this process of interpretation, for there will no essence, an intrinsic quality, to anything that makes it what it is, and not something else. Dennett realizes too that thoughts and speech are brain-writings, and thus they are just as subject to interpretation as any other “text.” (Here, by “text” is meant anything that needs interpretation; so, even the world – including all physical reality - is a text.)

Yet, it does seem that our mental states have a couple essential features: 1) they are “particularized.” That is, they are about something in particular, and not something indeterminate. 32 While I can think, it is not that I am thinking about nothing; rather, I can think about particular things with degrees of specificity, such as a cup, a cup of coffee, or a cup of Starbuck’s® coffee. 2) Mental states must be of or about something. 33 That is, they must have intentional contents. (Try having a thought or a belief that isn’t about anything!) Their intentionality seems to be intrinsic, or essential, to each mental state. They seem to have their

32 By “indeterminate,” I mean its features or properties are not specifiable.
33 Again, however, with the apparent exception of some pain experiences …
intentionality, and their intentional contents, essentially. And we can know this, it seems, by paying attention to the mental state.

Knowledge also has these qualities. When I know something, it always is of, or about, something. Both the standard justified true belief account of factual knowledge, or even knowledge of persons by acquaintance, seem to have this feature. Thus, if we cannot preserve these mental states or concepts (with their essential intentionality), we cannot have knowledge.

So, what does this mean for naturalism’s claim that the real, objective world is just physical? This too must be just an interpretation. Indeed, everything ends up being an interpretation for Dennett, just like it is for Derrida, and even for naturalism in general. That is, anything we think about or experience, and everything we claim to know, would be the result of an interpretative process, without a way to access directly the real world itself and know it as it truly is. It is interpretation all the way down; to even have an experience (such as to make an observation in science) would require interpretation.

Now, it is true that our theories and interpretive grids guide and influence us, but with this situation, there does not seem to be a way to get started interpreting in the first place. For, in any given interpretation, we can ask, “what is it we are interpreting?” If the answer is just another interpretation, as it seems it must, then if we are to be consistent, we simply are working within our own constructs and conceptualizations, but without any tether whatsoever to reality.

Worse, for the reasons we have seen above, taken consistently, naturalism does not seem to be able to sustain any real beliefs, thoughts, experiences used to make observations, or other mental states. But beliefs are essential to knowledge; so, on naturalism, there simply is no knowledge, period. So, what should we make of the claims of naturalists that we do know reality,
and reality is just a physical product of physical forces being “operated upon” by natural selection? We simply cannot know that to be true.34

All these conclusions should drive us to a significant conclusion: the “fact” side of the fact-value split is deeply mistaken. But what about the other side? For instance, can we have moral knowledge? To address that, let’s consider a few important, core morals that we all seem to know are true. What must be true in reality to account for and preserve these morals?

Some Core Morals

Let’s consider a few “core” moral virtues and principles, such as justice is good; murder is wrong; rape is wrong; and love is a virtue. There seems to be widespread (if not universal) agreement on these principles and virtues. It also seems that once we understand the concepts expressed in these statements, I think we simply should see that these acts are wrong, and these virtues are good, even necessarily so. That is, due to what they are, these acts seem intrinsically wrong, and these virtues seem intrinsically good.

For example, consider justice. Despite many moral claims being advanced, often from the standpoint of personal autonomy and relativism, justice stands out to me as something that, far and wide, people recognize as good. For instance, in addition to its roots in relativism and naturalism, the moral basis for the argument in favor of same-sex marriage is rooted in an appeal to equality, which is grounded in justice. Equal pay for equal work likewise presupposes justice as good, as do the concerns in the United States over “income inequality.” Regardless of what one thinks about how that issue should be settled, the concerns on all sides are rooted in appeals to justice. The same applies for legal cases, and equitable treatment of workers, immigrants, etc.

Now, let us consider a series of objections to my claim that these morals seem to intrinsically right (or good). Perhaps a relativist might reply that some morals have become settled by now. That is, over time, society has come to decide that these acts are wrong, and these virtues are good. However, if the relativist is right, then they could have turned out otherwise.

Such a result, however, seems so counter-intuitive that the burden of proof should be on the one making that claim. While it may seem at first glance that a people may reject (for instance) murder as wrong, actually I think we will find out that they do affirm it. The Sawi are a people in Irian Jaya who valued treachery. They would invite a neighboring tribe over to eat a meal together, but after fattening them up and seeing them become sleepy, the Sawi would kill and eat them. So, it might seem they did not accept murder’s being wrong. But, suppose we examine another scenario, in which a Sawi male decided he wanted another male’s wife for his own. To achieve that end, he killed that other male. I suspect we would see the Sawi people rise up against that man, condemn him for his action, and thus we would see that they too believe murder is wrong. They simply did not see the former case as an example of murder.\(^35\)

Once we form the concept of murder, I think we should see that it is a heinous act, a violation of the most repugnant sort, which simply is wrong. This reaction does not seem to be merely the product of socialization, for it seems to transcend cultures. Quite arguably, even Nazi soldiers or Japanese concentration camp guards in World War II, who were trained, desensitized killers, would have thought it wrong for a comrade to be murdered. However, they were trained not to see their killing of prisoners as murder.

So, how do we best explain what kind of thing these few, “core” morals are? I already briefly considered a relativistic view; how about the others that have been suggested? First, if

\(^{35}\) This then seems to be a factual difference over what they thought counts as murder, versus a difference in moral principles themselves. There might be a certain relativity in how moral principles are applied.
Hobbes is correct, what is moral is our being physically moved (i.e., attracted) to something, whereas what is immoral is our being repelled away. But, murderers and rapists move toward their victims. If so, why then are these wrong? In addition, physical motions can be exhausted descriptively, but morality has a different quality – it is prescriptive.

Second, on Hume’s view, the statements “justice is good” and “murder is wrong” just express feelings, akin to “ugh, murder!” But, these moral claims are not just descriptive ones. And, if feelings change, so can the morality of an action. Is that really so with these morals?

Third, for Kant, he thought of morals as being absolute, universal commands that belong to the realm of the noumena. But if knowledge comes empirically, why should we think (with Kant) that we can have moral knowledge? Why should we accept his starting point about the nature of morals? Instead, it seems more likely on his scheme that morals are like religion and would be just private and personal opinion. But that would make murder and rape’s being wrong, and justice and love being good, as just our constructs after all.

On utilitarianism, what is moral is based on the sum of the consequences. So, murder or rape’s wrongness could turn out otherwise, just as it could for justice and love. Further, who gets to define what are “good” and “bad” consequences? On what basis?

Last, consider naturalism’s options for ethics. Largely, these are just descriptive, which fits with our understandings of physical stuff. But, morality is more; it is prescriptive. Plus, if morality is just an evolutionary adaptation, then justice and love’s being good, and murder and rape’s being wrong could have turned out otherwise. Moreover, naturalism leaves us with everything being just our interpretation, precisely because there are no “deeper facts” (or essences) to anything. But that means these core morals are just our interpretations of physical stuff. If everything is interpretation, and each interpretation is particular to itself, then we cannot
have literally the same interpretation for these core morals – which undermines them as universally wrong.

So, all these options fail to do justice to the nature of these “core” morals. In key ways, these views cannot preserve these core morals. What then might be the best explanation for what they are? They seem to be intrinsically valid – just due to what they are, they seem intrinsically (even essentially) wrong (in the case of murder, rape) or good (with justice and love). And, they seem to be universally so. These findings have a significant implication: these morals are objectively real; they exist in a mind-independent way, making them part of reality. But, as we have seen earlier, they do not seem to be sense perceptible (though their instances seem to be).

Conclusion

All these conclusions lead us to another important one: these core morals objectively real, and we can know them as such. Moreover, together with my arguments 1) earlier against empiricism, and 2) that on naturalism we cannot have knowledge, the inherited “fact-value” split is false. But, we do in fact have knowledge in many areas, including science and ethics, which begs an important question: what then must be real ontologically for us to have such knowledge? First, it seems that mental states (and their intentionality) must be non-physical. Second, to conduct various scientific experiments and other investigations empirically, it seems we need to be able to use the physical-chemical input from the senses and nervous system along with our non-physical experiences, thoughts, etc. But it is hard to see how merely brains could use such non-physical “stuff”; thus, it seems that for such knowledge to happen, we need to be more than just bodies, but beings composed of both physical and non-physical aspects that can use these various kinds of inputs. This, of course, is a form of substance dualism, not physicalism, which alone is
suggestive (but not by itself determinative) for the other part of the “value” side of the split – that perhaps there is religious knowledge that we may have too.

Regardless, for our purposes today, the fact-value split is false. We can have moral knowledge of reality, and not merely our own moral preferences and opinions.