

Knowledge and Naturalism

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There is an objective difference between one who has knowledge of something and one who does not. This is true in both the occurrent and the dispositional senses of "knowledge" and "knows." That is, whether or not X has knowledge on a certain point or about a certain matter--knows the English alphabet, for example, the narrative content of War and Peace, or the date of Robert Kennedy's assassination--is not a matter of how anyone, including X himself, may think or feel about X and his conscious or other states.

Knowledge with reference to specific matters is a condition which individual human beings are or are not in. Usually this condition is found in a social context. But if only one person existed it would still be possible for that person to be knowledgeable about some, at least, of the specific matters that concerned him--for example, about reliable sources of food and water in his environment.

Can this objective difference among human beings consist in properties and relations that fit within a naturalist ontology?

A long tradition of ancient and modern philosophers from Plato, Descartes and Kant to T. H. Green, Edmund Husserl and Hilary Putnam has insisted that it cannot. Others--especially those in the 19th and 20th centuries who insisted upon distinguishing Naturalism from Materialism--have held that it could be. But with the rise and development of the mind/brain identity thesis during the last half of the 20th century, the generous naturalism (as we shall call it) of Dewey, Santayana, Sidney Hook and others has largely disappeared in favor of a narrower naturalism more commonly and more correctly called "Physicalism" (the older "Materialism"). For it, all distinctively human properties are reduced to strictly physical properties of the central nervous system of the human body or to these plus characteristics of the natural and social setting--or, to nothing at all.¹

In this paper I will try to explain why narrower Naturalism or unqualified Physicalism cannot find a place for knowledge, and specifically for three of its essential components: truth, logical relations and noetic unity. At this late date it is hard to say much that will be strictly new on these matters, but, apparently, there is much that needs to be said again. What I shall say about truth and logic is practically identical with what Frege said more than a century ago, though I hold views significantly different from his on how truth and logic fit into the full context of knowing and knowledge.² What I shall say about noetic unity adds little to what has already been said by Kant, Lotze and Husserl.

Naturalism is...What?

Before the question about the narrower Naturalism's ability to accommodate knowledge within its permissible categories can be raised, one has to come to some understanding of what Naturalism and knowledge are, and this is difficult to do without begging important questions.

In traditional philosophical terms, Naturalism is a form of Monism. It holds, in some order of interdependence, that reality, knowledge and method each are of only one basic kind. That is, there are not two radically different kinds of reality or knowledge or method. It is fundamentally opposed to Pluralism, and most importantly to Dualism as traditionally understood (Plato, Descartes, Kant).

In its modern forms, Naturalism further specifies its Monism by reference to the empirical or the sense perceptible. The one type of reality admitted by it is that of the sense-perceptible world and its constituents. All knowledge is, for it, reducible to (or in some manner continuous with) sense perception, and all inquiry essentially involves sense perception, directly or indirectly. Currently, "the sense perceptible" is de-emphasized in favor of "the scientific"--the organization of data around empirically underdetermined hypotheses. But this is understood to constitute empirical research and, hopefully, to yield empirical or descriptive knowledge.

This leads directly into the current versions of "naturalized epistemology," where the emphasis is entirely upon the human being as a strictly physical organism acquiring beliefs in its "natural" environment. The question as to whether Naturalism can accommodate knowing and knowledge is then replaced by the question of whether the various normative issues that arise with reference to knowledge and belief formation in the course of human life and scientific endeavors can be replaced by mere descriptions of actual processes of belief formation. In the famous words of Quine: "Epistemology still goes on, though in a new setting and a clarified status. Epistemology, or something like it, simply falls into place as a chapter of psychology and hence of natural science. It studies a natural phenomenon, viz., a physical human subject."³

Knowledge itself, then--and, more weakly, justified belief--is simply belief that is produced in a certain way, for example, in ways that are reliable, ways that tend to produce true beliefs in actual as well as counterfactual situations that are relevant alternatives to the actual situation.⁴ Quine and others hold that epistemology can be appropriately replaced by psychology. This would yield what is now widely referred to as a "naturalized epistemology." Hilary Putnam, Jaegwon Kim and others hold, by contrast, that the normative (non-descriptive) element cannot be eliminated from epistemology, and therefore that a naturalized epistemology is impossible.⁵

All of this is now very familiar. But there are problems: problems which indicate to me, as it has to others, that the issue of the naturalization of knowledge is misconceived when stated in this way. And first of all, if we are going to replace epistemology with psychology we will have to decide which psychology will do. In fact, there is no existing psychology for the Naturalistic viewpoint to turn to. There is only an idealization of some adequate theory of human behavior which, supposedly, might at some time be achieved. This will, of course, have to be a "scientific" psychology. But what would that amount to? Could it possibly be a psychology that is not essentially identified in terms of Naturalism itself? Highly unlikely. But then we are running in a circle, specifying Naturalism in terms of psychology, but then... a naturalized psychology.

At present there are many socially identifiable, institutionalized forms of "psychology," with associated professional organizations, funding sources and avenues of publication. Research universities in the United States rarely ever have only one academic department giving advance degrees in psychology. So, when the naturalized epistemologist speaks of replacing epistemology with psychology, which department will he go to?

And we might also have second thoughts about normativity being the issue for the naturalization of epistemology. It is, of course, an issue. It is hard to imagine that the only epistemological question to be raised with respect to belief is its occurrence--even occurrence under certain conditions, no matter how fine-tuned those conditions may be. We would still want to know if our belief is "true," "correct," "right." Putnam asks: "Why should we expend our mental energy in convincing ourselves that we aren't thinkers, that our thoughts aren't really about anything, noumenal or phenomenal, that there is no sense in which any thought is right or wrong (including the thought that no thought is right or wrong) beyond being the verdict of the moment, and so on? This is a self-refuting enterprise if there ever was one!"⁶

But let us surrender the point for a moment and grant that epistemology can be replaced by psychology, the normative by the descriptive. Will it make any difference with respect to the longstanding issues around the naturalization of knowledge? Not really. The descriptive/normative contrast has no essential bearing upon the issue of Naturalism in epistemology. Getting rid of normativity will not secure the naturalization of epistemology and retaining it will not exclude naturalization. It has seemed to do so only because an

important philosopher (Quine) in an influential paper set that contrast up as the essential issue, and others, for whatever reasons, accepted his formulation as the framework of the debate.

On the one hand, a hardy Naturalist such as Dewey might very well insist that there is nothing non-natural about normativity.⁷ To think so is only to admit another of what Dewey often called "untenable dualisms." Norms are interwoven throughout human experience and are every bit as "natural" as anything else to be found there. And a Wittgensteinian reading of linguistic rules and forms of life could come up with much the same point. Only someone who reads "descriptive" (as opposed to normative) in a strongly materialistic or physicalistic fashion would take the opposition of normative to descriptive to be the issue of naturalism in epistemology. But many Naturalists have not taken "descriptive" in any such sense, and certainly science or experimental method does not of itself require them to do so. What, exactly, is so unnatural or non-natural about norms?

On the other hand, let's suppose we surrender norms--just banish "right" in both its adverbial and its noun forms from our treatment of knowledge and justified belief. What is so "naturalistic" about mere description? A description will be naturalistic only if what it is about--its content, what it mentions--fits into a naturalistic ontology. The issue for Naturalism certainly is not just about normativity. What, for example, would make one think that an adequate description of the formation of belief by means of a reliable process would mention only things that would fit into a naturalistic ontology? Only, I suggest, the prior assumption that the "science" of psychology will, when fully perfected, be appropriately natural--that it will "emerge" from biology as biology from chemistry and chemistry from physics, or something like that. Or, at least, that it will mention nothing "dualistic" or "transcendental" with regard to the physical world.

And this does not even raise the issue of whether or not description as such can be understood in naturalistic terms, or whether describing itself is an entirely natural event or fact. A fully naturalized semantics is, once again, just presupposed in the move to "description" without norms. But wouldn't the description (of reliable processes of belief formation, etc.) itself have to be "correct," "right," "adequate," "justified"? And have we then gotten rid of norms if we simply do not mention them in our descriptions of epistemic processes?

I presume that the age-old discussions in ethical theory pitting Intuitionism and Naturalism against each other (coming into the late 20th Century through the ethical Intuitionism of G. E. Moore and developing in the subsequent critique of "descriptivism" by ethical theorists practicing "linguistic analysis") must have influenced Quine to frame the issue of naturalizing epistemology in the way he did. But his was a clearly unfortunate choice so far as genuine philosophical progress is concerned.

Invoking 'Science'

What has just been said with reference to psychology and naturalized epistemology calls attention to broader issues bearing upon the specification of Naturalism.

Methodological monism is an enduring aspect of generic Naturalism, and modern Naturalism is often specified simply in terms of an exclusive application of scientific method in all inquiries. But how can this method support claims about the nature of reality as whole. For example, one might state that the only realities are atoms (quarks, strings, etc.) and derivatives thereof. But how is he to support his claim? It certainly cannot be derived from any specific science (physics, chemistry on up) or from any conjunction of specific sciences. And it is not to be derived through any application of experimental techniques within any science.

The Naturalist must then have recourse to that popular but philosophically suspect abstraction, 'science' itself, which says even less than the individual sciences about the nature of reality as a whole, because says nothing at all. It isn't the kind of thing that can say anything, though many individuals--usually, I think, not themselves scientists, and certainly not scientists expressing truths within the competence of their

profession--present themselves as speaking for science, and thus as being 'scientific' in some extended but still authoritative sense.

John Searle seems to be in this position. He speaks of "our scientific view of the world," which according to him every informed person with her wits about her now believes to be true. He speaks of a view of the world which includes "all of our generally accepted theories about what sort of place the universe is and how it works."⁸ "It includes," he continues, "theories ranging from quantum mechanics and relativity theory to the plate tectonic theory of geology and the DNA theory of hereditary transmission," etc. We might imagine a very long conjunctive sentence--containing the specific theories he has in mind as conjuncts--that would, supposedly, express the "world view" in question.

But this will hardly do what he wants. One thing that will not show up in such a conjunctive sentence is any claim about reality as a whole or knowledge in general. Such specific scientific theories as those just mentioned--and no matter how many of them we may list--cannot provide an ontology. They never even attempt to determine what it is to exist or what existence is, and cannot by the nature of their content provide an exhaustive list of what ultimate sorts of things there are. Their existential claims are always restricted to specific types of entities as indicated in their basic concepts.

We emphasize the point that to suppose that a given scientific theory or conjunction of such theories provides an ontology constitutes a logical mistake, a misreading of what the theories say and imply. Those theories, and the bodies of knowledge wherein they are situated, actually say nothing whatsoever about the universe or about how it--the whole 'thing'--works. This is a merely semantical point about the meaning or logical content of the claims or sentences that make up the sciences. It is to be established or refuted by examining, precisely, those claims and sentences. It turns out that they do not even mention the universe, the totality of all that exists, nor do they say anything about the boundaries of knowledge generally. Such matters simply do not fall within the purview of their methods or findings.

In support of this claim we ask: Could one possibly find the place in some comprehensive and duly accredited scientific text or treatment, or some technical paper, where it is demonstrated or necessarily assumed by the science concerned that all that exists consists of particles or fields or strings--or whatever the proper subject matter of the science is? Would Searle or anyone else be able to mention the name of the physicist who established this as an "obvious fact of physics"?² Exactly where in the "atomic theory of matter" is the claim about what "the universe consists entirely of" to be found?

"After all," Searle rhetorically asks, "do we not know from the discoveries of science that there is really nothing in the universe but physical particles and fields of forces acting on physical particles?" The answer, contrary to his assumption, is "No, we do not." Again, could he possibly just point out when, where, how and by whom this "discovery of science" was made. Was it made?

Also, before the philosopher can use "the discoveries of science" he must determine what "science" says. But this is to reify science, to treat it as an entity that issues "results." Science, as already indicated, says nothing at all. Particular scientists do. Unfortunately they also make unscientific statements. How can we tell when an individual scientist is making scientific statements, and "science" is therefore speaking, and when they are not? And can a 'scientific' statement be false or perhaps illicitly derived and still be scientific?

If a scientific statement can be false or based on logical errors, then a scientific statement may be less than knowledge. How, then, could it be required that we accept such statements as a basis or framework for philosophical work? History shows that statements accepted as "scientific" have been both false and based on logical errors. Is the advocate of Naturalism then one who works under an authority that may be and has been wrong? He himself would rarely if ever have the competence to do the scientific work and therefore must be taking the statements of "science" on authority. But blind authority is in fact one of the things we would expect Naturalism to stand against. Historically it has done so, and that has been one of its virtues. How can it avoid resting on it, however, if what Searle says is true? And is a philosopher's statement about

science, a scientific theory or scientist to be automatically regarded as itself scientific? What can its status be?

The Dilemma of Naturalism

Naturalism staggers back and forth between physicalism (materialism) as a general ontology and first philosophy, and outright physics-ism or scientism (which need not take the form of physics-ism)--often, though not always, trying to derive physics-ism from scientism and then physicalism from physics-ism. This continues up to the present.

In a recent review Patricia Kitcher chides Stephen Stich for "philosophical Puritanism" when he takes Naturalism to hold that the only real entities are physical.¹⁰ Such a position apparently has now led Stich to give up Naturalism "in favor of an open-ended pluralism." Pluralism, as he takes it, is a position that counts as legitimate all properties "invoked in successful scientific theories." But for Kitcher, it seems, such "Pluralism," tied to "successful science," is just the Naturalism we want. She points out how "the obvious authorities" on naturalistic epistemology (Quine, Goldman) counsel us to "make free use of empirical psychology" and to "reunite epistemology with psychology."¹¹ Forget physicalism, her point seems to be. A loose scientism is enough to secure Naturalism for us. Indeed, many of the "generous" Naturalists of the mid-20th century gathered around Dewey and Sidney Hook (See footnote #1) identified Naturalism precisely with acceptance of science and only science as the arbiter of truth and reality, and seemed, at least, to accept whatever came out of the pipe of "scientific inquiry" as knowledge and reality.

But if the points made above about science, even "successful science," and about psychology in particular, are true, Kitcher's advice--similar to the advice of a Dewey or Hook--simply cannot be followed. It is vacuous in practice, for there is no way of identifying and accessing the "successful science" which is proposed as defining Naturalism. At most you get "science now," which is really only "some scientist(s) now." And certainly no science (including psychology) that was not Naturalistic in some strongly physicalistic or at least Empiricist sense would be accepted as "successful" by those inclined to Naturalism. Then we are back in the circle: Naturalism in terms of science--but, of course, naturalistic science.

For these reasons I take it that the appeal to science cannot serve to specify naturalism. There are, then, good reasons to be a "Puritan" if you want to advocate Naturalism. Naturalism has to be an honest metaphysics; and that metaphysics has to be "unqualified physicalism" as referred to above. But then a thinker who would be naturalist would feel pressure to have recourse to some specific apriori analyses to render his ontological specification of Naturalism plausible. Short of that one simply can find no reason why naturalistic monism with respect to reality, knowledge or method should be true: no reason why there should not be radically different kinds of realities with correspondingly radically different kinds of knowledge and inquiry. Why should sciences be "unified"? This lack of reason is, I think, what made A. E. Murphy conclude long ago, in his review of Naturalism and the Human Spirit, "that the naturalists, who have so much that is good to offer, still lack and need a philosophy...."¹²

In addition to the difficulty of coming up with such apriori analyses, however, to turn to such inquiry as might produce them would be to break with the epistemological monism essential to Naturalism and introduce something like a "first philosophy." This would be discontinuous with the empirical methods of the sciences. In showing its right through apriori analysis, Naturalism would simply give up the game.

In specifying what Naturalism is, therefore, one seems to be faced with an inescapable dilemma. Either one must turn to apriori (non-empirical) analyses to establish its monism, which will refute Naturalism's basic claim about knowledge and inquiry, or its claim will have to rest upon a vacuous appeal to "science."

That might seem to end the discussion about Naturalism as a philosophical alternative. But there may be a way to keep it going. One could retreat to a mere methodological Naturalism and say that scientific method is our only hope as human beings. Whether or not we can adequately specify Naturalism or know it to be true, one might say, the "scientific method" must be exclusively followed for human well being. Naturalism

would then be a humane proposal, not a philosophical claim. The proposal would be to assume in our inquiries that only the physical (or the empirical) exists and to see if inquiry based upon that assumption is not more successful in promoting human ends than any other type of inquiry.¹³ Our task here would then be to show that the methodological assumption proposed contradicts what knowledge itself is, and to insist that it therefore cannot be an adequate methodological assumption, since it will not allow us to understand knowledge itself.

And Knowledge is...What?

But now what about knowledge? I take knowledge in the dispositional sense to be identical with the capacity to represent a respective subject matter as it is, on an appropriate basis of thought and/or experience. In the occurrent sense it consists in actually representing, at a point in time, the respective subject matter as it is, on an appropriate basis of thought and/or experience. This is not intended as an analysis or definition of knowledge, but as an initial description of cases which count as knowledge or knowing.

What constitutes an "appropriate basis" will vary from subject matter to subject matter, of course, as is generally acknowledged of the corresponding methods of inquiry. It is, no doubt, impossible to define "appropriate basis" in any perfectly general way, or even to specify perfectly general necessary and sufficient conditions for having an appropriate basis. Certainly I will make no attempt to do so here. However, a few things may be said about the necessary conditions of knowledge and knowing, without intending to be definitional or even comprehensive. The challenge to the narrower Naturalism will be to accommodate these necessary conditions. If it cannot do so it must be false, though it might still offer itself as a heuristic principle of inquiry.

Clearly one necessary condition of knowledge, both in the occurrent and dispositional senses, is truth. This is a necessary component of representing anything as it is. But this necessary element in any sufficient condition of knowing rules out all known psychologistic or sociological analyses of knowledge, such as certainty, rational acceptability, warranted assertability, reliability of process, etc., all of which apparently could be satisfied in conjunction with representations and beliefs that are false. Could, that is, unless truth is simply defined in terms of such psychological or sociological conditions. (Of course certainty, warranted assertability and the like each have psychological and other interests in their own right.)

We should also note that logical relations will be essentially involved in any case of knowing. That perhaps should be expected because of their intimate association with truth. To know one must think, in the sense of actively exploring the logical interrelationships involved in and with the respective representations. This is merely to say that the subject matter in question must be reflectively and thoroughly conceptualized, and the logical relations between relevant propositions and experiences carefully examined. Knowledge, accordingly, does not simply happen to a person. It is not a passion.

Finally, in order to know one must have a certain broad familiarity with the subject matter itself--have observed it, tested it, informed oneself, thought it through--in ways suited to the kind of subject matter in question. How and to what extent this can and must be done will be determined by the relevant process of conceptualization of the subject matter (and of course by the subject matter itself), which will go hand in hand with observation and experimentation. All of this will produce a certain unity of consciousness that is necessary for there to be knowledge. Knowledge does not come in discrete units. Noetic unity across a complex field of consciousness within one person is required.

The absence of any reference to belief in my statements on knowledge and knowing will be immediately noticed. The absence is intended, and though rare today in discussions of knowledge it is by no means unique in the history of the theory of knowledge.¹⁴ Even such a resolute Naturalist as Roy Wood Sellars specifies the nature of knowledge without reference to belief.¹⁵

Belief I understand to be some degree of readiness to act as if such and such (the content believed) were the case. Everyone concedes that one can believe where one does not know. But it is now widely assumed that you cannot know what you do not believe. Hence the well known analysis of knowledge as "justified, true belief." But this seems to me, as it has to numerous others, to be a mistake. Belief is, as Hume correctly held, a passion. It is something that happens to us. Thought, observation and testing, even knowledge itself, can be sources of belief, and indeed should be. But one may actually know (dispositionally, occurrently) without believing what one knows.

Whether or not one believes what one represents truly and has an appropriate basis for so representing, depends on factors that are irrelevant to truth, understanding and evidence. It depends, one might simply say, on how rational one is. Now I do not think that this point about belief in relation to knowledge is essential to the rest of this paper, but I mention it to indicate that the absence of any reference to belief in my general description of knowledge is not an oversight. Belief is not, I think, a necessary component of knowledge, though one would like to believe that knowledge would have some influence upon belief, and no doubt it often does.

In addition, it seems to me that specification of knowledge in terms of belief is a harmfully tendentious characterization, favoring the naturalization of knowledge. This is because belief has an essential tie to action, and is therefore easily located in the natural world--say as a mere tendency of the physical organism to behave in certain ways. I suspect that it is the almost overwhelming Empiricist--and in that sense Naturalist--tendency of thought in our time that has created the general presumption that knowledge must be some kind of belief. Hence we must here at least question that presumption; and, I believe, when questioned it will not prove to be obvious or, finally, sustainable.

It also should be noticed that on the view here advanced one may know without knowing that one knows. Skeptical tendencies are often associated with the mistaken view that one has to know that one knows in order to know. And in particular, one does not have to know that one actually has "an appropriate basis in thought and experience" in order to have one, and one does not have to know that one's representation is true in order to know. It has to be true, indeed, but we do not have to know that it is true. We "use" it or live it; we don't "mention" or focus upon it.

Knowing that my representation is true is quite different condition from knowing the respective objective circumstance to be the case. When I know that the book in my briefcase is a copy of Kant's Critique of Pure Reason, for example, what I know is not that my representation of the book in my briefcase as being a copy of Kant's Critique is true--though of course I might know that too. What I know is something about that book, namely, that it is in my briefcase. And likewise, when I know that, I may not know that I have an "appropriate basis" for representing it as I do--though I might know that too. It is enough that it is true, and that I do I have an appropriate basis for representing it as I do.

Clearly, if I cannot know without knowing that I know, then I can't know that I know without knowing that I know that I know. And so forth. This is a genuinely vicious regress. But we often do in fact know things without knowing that we know, and without even considering whether we know or not. Many familiar cases could be cited.

Essential to knowledge and knowing are, then, at least truth and logical grounding. We know only if our representations in the given case are true and logically non-arbitrary. Essential to logical grounding are logical relations: especially the simple formal relations of implication, consistency and inconsistency. Noetic unity comes in because knowing and knowledge require a larger context of consciousness involving many interrelated states and acts and kinds of states and acts. Our question now becomes: Can truth, logical relations and noetic unity be understood in physicalistic--and in that sense "naturalistic" --terms? Can knowing and knowledge be accommodated within the categories of physicalism, the narrower or "Puritanical" Naturalism?

Truth as "Matching Up"

Truth lies at the heart of knowledge. Knowledge is a condition of the human being that involves truth, for it involves representing its subject matter as it is; and, as we shall also see, much of our knowledge is in the first instance knowledge of truths.

Truth is also a vital human need, and a major part of what makes knowledge valuable. It and its opposite, falsity, are solidly at home in the midst of ordinary life. To know what truth is and to be able to recognize it and its opposite are basic components of ordinary human competence. To find one's way about, to communicate, and to give and receive directions and commands often requires us to identify the truth values of thoughts, beliefs and statements. In functioning in normal human relationships, say in a family or on a job, one must be able to recognize truth in thought, belief and statement. All of us bear a primary ethical responsibility to make sure that how we are thinking and speaking of things is as they are, that is, that our thoughts and words are true. Our view of the nature of truth must be compatible with its actual role in real life. But what is truth?

We first come to know truth--and what truth is--in concrete cases of verification within our physical environment. An infant in its second year of life or earlier develops the ability to look for something and to recognize it--what they are looking for--when it is found. The child at that point is capable of sustaining a specific thought or representation of something and of sorting objects that come before it with respect to whether they are or are not what they are seeking. Close to the same time the "uh oh!" phenomena emerges. The child observes things as not being how they 'should' be or are expected to be and verbally expresses the felt incongruity or lack of "fit." Closely linked with these developments is the ability to think of something as being such and such, and the associated capacity to find something to be (or to not be) as it is thought to be. This is verification as a human reality. It is a primary form of knowing in the occurrent sense.

Soon the child learns the utility of lying, or representing things as it knows they are not. At that point it is in position to become truthful or honest, to routinely represent things as it knows them to be. Interestingly, children never have to be taught to lie. At an early age they figure it out quite on their own from their understanding of how thoughts and words do and do not match up with what they are about. This "matching up"--primarily of thought, and well before language is at the child's disposal--stands clearly before the child and is an essential condition of then learning the use of the words "true" and "false."

There is, accordingly, nothing esoteric, mysterious or enigmatic about truth (or falsity) itself, though many particular truths have such properties and some may even be completely unknowable. It is enigmatic or mysterious only for those who have decided that what it is it cannot be, or who have adopted a theory of mind (or language) and world that makes it either impossible or inaccessible. When what our belief or statement is about is as we believe or state it to be, when our representation or idea "matches up" to its object in the familiar way already indicated by cases, our representation (belief, statement) is true. Truth itself is just this characteristic of "matching up." When it is absent our representation etc. is false.

Truth and falsity are objective properties of representations. They are objective ways in which propositions differ and resemble among themselves, just as colors (red, yellow, green) and sizes are objective ways in which apples and other things differ and resemble among themselves. To say that they are objective is to say that they do not depend upon what we may think or feel about them. No proposition etc. can be made true merely by believing or favoring it--by one person or a million.

Now since this is so, what we find truth (or falsity) to be in the abundant cases where we can compare beliefs or statements (or, more properly, the propositions they involve) to what they are about is exactly what truth is in the cases where we do not or cannot directly compare thought with its subject matter. This characteristic constancy is something that truth values share with any object that, like truth, is not produced or modified by cognitive or other attitudes toward it. For example, thoughts to the effect that a certain candidate won an election, that the earth goes around the sun, and that Milton in Paradise Lost really intended to glorify rebellion are cases where we cannot directly verify or experience the truth of the thoughts by comparing them with what they are about. This inability, however, is due to the nature of the particular subject matter in relation to our cognitive faculties, not to the nature of representations, truth and reality as such. The truth of a belief or statement is not created by verification, but discovered by it.

Otherwise we could prevent a belief from being true by refusing to verify it. Even in the cases most difficult to verify, truth remains a "correspondence" or "matching up" of the general type we become acquainted with in the verified cases.

For a thought or statement to be true, then, is simply for its subject matter to be as it is represented or held to be. When we confirm that a hitherto unconfirmed belief or statement is true, we do not create the relation (correspondence) it actually has to what it is about, any more that we create the fit of a wrench to a bolt head by placing the wrench on the bolt head, or the fit of a door to a frame by setting the door in the frame. The wrench fits the bolt head (or does not) even if it is never placed upon the bolt head, and the door fits the frame (or does not) even if it is never placed within it. And, similarly, a representation that is true is true even if it is never verified--by direct comparison with its object or otherwise. Truth is not the same thing as verification or proof, nor is it dependent for its existence and nature upon verification, any more than the fit or "correspondence" of the wrench to the bolt head is or is dependent upon the juxtaposition of the wrench upon the bolt head.

Also, what truth is does not change with time or historical process. It is a certain property or relation-like structure, and as such it is not the kind of thing that can change, any more than grey and yellow or sister or brother can--which is a totally different matter from how we choose to use the words "grey," "yellow," "sister," and "brother." When philosophers of the last two centuries have suggested that truth--this relation-like structure of correspondence that we all become acquainted with in our early years--is "really" the logical coherence or practical utility of beliefs or statements, etc., their suggestion is no more worthy of serious consideration than would be a suggestion that yellow is really an odor or that being a sister is the same thing as being a seamstress. Those suggestions were in fact based on the assumption that we cannot compare beliefs and statements with what they are about--an assumption that is refuted by the fact that everyone constantly does it.

The Naivety of "Correspondence"

But isn't this view, as commonsensible as it may seem, simply naive, simple minded? Hasn't what we have learned about mind, phenomena, language and culture in the last two centuries shown that we do not and cannot experience such 'truth', can never directly find the fit (or lack of fit) between representations and what they are of or about?

To answer this question in any remotely adequate manner would require a critical interpretation of theories of knowledge since Locke. It is, above all, with Locke that we seriously and continuously began to develop theories of representation (first mental and then linguistic or "symbolic") according to which our representations actually make it impossible to see whether our thoughts "fit" what they are about because any attempt to do so would only yield another representation, and so on. This theory has been the foundation for many of the major 'triumphs' over Naturalism, from Kant and Hegel to Putnam and Derrida, as well as the root of the failure of many attempts at a genuine realist (often confused with naturalistic) theory of knowledge. It is also what has turned truth itself into an enigma or impossibility for many thinkers, and has led in the last two centuries to the emergence of many well known candidates for its office.¹⁶

Still, a few points might be usefully mentioned in response to the charge of naivety.

First of all, the anti-correspondence, representationalist theories which now fill up the recent philosophical past are far from coming together in an adequate account of the mind-world relation or lack thereof. It isn't as if there were now available some solid insight grounding an alternative to the type of accessible correspondence described above. In fact there is no generally acceptable alternative to correspondence. There is a series of successively discredited theories from Locke to Hume, to Kant to Hegel (or Fichte) to Positivism and Phenomenalism in their various forms; and then 'language' (the "new way of words") is substituted for way of "ideas" or "experience," and the old battles fought over again. This time about how words tie to the world, and the outcome being a lingo-centric predicament instead of a ego-centric

predicament. One cannot easily suppose that there is a philosophically credible alternative to the correspondence theory of truth. We don't have "something better" on hand.

Second, it is a noteworthy historical fact that every significant philosopher up to Kant accepted correspondence or "matching up" as the correct account of truth, even in cases, such as Hume's, where it was inconsistent with their overall system. Of course that does not by itself prove that that account is correct. But it is a historical fact that calls for some explanation.

This fact is, I think, associated with another significant fact: that those philosophers never suspected that thought was somehow linguistic, and that the real problem of truth had to do with sentences and what we do with them. Sentences and utterances do not, in fact, correspond to what they are about, and whatever truth may be as a predicate of them or other linguistic items is certainly open for speculation. What counts as a sentence (etc.) is also obviously relative to a language, and which sentences are true or false will be likewise. No doubt there are many interesting questions to be pursued with reference to sentences, languages, and "truth" as a linguistic predicate. But to suppose that a pragmatic or disquotational or rational acceptability theory of truth, for example, has anything to do with truth as a child comes easily to recognize it and as it is present in the constant experience of adults is simply to mistake or try to substitute one thing for another--of course from deep and powerful philosophical motivations.

These would surely include motivations of an empiricist or naturalistic character. Sentences and utterances, at least, present themselves as public, sense perceptible objects--though the "rules" governing them do not. But a certain version of contemporary Formalism in logical theory actually attempts to pass off the visible shape and arrangement of written symbols as logical form.¹⁷

Third, there remains the fact that we do constantly experience the "matching up" of thought with a subject matter we do not make or maintain in existence. At least we are strongly impressed that we do when we are not in the philosophical arm chair: so strongly impressed that only some very strong philosophical impetus to the contrary could shake us. I think it is this that explains the long dominance of the correspondence theory among philosophers.

There are two main philosophical interpretations of consciousness that undermine this commonsense impression and the long philosophical tradition. One--the "Midas touch" picture of consciousness, as I call it¹⁸--is the view that to take something as our 'object' automatically transforms it in some essential way (possibly even making it 'mental'). How, exactly, consciousness--or for that matter language, or culture--being what it is, could make a tree or block of ice what it is, or turn something that was not already a tree or block of ice into one, is truly hard to say. We actually know how trees etc. come about, and they are not made by consciousness. One also can safely say that the story about how consciousness supposedly does its transforming and productive work has never been satisfactorily told. The second interpretation plays off of the saying that one cannot escape consciousness--can't, as it is often said, "step outside of one's mind." Certainly, to be conscious of anything one must be conscious. But it does not follow from this that one cannot compare a thought to what it is about and see whether it "matches up" or not. Only confusion could make one think it does--a confusion probably based upon the "Midas touch" picture of consciousness.

Fourth, those who reject the correspondence model of truth do still, it seems to me, accept it, or at least its essential point, in a certain important respect. In advancing their own theories of the relationship between mind (or language/culture) and world they do not seem to me to suggest in any way that the truth of those theories about that relationship is in any sense relative. They seem to me to be telling us how things are with that relationship regardless of how they or any other person or culture may or may not speak or think of it. They give us the essential truth and the necessary essence of that relationship. I believe this to be true of the extreme relativists such as Rorty and Derrida, but also of the more modest ones such as Putnam.

Thus, Putnam states his own view that "truth and rational acceptability--a claims being right and someone's being in a position to make it--are relative to the sort of language we are using and the sort of context we are in."¹⁹ But can we imagine him to be thinking that his view of truth and rational acceptability here

expressed is relative to language and context? I believe he intends to tell us what is the case with regard to truth and rational acceptability itself, and what indeed cannot be otherwise. That we are always "within" a language, he is telling us, is an essential truth that makes "metaphysical realism" a strict and eternal impossibility. And yet he surely is, precisely, a metaphysical realist about our being within a language. The idea that in his discussions of language (mind) and world he is merely reporting on how things go from within a particular language and context which happen to be his does not seriously bother him--as surely it should if his views of truth etc. are, shall we say, true. But that would turn his view into something that would be of no general philosophical interest. And he does take philosophical interest to be of great importance. That is why he wants to be a Realist of some sort, if only an "internal" one. He can't just join up with Rorty et al. and treat truth as whatever can be sustained in your context. Thus his claim that Quine allows himself a "transcendental standpoint" in a certain respect²⁰ actually applies to himself, if I am right, with regard to his claims about rationality, truth, reference and allied subjects. Here he indeed does take the "God's eye view."

Now this is by no means peculiar to Putnam, who is certainly one of the very finest of contemporary thinkers. I think it is built into the essential function of thought and assertion to present things as they are without regard to their being thought of or spoken of. Thus we have to use special forms of thought and language to express how things appear to us or are conceptualized by us or our group. If I am right, the simple correspondence indicated above has had the influence it has had over philosophical tradition and plays the role it does throughout human life because that is what really lies at the juncture between mind and world where we actually live. I believe no sound reason has ever been given for thinking it does not.

Why Truth Can't Be "Naturalized"

Suppose, then, that truth in the sense of the matching up of representation with subject matter lies at the heart of knowledge. Can it be captured within the categories of the narrower Naturalism? I believe it clearly cannot. The argument against it is an old and simple one that has been reworked in many forms in recent decades.²¹

Suppose that we have an acceptable list of physical properties and relations. We might take them from physical theory, as the properties and relations corresponding to the concepts of current physics: location, mass, momentum and so forth. (Who knows what the future or ultimate physics will look like?) Or, moved by the above doubts about what philosophy can soundly derive from the sciences, we could turn to the primary qualities of Modern philosophy, and, for that matter, add on the secondary ones as well: color, odor, etc. I don't think we need, for present purposes, to be very scrupulous about the list. Let us agree that whatever goes on such a list will count as physical properties, and that narrow Naturalism is the proposal to confine our inquiries and conclusions to whatever shows up on the list and combinations thereof.

The argument, then, is simply that no such property or combination of properties constitutes a representation of anything, or qualifies their bearer as being of or about anything. The properties of those properties and combinations thereof are not the same as the properties of representations (ideas, thoughts, propositions, beliefs, statements). If this is correct, and if the narrower Naturalism admits only these properties, then there are no representations in the world of the narrower Naturalism. Truth then disappears from that world, because in it no subject matter is represented; and hence it can never happen that something "is as it is represented or thought to be." With truth, knowledge also disappears. The ontological structure of knowledge cannot be present in the world of narrower Naturalism.

Note that my claim is that such physical properties never constitute a representation. I say nothing here about representation (mental qualities) not emerging from the physical properties of, say, the human brain. This is not because I think they may so emerge, although some form of interaction between them and the brain surely does happen. Rather, it is because I can only regard talk of the emergence of irreducibly mental

properties from the brain or the central nervous system as mere property dualism cum apologies.²²

Significantly, Hilary Putnam and Daniel Dennett, in defending their own views of representation, belief and the intentional, emphatically support the view that the physical is devoid of the representational. Putnam asks us to imagine an ant crawling around in a patch of sand in such a way as to trace out "a recognizable caricature of Winston Churchill."²³ "Do the lines thus produced depict or represent Churchill?" Putnam asks. He thinks most people would say it does not. The ant has simply traced some lines "that we can 'see as' a picture of Churchill." Putnam's view is that nothing (in the brain/mind or out) in itself is a representation of anything, but is of or about (depicts or denotes), something other than itself, if it does so, only because we "take it" as depicting or denoting that other thing.

Dennett holds a similar view, and specifically with reference to the states of human beings, such as beliefs, desires, etc. In the typically "naturalistic" mode he declares his "starting point to be the objective, materialistic, third person world of the physical sciences," and holds "that philosophy is allied with, and indeed continuous with, the physical sciences."²⁴ Like Putnam (who of course is not a Naturalist), depicting, denoting, etc. is for Dennett only a matter of how we treat something. "The intentional stance" or "intentional strategy," as he calls it, "consists of treating the object whose behavior you want to predict as a rational agent with beliefs and desires and other mental states exhibiting what Brentano and others call intentionally."²⁵ The existence of belief, etc. with its intentionality is to be confirmed only by the success of the intentional stance as a strategy for predicting behavior. And when a better predictive strategy comes along, all the mental clutter of "folk psychology" will go the way of phlogiston and witches. Of course if that happens they aren't "really there" now.

For Dennett as for Putnam there is nothing in the brain or out that by its nature represents something else. There are no "natural signs." There are only human events of "taking as." And these events of "taking as" also, it would seem, must themselves lack any natural capacity for representation (of what is taken as). Rather they, in their turn, can only be taken as representing what is taken as intentional states or systems of the human organism, or what is taken as pictures or symbols. They do not inherently represent them.

Surely there is something wrong here. If we are in a world where nothing is naturally representative of something else, and we see the lines traced by the ant as a picture of Winston Churchill, then our seeing also is not naturally of the lines, and of the lines as depicting Churchill. Either there is going to be at some point a "taking as" which does not itself represent anything (even what is "taken")--which certainly sounds like a self-contradiction and is at best unlike the instances of "taking" featured in Dennett's explanations--or there is going to be an infinite regress of "takings." This inclines one to say that unless there are some natural signs--things that refer or represent simply because of what they are--there will be no signs at all.²⁶ But natural signs are, precisely, impossible in the world of strict physicalism--and, for his own reasons, in Putnam's more generous world as well.

Logical Relations

If narrow Naturalism cannot provide for truth, it also cannot provide for logical relations. Yet these too are essential constituents of knowledge. It cannot provide for such relations because they are, precisely, relations with respect to the truth values of propositions. Here we need only consider simple cases such as the relation of contrariety. Two propositions are logical contraries if they can both be false but cannot both be true. For example, Sue's dress is red and Sue's dress is blue. If one of these propositions is true, the other must be false. They cannot both be true. But both can be false--if Sue's dress is white, for example. The relation of contradiction, by contrast, is one that requires two propositions related by it to have opposite truth values, whichever they may be.

These and other logical relations are, like truth itself, objective relations. They obtain or do not obtain between propositions regardless of what any individuals or groups may feel or think about them. Moreover, laws expressing the logical relationships and logical character of propositions have a different sense and character from any laws of physical or psychological fact. They are neither hypothetical nor inductive, and have no existential import for such facts. They remain valid whether or not any such facts obtain. This becomes clearer if one tries to deduce or prove them from physical, psychological or linguistic facts or laws. It is not so much that it is not, in fact, done, or that it cannot be done, as that one cannot even imagine

what it would be like to do it.²⁷ These are points which Frege and Husserl elaborated so effectively in the late 19th and early 20th Centuries that they could hardly be raised for discussion until the philosophical turn from thought to language and culture was more or less completed in recent decades. But I think they are points which can be made to stand up independently of the correspondence account of truth; and, if so, they provide a refutation of Naturalism independent of that account and resting simply on the nature of the Laws of Logic.

But the centrality of logical relations for knowledge does not just concern the essential involvement of logical relations with truth values. Comparatively speaking, very little that we know we know because we are able to directly examine the respective subject matter and verify the truth of our ideas about it. This little is, of course, profoundly important, both in allowing us to understand what truth is, as explained above, and in providing true premisses from which we may proceed to other known truths by following out logical relations. Finding truths by following out logical relations occurs to an almost fantastic extent by the application of mathematics to various domains--and especially now, when such application is hugely extended by means of computers. In these cases it is knowledge of the truth of the derived propositions that allows us to know that the corresponding state of affairs obtains and that its constituents exist. Here logical relations plus truth of premisses allows us to know unexperienced (and even unexperiencable) existence, rather than the comparison of existence to thoughts about it allowing us to know truths.

Noetic Unity

As logical relations presuppose truth, so noetic unity presupposes logical relations--and more, presupposes a pattern of simultaneous and successive awarenesses that intercommunicates across a wide range of mental states and acts and their objects. The noetic aspect of knowing and knowledge encompasses all of the types of mental states and acts and their ways of coming together that are involved in the individual coming to know or to be in a state of knowledge. Knowledge is something that must be possessed. It is not the same thing as theory. And the possession of knowledge is an incredibly complicated and messy business, even with such a relatively simple part of knowing as a mere inference.

Thus Kornblith is quite right and makes a crucial point in rejecting purely apsychological accounts of belief (and knowledge) formation.²⁸ These types of accounts simply overlook the noetic requirements of knowledge and lead to what she calls "The Arguments-on-Paper Thesis," which treats justification as merely a matter of the logical relationships between propositions. The various forms of anti-foundationalism draw most of their ammunition from legitimate noetic considerations, and that is their strength: Quine's famous "web of belief," Popper's picture of inquiry as driving piles into mud and sand just deep enough to support the bridge, Norwood Hansen's theory-ladenness of perception, Horkheimer's distinction between "traditional" and "critical" theory, the currently famous "intertextuality," etc. etc.

Because the noetic issues are routinely mishandled through ontological mistakes or confusions carried into discussions of them--usually from empiricist or naturalistic assumptions--those who emphasize the noetic (and in a sense the psychological or even the social) conditions of knowing and knowledge most often turn out to be anti-realists. And one may be taken for an anti-realist just for attempting to do justice to the noetic requirements. About a century ago Wilhelm Wundt accused Husserl of refuting logical psychologism in the first volume of his Logical Investigations and reverting to it in the second volume--merely because the second volume is devoted to issues that are essentially noetic. The opposite of Naturalism, however, is not some form of subjectivism or idealism. Anti-Naturalism does not need to downgrade the ontological status of the empirical world and the empirical self. We don't surrender realism to defeat Naturalism.

Still, for all the risks, any careful practice of knowing or theoretical examination of knowledge (and none have surpassed Husserl's) must take its noetic dimensions into account. That is why philosophers do not write their arguments on three by five cards and pass them around to each other, and why even footnotes (pace Searle) are not a sign of low philosophical quality.²⁹ Philosophers produce expository texts, as well as arguments, to express, convey and evoke a noetic context within which actual understanding and knowing can occur and arguments be appreciated.

Thus, in his Discourse on Method, Part II, Descartes lays out his favored four from among "the great number of precepts of which Logic is composed." All four are clearly noetic principles, from refusing to 'accept' whatever is unclear, to the meticulous review of the steps in the progression from the clear and simple to the complex but logically derivable. Of course they also presuppose truth and logical relations and an ordered awareness thereof.

In a more recent philosophical presentation of modern logic, L. S. Stebbing distinguishes and interrelates inference (the essential noetic structure) and implication (the logical relation), the "therefore" and the "if...then," as she also puts it.³⁰ (She uses the term "epistemic" but clearly means the noetic as here understood.) The "epistemic" conditions of coming to know q on the basis of p, as she describes them, include: p must be known to be true, and p must be known to imply q without its being known that q is true. She also holds that "although p may imply q when q is false, yet q cannot be validly inferred from p unless it is the case both that p is true and is known to be true." She goes on to discuss the difference between inferring something ("validly"?) and tracing out the logical consequences of a proposition not assumed to be true or even assumed to be false, as in reductio ad absurdum. Such use of assumptions and logical relations are obviously a crucial part of coming to possess knowledge, though they clearly are not inferences or arguments.

Alvin Plantinga rightly notes that "foundationalism is a normative thesis about noetic structures."³¹ And, of course, the same is true about the many versions of Coherentism, Verificationism, Aufbau projects, Social Constructionism, Externalism, Internalism, and "linguistic rule" theories that have turned up during the last century or so.

So, can the noetic be naturalized? It clearly cannot be, because of its pervasive involvement with logical relations. But there is more. The Kantian theme of the "unity of apperception" turns up here. His primary focus was upon the unity of a simple judgment and what was thereby presupposed about the mind. That is an important topic in itself, but knowledge and knowing does not come in the form of a simple judgement, or two or three of them. It comes in the form of a vast "web," to borrow Quine's word, of judgments, conceptualizations, perceptions, memories, even feelings and sensations, and experiences of many kinds. Indeed, it is not too much to say, a web of life. To know, we have said, is to represent something as it is, on an appropriate basis of thought and experience. The "appropriate basis" is never just awareness of a few logical relations, and a considerable "background" must be in place before the simplest cases of verification--finding the broom to be in the closet as I thought it to be--can occur.

Now, without logical relations and awareness of logical relations none of this could exist. But everything from how rationality functions across the great noetic web of the individual self, to the basic nature of creative genius (what was it about Einstein, after all?), to issues of self-identity are involved in noetic unity. This, I believe, is why it is impossible to lay down general sufficient conditions of an "appropriate basis." And before Naturalism can triumph it would have to provide an elucidation of noetic unity within the framework of Physicalism specified above. This will take more than an argument that pain is a chemical process in the brain plus a salute to the future of brain science. We will need an "identity thesis" that reduces Einstein's understanding of physical theory to brain states before it becomes really interesting.

Summary

We have tried to show why Naturalism must be taken in the form of a "Puritanical" physicalism if it is to be a philosophically significant position, and have presented knowledge as involving at least truth as correspondence, logical relations and noetic unity. We have argued that there is no place for truth or logical relations in a world where the only properties are physical, and therefore that noetic unity is also impossible in such a world. Since it is possible--many things are known and there are people of great knowledge--Naturalism must be false. It cannot accommodate the ontological structure of knowing and knowledge.³²

Notes

1. What might be called "generic Naturalism" has a long history that includes: Classical Naturalism, with figures such as Democritus, Epicurus, Aristotle and Lucretius; Renaissance Naturalism, with Bruno, Campanella and Telesio, and--born too late--Spinoza; Empiricist/Nominalist Naturalism, with Hobbes, Hume, D'Holbach and most of the French Encyclopedists and Comte; 19th-Century Materialistic Naturalism, with Jakob Moleschott, Karl Vogt, Ernst Haeckel, Ludwig Büchner, Herbert Spencer and, it is often presumed, Charles Darwin; Mid-20th-Century (largely anti-Materialistic) Naturalism, with Santayana, Dewey and others; and Late-20th-Century ("Identity Thesis") Naturalism, which wavers between Scientism and Physicalism, with Quine, David Armstrong, Paul and Patricia Churchland, John Searle, etc.

To appreciate contemporary Naturalism for what it is, and the logical nuances that surround it, one has to see it in this long historical context. The single unifying theme of all Naturalisms is anti-transcendentalism. Their steady point of reference is the visible world and whatever it contains, which is "Nature" in extension. Nothing "outside" it is to be allowed. This visible world is held to be self-existent, self-explanatory, self-operating and self directing. Usually though not always it is thought to consist entirely of processes involving only blind force. But what "Nature" is in intension has never been agreed upon among Naturalists. Some look very much like Pantheists, and yet others (Santayana, Dewey) reach very far to incorporate "the divine" and all that is humanly unique into "Nature." (See, currently, the divergence between Searle and, e.g., Paul Churchland or Daniel Dennett on the nature of the the mental.) Thus "self" in "self-existent" etc. only has the negative meaning of "non-other," i.e., not in virtue of something separate from this thing called "Nature."

Effective entry into the long story for use by a contemporary thinker can be gained by starting with the article by James Ward, "Naturalism," in the Encyclopaedia Britannica, 10th edition, vol XXXI, p. 88, and then going on to his Naturalism and Agnosticism, (London: A & C Black, Limited, 1915). W. R. Sorley's The Ethics of Naturalism (London; William Blackwood and Sons, 1904), especially pp. 17-21, is also helpful in understanding how Naturalism has tried to distance itself from Materialistic Naturalism of Vogt, Haeckel, Büchner, etc. A series of articles on Naturalism in The Journal of Philosophy from 1945 through 1949, easily identifiable by their titles, was evoked by the appearance of Naturalism and the Human Spirit, [Yervant H. Krikorian, ed., (New York: Columbia University Press, 1944)] and by A. E. Murphey's excellent critical review of it in that Journal [42 (1945): 400-417]. The outcome of the mid-20th Century discussion is nicely summarized by Arthur Danto's article, "Naturalism," in Paul Edwards, ed., The Encyclopedia of Philosophy, vol. 5 (New York: Macmillan Publishing Co., 1967), pp. 448-430. One of the intriguing aspects of the current situation is how Materialism, which was thought to be dead or something to be avoided for the first half of the 20th Century, came to life again in association with the "identity thesis" of mind and body and a new Scientism, and led to a reformulation and resurgence of Naturalism at the end of the 20th Century. Reading Danto's fine article you would never have thought it possible.

For broader, cultural bearings of Naturalism, see Paul F. Boller, Jr., American Thought in Transition: The Impact of Evolutionary Naturalism, 1865-1900, (Chicago: Rand McNally & Company, 1969), and John Ryder, ed., American Philosophic Naturalism in the Twentieth Century, (Amherst, NY: Prometheus Books, 1994). [Return to text.](#)

2. See for details my paper, "The Integrity of the Mental Act: Husserlian Reflections on a Fregian Problem," in Mind, Meaning and Mathematics, Leila Haaparanta, ed., (Dordrecht/Boston: Kluwer Academic Publishers, 1994), pp. 198-224. [Return to text.](#)
3. W. V. Quine, Ontological Relativity and Other Essays, (New York: Columbia University Press, 1969), p. 101. [Return to text.](#)
4. Hilary Kornblith, "Beyond Foundationalism and the Coherence Theory," in Hilary Kornblith, ed., Naturalizing Epistemology, 2nd edition, (Cambridge, MA: The MIT Press, 1994), p. 142. [Return to text.](#)

5. See Jaegwon Kim, "What is 'Naturalized Epistemology'?" in Kornblith, ed., Naturalizing Epistemology, pp. 33-55; and Hilary Putnam's two Howison lectures, published in his Realism and Reason, (Cambridge: Cambridge University Press, 1983), Chapters 12 and 13, under the titles "Why There Isn't a Ready-Made World" and "Why Reason Can't Be Naturalized." [Return to text.](#)
6. Realism and Reason, p. 246. [Return to text.](#)
7. See the Chapter "The Construction of Good," in Dewey's The Quest for Certainty, (New York: G. P. Putnam's Sons, 1960) or most any of Dewey's mature works, such as Human Nature and Conduct, (New York: The Modern Library, 1922) or, perhaps best of all, Experience and Nature, (New York: Dover Publications Inc., 1958). On norms in nature see also Alvin Plantinga, Warrant: The Current Debate, (New York: Oxford University Press, 1993), p. 72, and the thorough discussion in his Warrant and Proper Function, (New York: Oxford University Press, 1993), Chapter 11. [Return to text.](#)
8. John Searle, The Rediscovery of the Mind, (Cambridge, MA: The MIT Press, 1992), p. 85. [Return to text.](#)
9. Searle, Rediscovery, p. xii. [Return to text.](#)
10. Patricia Kitcher, "Review of Stephen P. Stich's Deconstructing the Mind," The Journal of Philosophy, 95 (December, 1998), 641-644, pp. 641-642. This entire review is actually quite instructive on the problems of specifying Naturalism currently. [Return to text.](#)
11. Kitcher, Op. cit., p. 642. [Return to text.](#)
12. A. E. Murphey, "Book Review of Naturalism and the Human Spirit," The Journal of Philosophy, 42 (1945), 400-417, p. 417. This may be the deeper reason why there is now a widespread sense that, in the words of Michael Friedman, Naturalism "has reached the end of its useful life." See his thorough examination of the current situation regarding Naturalism in his Presidential Address to the American Philosophical Association: "Philosophical Naturalism," Proceedings and Addresses of the American Philosophical Association, 71 (1997): 7-37, as well as Barry Stroud's Presidential Address of the previous year, "The Charm of Naturalism," [Proceedings and Addresses etc., 70 (1996): 43-55], which emphasizes the lack of anything approaching a consensus concerning the meaning of the term. The volume Naturalism: A Critical Appraisal, Steven Wagner and Richard Warner, ed., (Notre Dame, IN: University of Notre Dame Press, 1993) also demonstrates what hard days have now befallen the movement. [Return to text.](#)
13. One can also retreat to agnosticism, as seems to have happened with Thomas Huxley and others in the late 1900s. See the article, "Naturalism," in James Hastings, ed., Encyclopedia of Religion and Ethics, IX, (New York: Charles Scribner's Sons, n.d.), pp. 195-198. Also James Ward, Naturalism and Agnosticism. Agnosticism about matter has begun to re-emerge in the philosophy of mind in recent years. [Return to text.](#)
14. For a quick introduction see the article "Knowledge and Belief," by Steven Luper-Foy, in A Companion to Epistemology, Johathan Dancy and Ernest Sosa, ed., (Oxford: Blackwell Publishers, 1993), pp. 234-337. Unfortunately, John Cook Wilson is not discussed there. [Return to text.](#)
15. Roy Wood Sellars says that "knowledge is the possession of ideas which do disclose the characteristics of the object denoted. In knowing we hold ourselves to grasp the nature of the object, its properties, characteristics.... Knowledge is the disclosure of the characteristics of existence." Roy Wood Sellars, The Philosophy of Physical Realism, (New York: The Macmillan Company, 1932), p. 106. The entire Chapter IX, "Knowing a Common World," should be read. [Return to text.](#)
16. First Hegel and Kierkegaard, then Pragmatism and Coherence, then several 20th Century options parasitical upon language (verifiability, rational acceptability, disquotational theories, and so forth). Loosening the grip on truth as an objective structure quickly led to loss of an objective and imperious logic. See the ways Hume, Kant, Hegel and Mill abuse the idea of logic, and for later developments up to the present see my "The Degradation of Logical Form," Xiomathes (1997): 31-52. [Return to text.](#)
17. See my "Space, Color, Sense Perception and the Epistemology of Logic," The Monist, 72 (1989): 117-133, for a critical discussion of this idea.

With respect to the linguistic nature of thought, Dennett remarks: "So the argument for a language of thought comes down to this: What else could it be?" [Daniel C. Dennett, The Intentional Stance,

(Cambridge, MA: The MIT Press, 1987), p. 35 and see the footnote on this page.] Well, there are some interesting possibilities as to what thought apart from language might be, well known in the history of thought, if one can but for a moment escape the grasp of empiricistic Naturalism. [Return to text.](#)

18. See my "Predication as Originary Violence: A Phenomenological Critique of Derrida's View of Intentionality," in [Working through Derrida](#), Gary B. Madison, ed., (Evanston IL: Northwestern University Press, 1993), pp. 120-136. [Return to text.](#)
19. [Realism and Reason](#), p. 234. [Return to text.](#)
20. [Realism and Reason](#), p. 242. [Return to text.](#)
21. In the last chapter of his [The Intentional Stance](#), Dennett gives a very helpful presentation of the issues in recent these discussions, from the discussions between Roderick Chisholm and Wilfrid Sellars to the time of the writing of his book in 1987. [Return to text.](#)
22. Searle's position is the clearest case of this. See [The Rediscovery of Mind](#), and the more recent collection of papers, [The Mystery of Consciousness](#), (New York: The New York Review of Books, 1997). I do believe that emergence can be employed as a valid and useful concept in numerous domains, e.g., chemistry, sociology and the arts. But its valid employment requires some degree of insight into why [this](#) emerges from [that](#). Such insight is lacking in the case of the brain and thoughts. This is a basic point made by such authors as Thomas Nagel and Colin McGinn. Searle's "simple solution" to "the famous mind-body problem," which "in a sense, we all know...to be true" simply refuses to face up to this fact. ([Rediscovery](#), p. 1) Rightly insisting on the irreducibility of mental properties, Searle tries to force them to be natural by assigning them a role in evolutionary theory and claiming that they in some literal sense are present in or on the brain. As to the former point, even Descartes' could have recognized the function of his mental qualities in survival. Of course he did not think they 'emerged' from the brain. But neither Searle or anyone else has given any sense to the claim that they come from or are in or upon the brain. The actual relationship remains totally obscure. [Return to text.](#)
23. Hilary Putnam, [Reason, Truth and History](#), (Cambridge: Cambridge University Press, 1981, p. 1. [Return to text.](#)
24. Daniel C. Dennett, [The Intentional Stance](#), p. 5. [Return to text.](#)
25. [Op. cit.](#), p. 15 [Return to text.](#)
26. This is the thesis developed in Laird Addis, [Natural Signs](#), (Philadelphia: Temple University Press, 1989), especially "Part Two." [Return to text.](#)
27. For development of this point with special reference to Quine, see my "The Case against Quine's Case for Psychologism," in [Perspectives on Psychologism](#), M. A. Notturmo, ed., (Leiden: E. J. Brill, 1989), pp. 286-295. And see the lengthy discussion of Psychologism and the Laws of Logic in my [Logic and the Objectivity of Knowledge](#), (Athens, OH: Ohio University Press, 1984), pp. 143-166. [Return to text.](#)
28. Hilary Kornblith, "Beyond Foundationalism and the Coherence Theory," in [Naturalizing Epistemology](#), p. 133. She seems unaware that she is dealing with issues that were thoroughly worked out a couple of times during in the last one hundred years. See my [Logic and the Objectivity of Knowledge](#), pp. 143-166. [Return to text.](#)
29. See Searle's remark to the effect that "philosophical quality varies inversely with the number of bibliographical references, and that no great work of philosophy ever contained a lot of footnotes," In [The Rediscovery of Mind](#), p. xiv. [Return to text.](#)
30. L. Susan Stebbing, [A Modern Introduction to Logic](#), (New York: Harper & Brothers, 1961), p. 214-215. Stebbing draws heavily on the three volume [Logic](#) of W. E. Johnson, especially Part II, Chapter I, '3. [Return to text.](#)
31. [Warrant: the Current Debate](#), p. 73. [Return to text.](#)
32. For an account that covers much the same ground as this paper, but from within the framework and terminology of Husserl's strongly realist account of knowledge, see my paper, "Knowledge," in [The Cambridge Companion to Husserl](#), Barry Smith and David Woodruff Smith, ed., (Cambridge: Cambridge University Press, 1995), pp. 138-167.