

Against Naturalism about Truth

BERIT BROGAARD

Naturalism

It is fairly common in philosophy to distinguish between two forms of naturalism: methodological and ontological (Devitt 1994; Loewer 1997; Papineau 2009). Within philosophy, methodological naturalism is a view about philosophical practice. It states that philosophy and science are pursuing the same ends and should use similar methods to reach those ends. If the aim of science is to increase our collective reservoir of *a posteriori* knowledge by testing theories against the empirical data, then according to methodological naturalism, this is also the aim of philosophy. I will have nothing to say about the plausibility of methodological naturalism in this paper.

In contrast with methodological naturalism, ontological naturalism concerns not philosophical practice but what there is. It will be helpful to distinguish between two forms of ontological naturalism (hereafter, just “naturalism”). I shall take naturalism, in its strongest form, to be the view that all truths (i.e., truth bearers, such as propositions and sentences, that have *the property of being true*) can be deduced, at least in principle, from truths about natural entities on the lowest level of organization; for example, truths about the elementary particles and forces of the universe.¹ So, a conjunction of all truths about the elementary particles and forces, including the laws of nature, would *a priori* entail all truths. I define naturalism, in a weaker form, as the view that the only entities that can be causally efficacious are physical entities. This view is also sometimes captured as the idea that the physical realm is causally closed; that is, all physical effects can be explained by microphysical

1 It is important to keep in mind that we are using “true” and its cognates in these two different ways: that is, to refer to a property that truth-bearers have and to refer to the truth-bearers themselves when they have that property. The question I am concerned with here is whether naturalism about the truth property (rather than the truth-bearers) is possible. Naturalism about certain truth-bearers (e.g., token sentences) certainly seems possible.

phenomena and fundamental microphysical laws. Call these two views *strong and weak ontological naturalism*, respectively.²

Strong Ontological Naturalism: All truths can be deduced, at least in principle, from truths about physical entities at the lowest level of organization.

Weak Ontological Naturalism: Only physical properties can be causally efficacious.

As strong ontological naturalism rules out the possibility of any supernatural or nonphysical entities, it *a fortiori* rules out that there can be supernatural entities that can causally influence the spatiotemporal world. So, strong ontological naturalism entails weak ontological naturalism. But the weak view does not entail the strong. Unlike the strong view, the weak view is compatible with the existence of supernatural and nonphysical entities, such as ghosts, angels, and golden mountains, as long as these supernatural and nonphysical entities cannot causally influence the world. However, since physically verifying the existence of these entities would require that they be causally efficacious, for example by emitting radiation that can be physically measured, weak ontological naturalism rules out that we could ever physically verify the existence of such entities.

Strong ontological naturalism is a fairly controversial view among both philosophers and scientists. Thinkers who believe that there are strongly emergent properties, for example, will deny that all truths are deducible even in principle from truths about elementary particles and forces. Weak ontological naturalism is more widely accepted, though it is by no means close to universally accepted, even among scientists. Some consciousness researchers, for example, believe that consciousness is a fundamental nonphysical property that nonetheless may be causally efficacious (Koch 2012). Our discussion here will be limited to naturalism about truth. I will explore which theories of truth are compatible with strong and weak ontological naturalism. As we will see, the only theories that appear to be compatible with strong ontological naturalism are deflationary theories, but, as I will argue, deflationary theories are unlikely to be attractive to folks with strong naturalist inclinations.

² I do not rule out the possibility of a moderate version of ontological naturalism that formulates naturalism in terms of metaphysical entailment rather than deducibility. For example, some physicalists deny strong ontological naturalism, as I have formulated it, but would hold that truths about the microphysical realm metaphysically entail all truths (or at least, all truths about the physical and the mental) (e.g., Levine 1983; Tye 1995; Lycan 1996; Hill 1997; Block and Stalnaker 1999). This view is sometimes cashed out as the supervenience claim that the mental supervenes on the physical. If the mental supervenes on the physical, any changes in mental properties must be accompanied by changes in physical properties. I will not discuss this more moderate form of ontological naturalism here, as none of the main accounts of truth is a candidate to be a theory that is metaphysically entailed by, but cannot be deduced from, physical theories.

There are also theorists who argue that property dualism is compatible with strong naturalism, because they take mental properties to be natural properties governed by natural psychophysical laws (e.g., Chalmers 1996). We could easily accommodate this type of view by substituting “natural” for “physical” in our formulation of strong ontological naturalism. However, in my opinion, it is ill-advised to attempt to argue for a broader definition of “natural” within the limits of a short chapter. If there are indeed primitive mental properties, then they may well turn out to be natural properties. But it doesn’t follow from such a concession that all primitive properties should be counted as natural properties. If that were the case, then naturalism might quickly become a rather trivial position, as any entity that is not reducible to physical properties and that seems to have some claim to existence might then be rendered a natural property. As I don’t know how to avoid trivialization on a broader formulation of naturalism, I shall here assume that naturalism requires deducibility from the microphysical arena.

Is Truth Causally Efficacious?

Weak ontological naturalism holds that only physical properties are causally efficacious. So, if truth is not causally efficacious, weak ontological naturalism can be correct even if truth is not a physical property. So, one pertinent question to ask is whether truth is causally efficacious.

It is widely held that truth has certain normative properties, such as being the aim of belief and assertion and the end of inquiry (Dummett 1959; Peirce 1992; Lynch 2009). Michael Dummett (e.g., 1959), for example, held that a person who is rationally asserting something is motivated by the aim of saying something true. Charles Sanders Peirce argued that the most important effect of truth is that it will be revealed by scientific inquiry at some future progressed state of science. As he puts it, “the opinion which is fated to be ultimately agreed to by all who investigate, is what we mean by the truth” (Peirce 1992, 139).

However, there is good reason to think that even if truth is normative in either of these senses, it is not normative in the strong sense of being causally efficacious. Consider first the hypothesis that truth is central to our assessment of belief. Truth may be central to our assessment of belief insofar as we predicate it of belief, but truth does not appear to guide our assessment of belief. If you say that you believe that it’s raining, and I look out the window and see no water coming down from the sky, I might say that your belief is false. However, what guides my assessment of your belief is not truth, but evidence (my seeing no water coming down from the sky). My perceptual experience provides *prima facie* justification for my belief that it’s not raining, and it is on the basis of this belief that I judge that your belief is false. Though I predicate truth, or the lack thereof, of your belief, it is not truth that causes me to make this assessment. What gives rise to my assessment is my perceptual experience and the belief in which it results.

Consider next the hypothesis that truth is the aim of scientific inquiry. It is certainly true that most scientists (and philosophers) will tell us that they hope to find the truth. But the property of being true does not causally influence the progress of science or scientific practice. Consider the ancient scientific question of whether the universe has always existed or came into existence at some point in the past. Astronomer Edwin Hubble eventually found a way to answer this question. He knew that light that is emitted from an object that is moving away from an observer appears redder than the light of an object that is not moving away. This is known as “redshift.” By observing distant galaxies, Hubble found that their redshift increased as a linear function of their distance. So, he concluded that the universe was expanding. From this, physicists inferred that the universe was smaller in the past and therefore had not always been in existence, or at least had not always existed as it does today. The truth properties of the truths that the scientists discovered (assuming that they are true) did not cause scientific progress or practice. What caused the progress and practice were (1) a question (“Has the universe always existed?”), (2) a hypothesis about distance and light (“Light emitted from objects that move away from the observer is redshifted”), (3) observations of light emitted from distant galaxies (“The redshift of distant galaxies increases as a linear function of their distance”), and (4) inferences to the best explanation. Truth itself played no role.

Truth may be what we are searching for, it may be what we are aiming at or hoping to reach, but it does not play a causal role in forming beliefs or in guiding scientific progress or practice. Truth, it seems, is causally inefficacious. It may be thought that these considerations presuppose particular “conservative” or “conventional” theories of truth, and that truth

perhaps can be understood to play a causal role given a more radical theory of truth, such as radical pragmatism. As we will see further on, however, radical pragmatists deny that truth is a substantial property and adamantly deny that it can have any normative effect on our ordinary or scientific practices.

Could truth be causally efficacious in a different way? It is sometimes thought that causally inefficacious properties are strange, because it seems that properties must be causally efficacious in order for us to have knowledge of them. Suppose, for example, that there are causally inefficacious ghosts. Since it appears that we come to have knowledge of things as a result of these things leaving a causal mark on our cognitive system, it would seem that we could not come to have any knowledge of ghosts that cannot causally affect us. Since it is arguable that we do have some knowledge about truth, and since knowledge about a property appears to require that the property be causally efficacious, it might seem that truth must be causally efficacious. Truth may be different from causally inefficacious ghosts in this regard. A widely accepted platitude about truth is that it obeys convention T, or the T schema, which can be expressed as follows:

Convention T: $\ulcorner \varphi \urcorner$ is true iff φ .

If truth obeys convention T, then we can come to have knowledge of truth by inference. Let it be granted for argument's sake that some of our beliefs count as knowledge. Let's say that I know that I am human. From "I am human," it follows by convention T that it is true that I am human. From this, it follows by existential generalization that something is true. By property abstraction, it follows that there is a property of truth. If I have the right sorts of logic skills, I can come to know there is a truth property. But there is nothing in this process that requires the truth property itself to be causally efficacious, which is to say, the truth property itself need not have any causal influences on my cognitive system in order for me to come to have this knowledge.

If truth is causally inefficacious, then the nature of truth (whatever it is) does not counter weak ontological naturalism. Recall that weak ontological naturalism, as we defined it, is the view that only physical entities can be causally efficacious. If truth is not causally efficacious, which it probably is not, then weak ontological naturalism can be true even if truth turns out to be a nonnatural property. So, weak ontological naturalism about truth is correct (but trivially so).

Is Truth a Natural Property? The Correspondence Theory

We have established that truth is unlikely to be causally efficacious. If this is right, then the existence of a truth property is compatible with weak ontological naturalism. The question remains, however, whether truth is a natural property or not. If it's not a natural property, then strong ontological naturalism is false. This question is more difficult, as it forces us to consider the plausibility of particular theories of truth and whether they entail that truth is a natural property.

Probably the most widely accepted view of truth is a form of the correspondence theory, which takes truth to be a correspondence between a sentence or proposition and a fact (Russell 1918/1956; Wittgenstein 1921/1961). It is a bit of a mystery what this relation of correspondence is supposed to be. In simple cases, it may appear straightforward. Consider,

for example, the sentence “Dorothy is singing.” This sentence consists of a noun phrase, “Dorothy,” and a verb phrase, “is singing.” Let us suppose that an utterance of this sentence is true. On the correspondence theory, there is then a fact that consists of a person named “Dorothy” and the property of singing. Correspondence obtains when there is an utterance of a sentence with a certain structure and a fact with the same structure, and the constituents of the sentence denote the constituents of the facts. This story about atomic truths will, of course, need to be combined with a theory of the truth conditions for molecular, or complex, truth-bearers. Truth conditions for complex nonmodal truth-bearers can be given by truth-conditional recursion clauses that can be taken to be true by stipulation. A sentence of the form “not- p ” is true if and only if “ p ” is false; a sentence of the form “ p and q ” is true if and only if “ p ” is true and “ q ” is true; a sentence of the form “ p or q ” is true if and only if “ p ” is true or “ q ” is true; and so on.

One common critique of the correspondence theory is that it is not clear that the world comes divided up into sentence-like facts (Austin 1950, 155; Rorty 1981). The correspondence theorist may be able to get around this worry by dropping the notion of a fact from the definition of “correspondence.” For example, they might say that correspondence between an utterance of a sentence and the world obtains when the noun phrase of the sentence denotes an object that instantiates the property denoted by the verb phrase. On a widely accepted view of denotation (or reference), what names and predicates denote can be understood in terms of causation and, perhaps, speaker intentions (see, e.g., Field 1972; Kripke 1980; Fodor 1990; Loewer 1997). For example, “Dorothy” denotes Dorothy when there is a causal chain leading from the speaker’s use of the name “Dorothy” to the individual who was named “Dorothy.” Another approach is to take truth in language to derive from the accuracy conditions of perceptual states, and then define the accuracy conditions of perceptual states in terms of covariation and epistemically optimal conditions (Stalnaker 1984; Loewer 1997). However, as we will see in the next section, it is unlikely that there is a naturalistically respectable notion of truth that appeals to epistemically optimal conditions.

There are other well-known problems for a naturalistic version of the correspondence theory. One is that it is not clear how correspondence works for normative, modal, and mathematical claims, such as “Murder is wrong,” “Someone else could have written this article,” and “ $2 + 2 = 4$.” Even if “2” and “4” denote entities, they probably don’t denote causally efficacious entities. So, it would seem that the correspondence theory cannot be spelled out in naturalistic terms. This, however, is not a problem specifically related to the correspondence theory, but a more general problem for naturalism. A range of modal notions, such as *causality*, *disposition*, and *law*, figure in fundamental physical theories, and therefore ought to be treated as naturalistic. The same may apply to mathematical notions. It is, however, beyond the scope of this chapter to investigate whether it is possible to account for normative, modal, and mathematical facts in terms of microphysical properties, or whether these subject matters require positing new primitive properties. (See Chapters 2, 20, 21, and 25–29 for further information on some of these issues.)

There are, however, a couple of more devastating problems for the correspondence theory from a naturalistic point of view. Even if we can find a way to resolve the problems just outlined, we cannot account for all correspondence in terms of causation and speaker intentions. It is unlikely that the correspondence between all quantificational truths and material entities can be cashed out in terms of causation and speaker intentions. The strategy might work for some cases of ordinary language. For example, “There is a shortest female spy” is true just in case there is a woman who is a spy and who is shorter than all

other spies. Provided that one can be causally acquainted with the properties of being a spy, being female, and being short, we can provide a naturalistic account of the correspondence relation in this case. However, it will be much harder to provide a naturalistically respectable account of the correspondence relation between the quantificational statements of microphysical theories and the microphysical realm. It is hard to see how we could be causally acquainted with microphysical entities in the way we are with people, cats, and dogs. This is not to say that microphysical entities, such as quarks, neutrinos, photons, and bosons, are not causally efficacious, but only that the causal relationship that may obtain between us and them will be insufficient to account for the correspondence relation in naturalistic terms. The standard move made in order to account for the denotation of theoretical entities is Ramsification, which is a way of eliminating theoretical terms in favor of existentially quantified bound variables and predicates (Ramsey 1954; Lewis 1970). For example, “There is an electron in the collider” can be understood along the lines of “There is an x such that x satisfies P_1, P_2, \dots, P_n (where $P_1 - P_n$ are predicates of the scientific theory positing electrons, e.g., ‘is an electron,’ ‘has a negative charge,’ etc.), and x is in the collider.” But the predicates of physical theories do not denote properties with which we are causally acquainted. So, the correspondence theory does not seem to allow for a strongly naturalistic account of truth: it requires an irreducible, ontologically primitive notion of correspondence. Note that arguing that facts are true propositions, and that correspondence is therefore identity, along the lines of Moore (1901/02) and Russell (1904), is unlikely to help. This move just substitutes an irreducible notion of truth for an irreducible notion of correspondence.

A further problem for correspondence theorists who want to grant that physical theories can be true in virtue of corresponding to the microphysical realm is that this appears to require a form of antirealism with respect to the reality that consists of medium-sized material bodies and their perceptible properties. Physicists will tell us that, on a microphysical level of reality, there are no solid objects. On a microphysical level, a chair is just an array of particles with no obvious boundary and no real shape. If we take these claims to be true, then at least some truths about medium-sized material bodies and their property instances may turn out to depend in part upon our experiences of them. Few theorists would deny the veridicality of all of our experiences of solid, medium-sized material bodies. The veridicality of perceptual experience does not require seeing into the deepest corners of reality. Our visual experiences of the colors, shapes, and textures of medium-sized material bodies are said to be veridical when the viewing conditions and neurological systems of the perceiver fall into a normal range that is such that different perceivers within this range can, roughly, agree on what they perceive. But the notion of veridicality is intimately tied to the notion of truth (Siegel 2010). When we say that our experience of a rock being solid is veridical, this is normally taken to mean that it is true that the rock in question is solid. We can account for the tactile and action-related property of solidity by defining it as the weakly emergent property of resisting penetration at a certain level of interaction. However, the veridicality of a visual experience of a rock being solid when the rock is not interacting with other medium-sized objects cannot be accounted for in this way. Rocks have the *visually* perceptible property of being solid only relative to creatures like us who experience them as such under certain conditions. Another good example is that of color: a rose has the visually perceptible property of being red only relative to creatures like us that experience it as such in particular circumstances (Cohen 2009; Chirimuuta 2015; Brogaard forthcoming). Many ordinary truths must thus be understood in terms of experience in ideal, or sufficiently

good, experiential conditions, which include an ideally placed observer. For example, where “solid” refers to a visually perceptible property that medium-sized objects can possess even when they don’t interact with other medium-sized objects, “That thing is solid” is true if and only if, if circumstances were ideal for experiencing the thing in question, it would visually appear to be solid. It seems, then, that claims about correspondence between statements and reality in some cases collapse into claims about assessment in ideal circumstances. So, not only is the correspondence theory incompatible with strong naturalism, but it also appears to be committed to elements of antirealism about truth. As we will see in the next section, antirealism about truth is also incompatible with strong naturalism.

Antirealism about Truth

In his presidential address to the American Philosophical Association (APA), “How to Be an Anti-Realist”, Alvin Plantinga (1982, 64–66) argues that the only sensible way to be an antirealist is to be a theist. Antirealism in this context is the epistemic analysis of truth that says:

(AR) Necessarily, a statement is true iff it would be believed by an ideally (or sufficiently) rational agent/community in ideal (or sufficiently good) epistemic circumstances.

In every world, if it is true that ideal circumstances obtain, it would be believed that ideal circumstances obtain if they were to obtain. So, in a closest world where ideal circumstances obtain, it would be believed that they obtain. So, the right-hand side of (AR) is true. It follows that it is true that ideal circumstances obtain. Since (AR) is necessary, it is necessarily true that ideal circumstances obtain. Plantinga concludes that since human existence is a contingent matter, the ideal circumstances must be those of God. If Plantinga is right, then antirealism entails a denial of strong and weak naturalism (assuming that God is nonphysical and causally efficacious).

Plantinga’s formulation of antirealism involves an ambiguity, however (Rea 2000; Wright 2000; Brogaard and Salerno 2005). The ambiguity arises when we speak loosely of “ideal epistemic circumstances.” The antirealist could be saying that there are circumstances ideal for the evaluation of any truth or that for each truth there is a set of circumstances (not necessarily the same set) that is ideal for the evaluation of it. These two readings provide us with subject matter-nonspecific and subject matter-specific readings of antirealism, respectively, because the latter, but not the former, avows an epistemic idealization that is specific to the subject matter of the statement.

The correct reading appears to be the subject matter-specific reading. Different circumstances are ideal, or sufficiently good, circumstances for the evaluation of different truths. For example, extremely good auditory conditions would be required for the evaluation of “That note is a C sharp,” but good auditory conditions would be neither necessary nor sufficient for the evaluation of “That wall is a shade of red.” The most plausible reading of (AR) is thus a subject matter-specific reading. Let “ Qp ” mean that “circumstances are ideal (or sufficiently good) for determining whether p .” The subject matter-specific version of (AR) can then be articulated as follows:

(AR*) Necessarily, p is true iff, if Qp were to obtain, then it would be believed that p obtains.

Plantinga’s proof is not valid on the subject matter-specific reading, because it rests on a premise that is given a subject matter-nonspecific reading. Suppose the premise is given a subject matter-specific reading instead. Then it says, for instance, “If it is true that ideal

circumstances for determining that ideal circumstances for determining that *snow is white* obtain, then it would be believed that ideal circumstances for determining that *snow is white* obtain.” Since the right-hand side is true, we can infer that ideal circumstances for determining that *snow is white* obtain. This is as it should be, as we should expect “Snow is white” to come out true. But we cannot make any inferences about ideal circumstances in general.

(AR*) has its own share of problems. It rules out a truth-conditional account of meaning. On a truth-conditional theory of meaning, the meaning of “Snow is white” is equated with the condition under which it is true. Within an antirealist framework, the meaning of “Snow is white” could be understood as the ideal circumstances in which it would be believed. But (AR*) requires that ideal circumstances are specific to the subject matter of the sentence to be evaluated. This presupposes an independent account of meanings (or subject matters). So, on pain of circularity, (AR*) cannot provide a truth-conditional account of meaning. It’s a good question, and not a question that I will attempt to answer here, which other theories of meaning may be compatible with the antirealist framework.

A further problem for (AR*) is that, while it avoids Plantinga’s theist implication, it has an idealist implication that seems unintuitive (Brogaard and Salerno 2005). (AR*) entails that necessarily, conditions are ideal for determining whether some statement is true. Let “ Q_{Qp} ” mean “Conditions are ideal for assessing Qp for truth,” and let Qp be the statement “Epistemic conditions are ideal for determining whether some statement is true.” In this case, $Q_{Qp} \rightarrow Qp$. For, if conditions are ideal for determining whether Qp (i.e., Q_{Qp}), then conditions are ideal for determining whether some statement is true (i.e., Qp). It can be shown that this implication, together with (AR*), entails that necessarily, epistemic conditions are ideal for determining whether some statement is true. These conditions include the existence of a properly placed epistemic agent. So, necessarily, there is an epistemic agent. An antirealist must thus deny the possibility of truth in a world where there are no epistemic agents.

The conclusion that, necessarily, there are epistemic agents, and so there are no truths without epistemic agents, is not theism but a form of idealism (Brogaard and Salerno 2005). It may be thought that this consequence is not devastating, or even counterintuitive. If the bearers of truth are sentences or utterances (rather than propositions), then perhaps there are no truths without agents. The existence of sentences is mind-dependent. The conclusion is a form of idealism and is devastating to antirealism only if it implies that there cannot be “facts” in a world lacking epistemic agents. The intuition is that facts may obtain even if true sentences do not. So long as antirealism allows that there may be facts without agents, antirealism does not entail a problematic form of idealism.

The point is well taken. That there may not be truths without minds does not by itself entail idealism, since it leaves open the question of whether there can be facts without minds. But the consequence derived by Brogaard and Salerno (2005) does not allow for the possibility of facts without minds, even if sentences are treated as the bearers of truth and falsity. It was shown that in every possible world there are agents; so, antirealism implies that there are no worlds without epistemic agents. This is a stronger claim than the claim that there are no true sentences (or utterances) without agents. And it is strong enough for a substantial form of idealism. If there are no uninhabited worlds, then *a fortiori* there are no uninhabited worlds occupied by facts.

Crispin Wright (1992) has proposed an alternative formulation of antirealism, according to which a proposition is true just in case one would be warranted in believing it regardless

of how one's state of information was extended. He thus avoids the counterfactual formulation that appeared to cause trouble for Plantinga's formulation. However, arguably, Wright's proposal is just a form of the subject matter-specific reading of (AR): if a proposition is true if and only if believing it remains warranted no matter how our information is expanded, then arguably a proposition is true if and only if in close scenarios in which our information is extended and conditions are sufficiently good for assessing that proposition, an ideal agent will believe it.

The question remains whether antirealism about truth is incompatible with strong naturalism. The antirealist defines truth partially in terms of modal properties. However, as I have already mentioned, anyone with strong naturalist inclinations will need to offer a naturalistic account of modal properties. It may be doubted that this can be done in a noncircular fashion if one is an antirealist about truth. But let us suppose that it can be done, or that modal properties are respectable primitives, as their existence is implied by fundamental physical theories. Then the question remains whether antirealism, which appears to entail a form of idealism to the effect that there cannot be any truths or facts without epistemic agents, is compatible with strong naturalism. Epistemic agents, of course, can be understood as thinkers or minds; they don't need to have material bodies. Is the antirealist's theory, so understood, deducible, in principle, from truths at the lowest level of organization? The answer appears to be "No." Here is one reason to think that it is not. The theory implies that there cannot be truths, or facts, without epistemic agents. Epistemic agents thus seem more fundamental than, say, elementary particles and forces. So, if strong naturalism is taken to imply that theories of truth must follow logically from, say, the theories of particle physics, then antirealism is incompatible with strong naturalism. Of course, there may be radical reformulations of naturalism that simply require that all properties follow from fundamental properties. If the properties of agents are fundamental properties, then antirealism could perhaps be taken to be a naturalistic theory. However, on more conventional ways of cashing out "strong naturalism," antirealism seems radically antinaturalistic.

Deflationary Theories of Truth

Another type of theory of truth that I will discuss in light of naturalism is the deflationary theory. Deflationary theories of truth hold that the meaning of "true" is fully explained by the T schema and an account of the function of "true," which is primarily to serve as a device for generalization and abbreviating conjunctions and disjunctions (Horwich 1990; Field 1994).³ Suppose John tells you and your friend, "The seminar is canceled. Professor Brown is sick. The others are thinking about going to Pi. You should come." As you part ways with John, your friend skeptically declares: "I don't think the seminar is canceled, or that Professor Brown is sick for that matter." You beg to differ and simply reply, "No, what John said is true," thereby abbreviating the longer conjunction of John's statements. This function of the truth predicate at least partially explains why we have it in our language.

3 Some distinguish between the redundancy theory and minimalism as distinct forms of deflationism, where the redundancy theory holds that there is no truth property at all, whereas minimalism holds that there is a truth property but that it is insubstantial: there is no more to it than the disquotational instances of the T schema. However, I shall ignore this distinction here, as it is of no consequence in the present context.

Furthermore, when we master the concept, we are willing to accept all instances of the T schema. For instance:

“Snow is white” is true iff snow is white.

But according to deflationists, there is no substantial truth property in the world. We might compare the truth predicate “true” to the connective expression “or.” Because “or” is an expression for a truth-functional connector, its meaning is given by its truth conditions. So, “ p or q ” is true just when “ p ” is true, “ q ” is true, or both “ p ” and “ q ” are true. But, arguably, “or” does not denote any language-external properties. Likewise, deflationists will say that “true” does not refer to anything outside of language itself.

More radical versions of deflationism – sometimes called “neorelativism” or “radical pragmatism” (Zemach 1987) – hold that truth is “merely an expression of commendation” (Rorty 1985, 6). As Rorty puts it, “the [radical] pragmatist says that there is nothing to be said about truth save that each of us will commend as true these beliefs which he or she finds good to believe” (1985, 5). Something like this view has been exposed by a diverse range of thinkers, including Quine (1969; 1974), Rorty (1982; 1991; 1998), and Davidson (1984).

Radical pragmatism about truth is not typically classified as deflationist. In fact, it seems that postmodernists like Rorty take truth to be intersubjective agreement among the members of a community, which would make it a substantial property. In a famous quote, Rorty states that “truth is what your contemporaries let you get away with” (1979, 176). However, as his student Crispin Sartwell (2007) argued in an obituary, these provocations are best understood as rhetorical. And, in fact, there is good reason to think of radical pragmatism as a variant of deflationism. The proponents reject the notion of truth as correspondence to a language- and theory-independent reality. The very notion of correspondence is regarded as empty, because it presupposes either that reality exists independently of our theories (Rorty 1985) or that expressions have some invariant meaning and reference (Quine 1969). Moreover, radical pragmatists explicitly state that truth is not a substantial property. The predicate “true” merely plays a role as an expression of certain attitudes (Rorty 1985).

As “true” does not express a substantial property, on the deflationary account, this theory is perfectly compatible with both weak and strong ontological naturalism. A deflationary theory of truth is no more an objection to naturalism than a conventional theory of disjunction or existential quantification. In fact, if truth simply is the semantic value of a predicate in a natural language, and truths about the human mind are deducible in principle from our best physical theories, then we can be nearly certain that features about the truth predicate will also be deducible in principle from these theories. So, those who find strong naturalism irresistible may find a deflationary approach to truth attractive.

The question remains, however, whether deflationary accounts of truth can ultimately be preserved. There have been several objections to deflationary theories in the literature. One common objection is that they cannot account for the normative aspects of truths (see, e.g., Wright 1992). I have already raised an objection to the idea that truth plays a normative role, and this objection can be turned into a reply on behalf of the deflationist. The most frequently cited normative aspects of truth are (1) that truth is the aim of scientific inquiry and (2) that beliefs are correct if and only if they are true. A plausible response to the first challenge is to say that the real guiding force of scientific inquiry is a *hope* or *desire* that we will form true beliefs as a result of scientific inquiry, where a true belief can be understood in terms of the derivative T schema: For any belief that p , that belief is correct

if and only if p . A plausible response to the second challenge is to say that the real guiding element in our assessment of beliefs is evidence (which consists of beliefs and perceptual experiences).

An objection to deflationism that seems to have more bite is that, on pain of circularity, the deflationist cannot provide a truth-conditional account of meaning (Jackson, Oppy, and Smith 1994). On a truth-conditional account of meaning, the meaning of a sentence is its truth conditions. For example, “Snow is white” means that snow is white just in case “Snow is white” is true if and only if snow is white. Deflationists cannot offer a truth-conditional account of meaning because the primary truth-bearers of the deflationary theory require an independent notion of meaning. The truth-bearers in the T schema “ p is true iff p ” cannot be sentences, as the T schema is only true provided that “ p ” means that p . So, the truth-bearers in the T schema must be either propositions or interpreted sentences. Both notions ensure that “ p ” is assigned a meaning. The proposition that snow is white, for example, can be taken to be a level of meaning that the sentences “Snow is white,” “Schnee ist weiss,” and “La neige est blanche” have in common. But if the T schema, which characterizes our use of the truth predicate, is formulated in terms of a notion of meaning, then on pain of circularity, the deflationist cannot provide a truth-conditional account of meaning. Though there no doubt are other plausible accounts of meaning, the challenge of providing such an account should not be taken lightly.

Thinkers, like Quine (1969; 1974), who reject that language has meaning may not appear to face the challenge of providing an alternative theory of meaning. However, Quine’s theory cannot ultimately be denying that theories are associated with any form of meaning that we can grasp. If it were, the theory would be at risk of being self-refuting. Suppose that some theory implies that theories do not have any associated meaning that we can grasp. This leads to a dilemma (Zemach 1987): either we are capable of understanding the theory in question or we are not. If we are incapable of understanding the theory, then there is no reason to bother with it. If we are capable of understanding the theory, then the theory is associated with a meaning that we can grasp; but if it is associated with a meaning that we can grasp and also claims that theories are not associated with a meaning that we can grasp, then the theory is false. So, either we cannot understand the theory in question or it is false. The theory must be rejected either way.

Another common objection to deflationism is that the theory cannot explain the correspondence intuition that sentences are true in virtue of certain things obtaining in the world (Stoljar and Damjanovic 2010). I don’t think this objection has much bite if deflationism is considered in isolation of other views, as it is clear that deflationists – *qua* denying correspondence theories of truth – are not giving full credit to this intuition. However, simply denying that theories of truth must conform to this intuition becomes less plausible when deflationism is combined with strong naturalism. Those who find strong naturalism plausible will typically hold that there is some discourse that contains predicates that express natural properties, and that those natural properties exhaustively characterize what is expressed by those predicates (Dowell 2004). It follows naturally from this idea that to say that “ x is N ” (where “ N ” expresses a natural property) is true is to say something substantial, viz. that “ x is N ” is true in virtue of x instantiating N . This suggests that while deflationism is not at odds with strong naturalism, as we have formulated it here, a deflationist truth property is too thin to satisfy the naturalist’s aspirations. For example, if the strong naturalist says that charm, spin, or charge is a natural property, then this claim is insubstantial, as it doesn’t correspond to anything.

Conclusion: Pluralism about Truth

I have argued that truth is unlikely to be causally efficacious. As weak naturalism says that only natural properties can be causally efficacious but is quiet about any potential non-natural properties, the existence of a truth property is consistent with weak naturalism. However, it is doubtful that any realist theory that treats truth as a substantial property will turn out to be consistent with strong naturalism. The correspondence theory will be hard pressed to offer a naturalistically respectable account of the correspondence relation that supposedly obtains between physical theories and microphysical reality. Antirealism, on the other hand, appears to entail a form of idealism to the effect that there cannot be any truths or facts without epistemic agents. Reality itself requires that there are properly placed agents. This implication appears to be incompatible with strong naturalism, as we have formulated it, as it seems to require that epistemic agents, or at least thinkers or minds, are more fundamental than physical entities, such as elementary physical particles and forces. Finally, though deflationary theories of truth are compatible with strong naturalism, this is not going to be of much help to the naturalist. Deflationary theories of truth deny that there really is such a thing as truth outside of language. Rather, there are truth predicates and the semantic values of those predicates or our use of them. As truth is not a substantial property, given deflationary theories, these theories are compatible with strong naturalism, as formulated in this chapter. But these theories are not suitable adjoints to strong naturalism, as folks with strong naturalist inclinations normally want to posit the existence of substantial natural properties.

On the face of it, this does not leave us in a very good place. All of the theories of truth considered appear to have large drawbacks. The correspondence theory of truth must posit correspondence between physical theories and microphysical reality as a non-natural ontological primitive. Furthermore, claims about correspondence obtaining between ordinary statements and the medium-sized level of reality appear to collapse into counterfactual claims about how things would appear to agents in ideal, or sufficiently good, circumstances. Antirealism about truth appears to have the implication that there cannot be any truths or facts without epistemic agents, which many would consider a rather unattractive consequence, regardless of their inclinations toward naturalism. Deflationary theories of truth either are self-undermining or are faced with the difficult task of providing a non-truth-functional theory of meaning. Furthermore, even if these theories are not at odds with strong naturalism, they threaten to trivialize it. Because there is no correspondence between language and reality, the claim that deflationary truth is natural is insubstantial.

There are theories of truth that may seem to fare better in a number of respects than the three main theories discussed in this chapter. One is the pluralist theory discussed in Chapter 18. Pluralism about truth is the view that truth is a functional-role concept (Wright 1992; Lynch 2000; 2009). In different types of discourse, different properties play the truth role, which is defined by features that derive from our pretheoretic or folk conception of truth (e.g., "Truth is the aim of belief"). It is important to emphasize that pluralism is a form of role functionalism rather than realizer functionalism. Role functionalism equates the property in question with the functional characteristics, whereas realizer functionalism equates the property in question with the realizer property that satisfies the functional characteristics. For example, on a functional conception of pain, pain may be taken to be any state which produces the belief that something is wrong with the body and a desire for the state to disappear, and which tends to give rise to anxiety, moaning, whining, or

screaming. If this functional role is played by C-fiber stimulation, then a person is in pain when she undergoes C-fiber stimulation. Role functionalists, however, would identify the pain property with the functional role property itself, not the C-fiber stimulation. Likewise, pluralists about truth take truth to be identical to the functional-role property itself. This avoids a problem that would otherwise arise in accounting for semantic properties such as validity, which depend on there being a single truth property. Consider the following argument:

If animals can feel pain, then it's wrong to let them suffer.
 Animals can feel pain.
 Therefore, it's wrong to let them suffer.

Valid arguments are truth preserving: the premises cannot be true while the conclusion is false. But this requires that there is a single truth property that is preserved. If there are different truth properties for moral and nonmoral claims, then the argument is not valid.

I think pluralism may be among the most plausible theories of truth. But it is worth pointing out that it does not straightforwardly avoid the problems discussed here. This is because it assumes that different properties can play the truth role for different discourses. For example, it may be argued that correspondence plays the truth role for discourse about the microphysical realm, that assessment in ideal circumstances plays the truth role for truths about the level of reality that consists of medium-sized objects and their perceptible properties, and so on.⁴ Pluralism by itself does not resolve the problems that face the correspondence theory and antirealism about truth. These problems require independent solutions, but since pluralism is already pluralistic, it might not be ad hoc if the pluralist were to impose restrictions on theories of truth. For example, to avoid the unintuitive consequence of antirealism about truth that agents exist necessarily, a pluralist could disallow that assessment in ideal circumstances can itself play the truth role for the assessment of whether ideal circumstances obtain. She could argue that the question of whether ideal circumstances obtain is decided by convention. Given a pluralistic framework, this move does not feel like an odd exception to antirealism about truth, but rather a natural implication of a pluralistic framework. Pluralism also allows us to provide a truth-conditional account of meaning. On pain of circularity, an antirealist theory of truth cannot provide a truth-conditional account of meaning, because the idea of an ideal circumstance that is specific to the subject matter of the sentence that is being evaluated for truth rests on a prior conception of meaning. Within a pluralistic framework, truth is not identical to assessment in ideal circumstances but to a functional role property. This seems to avoid the circularity. However, pluralism still leaves us with the consequence that there is a correspondence property that sometimes plays the truth role and that cannot be fully reduced to microphysical properties. So, it looks like the pluralist will need to reject strong naturalism.

This, however, may be exactly as it should be. A fully reductionist theory of all semantic relations appears to run into trouble of an epistemic kind (Putnam 1983, 290–296; Zemach 1987). Suppose a given theory implies that “reference” *refers* to the natural property R. As the theory logically depends on a notion of reference, it can only be assessed for correctness or plausibility on the assumption that we have some understanding of what “reference” is,

4 This is just an example of how to accommodate some of the observations made earlier in the chapter. Wright and Lynch do not divide up the labor in this way.

independently of what the theory says that it is. This is not to say that there could not be R properties, but only that we could never confirm that they function in the way that the theory says that they do. Moreover, the theory would not be deducible from theories about the microphysical realm. So, a naturalistic theory of reference would be antinaturalistic. This strongly suggests that semantic notions are irreducible, primitive relations and hence are not natural properties of the sort strong naturalism requires.

Acknowledgments

I am grateful to Kelly James Clark for helpful comments on a previous version of this paper.

References

- Austin, J.L. (1950). Truth. *Proceedings of the Aristotelian Society* 24(Suppl.): 111–129. Reprinted in Austin, J.L. (1961). *Philosophical Papers*, edited by J.O. Urmson and G.J. Warnock. Oxford: Clarendon Press.
- Block, N. and Stalnaker, R. (1999). Conceptual Analysis, Dualism, and the Explanatory Gap. *Philosophical Review* 108: 1–46.
- Brogaard, B. (Forthcoming). The Self-Locating Property Theory of Color. *Minds and Machines*.
- Brogaard, B. and Salerno, J. (2005). Anti-Realism, Theism, and the Conditional Fallacy. *Nous* 39: 123–139.
- Chalmers, D.J. (1996). *The Conscious Mind: In Search of a Theory of Conscious Experience*. New York: Oxford University Press.
- Chirumuuta, M. (2015). Perceptual Pragmatism. In *Outside Color*. Cambridge, MA: MIT Press.
- Cohen, J. (2009). *The Red and the Real*. Oxford: Oxford University Press.
- Davidson, D. (1984). *Inquiries into Truth and Interpretation*. Oxford: Oxford University Press.
- Devitt, M. (1994). The Methodology of Naturalistic Semantics. *Journal of Philosophy* 91(10): 545–572.
- Dowell, J.L. (2004). From Metaphysical to Substantive Naturalism: A Case Study. *Synthese* 138(2): 149–173.
- Dummett, M. (1959). Truth. *Proceedings of the Aristotelian Society* 59: 141–162.
- Field, H. (1972). Tarski's Theory of Truth. *Journal of Philosophy* 69: 344–375.
- Field, H. (1994). Deflationist Views of Meaning and Content. *Mind* 103(411): 249–284.
- Fodor, J. (1990). *A Theory of Content and Other Essays*. Cambridge, MA: MIT Press.
- Hill, C.S. (1997). Imaginability, Conceivability, Possibility, and the Mind–Body Problem. *Philosophical Studies* 87: 61–85.
- Horwich, P. (1990). *Truth*. Oxford: Basil Blackwell.
- Jackson, F., Oppy, G., and Smith, M. (1994). Minimalism and Truth Aptness. *Mind* 103(411): 287–302.
- Koch, C. (2012). *Consciousness: Confessions of a Romantic Reductionist*. Cambridge, MA: MIT Press.
- Kripke, S.A. (1980) *Naming and Necessity*. Cambridge, MA: Harvard University Press.
- Levine, J. (1983). Materialism and Qualia: The Explanatory Gap. *Pacific Philosophical Quarterly* 64: 354–361.
- Lewis, D. (1970). How to Define Theoretical Terms. *Journal of Philosophy* 67: 427–446.
- Loewer, B.M. (1997). A Guide to Naturalizing Semantics. In *A Companion to the Philosophy of Language*, edited by C. Wright and Bob Hale. Oxford: Blackwell.
- Lycan, W. (1996). *Consciousness and Experience*. Cambridge, MA: MIT Press.
- Lynch, M. (2000). Alethic Pluralism and the Functionalist Theory of Truth. *Acta Analytica* 15: 195–214.

- Lynch, M.P. (2009). *Truth as One and Many*. Oxford: Clarendon Press.
- Moore, G.E. (1901/02). Truth and Falsity. Reprinted in Moore, G.E. (1993). *Selected Writings*, edited by T. Baldwin, pp. 20–22. London and New York: Routledge.
- Papineau, D. (2009). Naturalism. In *The Stanford Encyclopedia of Philosophy*, edited by Edward Zalta. Available from: <http://plato.stanford.edu/archives/spr2009/entries/naturalism/> (last accessed July 15, 2015).
- Peirce, C.S. (1992). *The Essential Peirce*, vol. 1. Bloomington: Indiana University Press.
- Plantinga, A. (1982) How to Be an Anti-Realist. *Proceedings and Addresses of the American Philosophical Association*, 56(1): 47–70.
- Putnam, H. (1983). *Realism and Reason*. Cambridge: Cambridge University Press.
- Quine, W.V.O. (1969). *Ontological Relativity and Other Essays*. New York: Columbia University Press.
- Quine, W.V.O. (1974). *The Roots of Reference*. La Salle: Open Court.
- Ramsey, F. (1954). *The Foundations of Mathematics*. London: Routledge.
- Rea, M. (2000). Theism and Epistemic Truth-Equivalences. *Nous* 34: 291–301.
- Rorty, R. (1979). *Philosophy and the Mirror of Nature*. Princeton: Princeton University Press.
- Rorty, R. (1981). *Philosophy and the Mirror of Nature*. Princeton: Princeton University Press.
- Rorty, R. (1982). *Consequences of Pragmatism*. Minneapolis: University of Minnesota Press.
- Rorty, R. (1985). Solidarity of Objectivity? In *Post-Analytic Philosophy*, edited by J. Rajchman and C. West. New York: Columbia University Press.
- Rorty, R. (1991). *Philosophical Papers*, vol. 1: *Objectivity, Relativism and Truth*. Cambridge: Cambridge University Press.
- Rorty, R. (1998). *Philosophical Papers*, vol. 3: *Truth and Progress*. Cambridge: Cambridge University Press.
- Russell, B. (1904). Meinong's Theory of Complexes and Assumptions I, II, III. *Mind* 13: 204–219, 336–354, 509–524.
- Russell, B. (1918/1956). The Philosophy of Logical Atomism. In *Logic and Knowledge: Essays 1901–1950*, edited by R. C. Marsh, pp. 177–281. London: George Allen and Unwin.
- Sartwell, C. (2007). The Provocateur's Philosopher. *Los Angeles Times*, June 12, 2007. Available from: <http://articles.latimes.com/2007/jun/12/opinion/oe-sartwell12> (last accessed July 15, 2015).
- Siegel, S. (2010). The Contents of Perception. In *The Stanford Encyclopedia of Philosophy*, edited by Edward Zalta. Available from: <http://plato.stanford.edu/archives/win2010/entries/perception-contents/> (last accessed July 15, 2015).
- Stalnaker, R. (1984). *Inquiry*. Cambridge, MA: MIT Press.
- Stoljar, D. and Damnjanovic, N. (2010). In *The Stanford Encyclopedia of Philosophy*, edited by Edward Zalta. Available from: <http://plato.stanford.edu/archives/win2010/entries/truth-deflationary/> (last accessed July 15, 2015).
- Tye, M. (1995). *Ten Problems of Consciousness: A Representational Theory of the Phenomenal Mind*. Cambridge, MA: MIT Press.
- Wittgenstein, L. (1921/1961). *Tractatus Logico-Philosophicus*. London: Routledge.
- Wright, C. (1992). *Truth and Objectivity*. Cambridge, MA: Harvard University Press.
- Wright, C. (2000). Truth as Sort of Epistemic: Putnam's Peregrinations. *Journal of Philosophy* 97(6): 335–364.
- Zemach, E.M. (1987). Truth and Some Relativists. *Grazer Philosophische Studien* 29: 1–11.