Midwest Studies in Philosophy, XXIII (1999)

Criteria and Truth

BERNARD HARRISON

1. WITTGENSTEIN AND "WITTGENSTEINIANISM"[1]

In the early days of Wittgenstein commentary, much attention was devoted to the term "criterion." The word occurs with some frequency in Wittgenstein's writing, often in contexts in which what the reader is to make of the general drift of the argument seems largely to depend on what he makes of its meaning. But it is seldom altogether clear whether it is being used in an "ordinary" sense, or as a term of art, and if the latter, how it should be defined.[2] Here, then, was an exegetical riddle worth tackling, and it was duly tackled, most notably, and influentially, by Rogers Albritton in "On Wittgenstein's Use of the Term 'Criterion.'"[3] Albritton's views, supported by many other writers, including P. M. S. Hacker[4] and G. P. Baker,[5] gave rise to a consensus, very widely held in the philosophical community at one time, to the effect that

1. Wittgenstein meant by the term "criterion" very much what Albritton makes him mean.
2. the concept, understood in that sense, opens the way to a new and important range of arguments against skepticism, and particularly against skepticism concerning Other Minds.

A very considerable literature, surveyed by W. Gregory Lycan[6] (to 1971) and Mark Addis[7] (subsequent discussion to 1995), accumulated around this tissue of claims. The outcome of this discussion has not, on the whole been favorable to claim (2). Few philosophers have in the event been persuaded that Wittgenstein's notion of a criterion as glossed by Albritton yields important new arguments against skepticism. Crispin Wright[8] has argued persuasively that the position ascribed to Wittgenstein by the orthodox interpretation is internally incoherent, and equally negative assessments are to be found in a range of writers as disparate in their more general philosophical

commitments as Richard Rorty,[9] Charles Chihara,[10] John McDowell,[11] and Stanley Cavell.[12] This critical tradition seems to me broadly correct. I shall argue here, and have argued in more detail elsewhere,[13] that Wittgenstein does dispose of interesting new arguments against skepticism. But I do not think that they depend in the slightest upon the notion of "noninductive evidence" central to the orthodox interpretation.

By contrast, the discussions recorded by Lycan and Addis have touched very lightly on claim (1) above. Philosophers have on the whole continued to take it for granted that Wittgenstein did indeed mean by the term "criterion" something fairly close to what Albritton made of it in 1959. There is nothing surprising about this. Philosophers are not on the whole, either by temperament or by training, rummagers in obscure texts. They are not, to their credit, fascinated by cyphers or mysteries concealed in the dimensions of the Great Pyramid. They prefer rational discussions of clearly and precisely specified claims, and among the many merits of Albritton's original interpretation is that it meets these requirements. At the same time it seems clear both that philosophy cannot wholly do without interpretation, and that one principle of charity under which interpretation should proceed, especially when the work of a writer of the magnitude of Wittgenstein is in question, is that the interpreter should at least pause for reflection if he finds himself tempted by an interpretation that saddles his author with hopelessly indefensible views. By the light of that principle, the fate of the orthodox interpretation as a contribution to the discussion of skepticism must reflect some doubt back on its adequacy as an interpretation. The discussion so far, in other words, may have had less to do with Wittgenstein than with "Wittgensteinianism."

This is the issue that I hope to reopen here. I shall begin by going back all the way to Albritton's paper, with a view to identifying some interpretative questions that it, in common with later contributions to the discussion, leaves open. I shall argue that the attempt to resolve these questions suggests an alternative interpretation of Wittgenstein's use of "criterion," one whose consequences for skepticism, although interesting and important, are perhaps less important than its consequences for our understanding of the relationship between meaning and truth.

To conclude these preliminaries: a note on methodology. A natural way of approaching the question of what Wittgenstein meant by "criterion" would be to assemble all or many of the passages in which the word occurs and to attempt to distill understanding out of the immediate context of each. This procedure, indeed, has been the one most generally followed in the literature of the topic. The problem with it, it seems to me, is that it disregards the possibility that Wittgenstein's use of a given term in a specific context might be directed by considerations arising outside that immediate context of use, and for that matter outside the immediate context of any other occurrence of the term. Accordingly I shall proceed differently. I shall start by identifying some general questions, both textual and philosophical, to which an adequate interpretation ought to provide an answer. Then I shall ask whether there is to be found in Wittgenstein's work prior to the introduction of the term any body of argument that might yield answers to them. The object will be to arrive at a potential interpretation with some claim to be rooted in the prior development of Wittgenstein's thought, rather than, as has quite often happened, in the general climate and assumptions of versions of analytic philosophy, which there is reason to

think Wittgenstein would have rejected. Only at that point shall we return to the familiar contexts of occurrence of "criterion" to test the power of the proposed interpretation to make sense of them.

2. SOME QUESTIONS FOR THE ORTHODOX INTERPRETATION

We need, to begin with, a summary of the orthodox interpretation. An admirably concise one, made by Crispin Wright[14] a quarter century after Albritton's paper, runs as follows:

> Orthodoxy in the interpretation of Wittgenstein attributes to criteria five cardinal features: that recognition of satisfaction of criteria for *P* can confer skeptic-proof knowledge that *P*; that *P*'s criteria determine *necessarily* good evidence for *P*, and thereby fix its content; that the criteria for *P* will typically be multiple; that satisfaction of criteria for *P* is always consistent with having, or discovering, further information whose effect is that the claim that *P* is not justified after all.

To see how this odd collection of claims originated, we need to return to Albritton's original paper of 1959, leaving aside for the moment its postscript (1966), in which he retracts some of its suggestions, most notably the proposal that to give the criterion for *X*'s being so is to state a necessary truth about *X*.

Albritton's 1959 interpretation is based very largely upon pp. 24–25 of *The Blue and Brown Books* [BB].[15] Here, Wittgenstein famously distinguishes between "criteria" and "symptoms." He does so with reference to the medical definition of "angina," meaning by that not heart pain but a sore throat. He says,

> If medical science calls angina an inflammation caused by a particular bacillus, and we ask in a particular case "why do you say this man has got angina?" then the answer "I have found the bacillus so-and-so in his blood" gives us the criterion, or what we may call the defining criterion of angina. If on the other hand the answer was, "His throat is inflamed," this might give us a symptom of angina. I call "symptom" a phenomenon of which experience has taught us that it coincided, in some way or other, with the phenomenon which is our defining criterion. Then to say "A man has angina if this bacillus is found in him" is a tautology or it is a loose way of stating the definition of "angina." But to say, "A man has angina whenever he has an inflamed throat" is to make a hypothesis.

Albritton glosses this, and other related passages, as follows:

> A criterion for a thing's being so is something that can show the thing to be so and show by its absence that the thing is not so; it is something by which one may be *justified in saying* that the thing is so and by whose absence one may be justified in saying that the thing is not so. And a criterion for a thing's being so has this relation to the thing's being so not as a matter of fact, like what Wittgenstein calls a "symptom" of its being so, but as a matter of "logical" necessity. That is, on Wittgenstein's account of such necessity, its relation to

> the thing's being so is "founded on a definition" or "founded on convention" or is a matter of "grammar."[16]

Although I think this gets Wittgenstein wrong, it comes in some respects quite close to getting him right. There are, though, some questions to be asked.

(1) Albritton says that a "criterion," as Wittgenstein uses the term, is a condition for "a given thing's being so," that "a criterion is in Wittgenstein's usage always a criterion for something or other's being the case."[17] Yet Wittgenstein in fact habitually speaks of criteria as conditions for something or other's being "*called 'X'*". Albritton in effect grants the ubiquity of this form of words in Wittgenstein's work, but has no explanation to give of its presence: "I have no exact account to give of Wittgenstein's use of such expressions as 'is called.'"[18] The suggestion is, then, that in Wittgenstein's usage "is called *X*" is no more than an obfuscatory circumlocution for "is *X*." This is certainly a possible interpretation, but again one to be adopted with caution in dealing with the work of a major philosopher. We shall return to it later.

(2) Albritton's gloss commits Wittgenstein to the existence of a class of necessary truths of the form "necessarily if *Cx* then *Fx*," where *Cx* is to be read as "*x* satisfies criterion *C*." This is surely an interpretation at best weakly supported by the textual evidence for it, which consists simply in Wittgenstein's observation that if a man's having a certain bacillus in him is the criterion (or, alternatively, a "defining criterion") of his having angina, then the statement that a man has angina if this bacillus is found in him "is a tautology or it is a loose way of stating the definition of angina." These words of Wittgenstein's do seem, at least when the resources of interpretation are confined to those available in the immediate context, depressingly vague. Albritton himself speaks of "that misery of the word 'tautology,' which Wittgenstein uses in the passage I've been discussing."[19] As readers with a full set of preexisting philosophical assumptions and commitments we naturally want to know, for instance, whether "tautology" is to be read as "analytic truth" and whether Wittgenstein's "loose way of stating the definition of angina" would, if cleaned up and made precise, amount to a statement of sufficient and necessary conditions. Lacking help from the text we naturally feel obliged to make the best we can of it, and this is what Albritton has done. But once again, that route to understanding is not a particularly safe one. The "best we can make" of a writer's words may yield too much to the natural human tendency to believe that the categorial options in terms of which a professional community tends to view things must exhaust the possible alternatives, and too little to the possibility that a more critically exacting scrutiny of a wider sample of the writer's work might reveal possibilities of thought and meaning lying outside that charmed circle.

(3) Having committed Wittgenstein to the existence of necessary truths, Albritton's gloss further commits him to a conventionalist account of the truths in question: "on Wittgenstein's account of such necessity, its relation to the thing's being so is 'founded on a definition' or 'founded on convention' or is a matter of 'grammar.'"[20] There are two problems with such an interpretation. The first is the extreme weakness of crude conventionalism as a philosophical theory. The bottom-line difficulty here is that stipulations, whether of the meanings of terms, or "conventions," or "grammar," or anything else, are implausible candidates for the status of necessarily

true statements because they are implausible candidates for the status of statements. Wittgenstein nowhere addresses this excessively obvious objection to the conventionalism about necessary truths supposedly central to his position. Is it more plausible that he was too stupid to see the need to address it, or that he was not a conventionalist and possibly not a believer in necessary truths of the required sort?

(4) The second difficulty is textual in nature; it is also a difficulty for (2). Wittgenstein makes it clear that a criterion for *X* may be satisfied without its being the case that *X* actually obtains. This is the so-called defeasibility of criteria much aired in later discussions of the topic. It is a consequence of, inter alia, Wittgenstein's further remarks about the "angina" case. "In practice," Wittgenstein says,

> if you were asked which phenomenon is the defining criterion and which is a symptom, you would in most cases be unable to answer this question except by making an arbitrary decision *ad hoc*. It may be practical to define a word by taking one phenomenon as the defining criterion, but we will easily be persuaded to define the word by means of what, according to our first use, was a symptom. Doctors will use names of diseases without ever deciding which phenomena are to be taken as criteria and which as symptoms; and this need not be a deplorable lack of clarity. For remember that in general we don't use language according to strict rules—it hasn't been taught to us by means of strict rules, either. [BB 25]

This plainly opens the possibility, among others, that the usage of the medical profession might be such that "the bacillus might be found in" someone who still fails to count as an angina sufferer because he has no sore throat. Having a sore throat on its own is not, that is, on the supposed medical usage, a "criterion" for angina, because angina is, in that usage, the disease—whose symptom is a sore throat—caused by that bacillus. But having the bacillus need not entail exhibiting any symptoms (individuals can be immune to certain bacilli), and so need not entail having the disease. That being so, Wright[21] is clearly correct to argue that "it is seriously unclear whether" the defeasibility of criteria "can be made to harmonise" with the claim that criteria offer "*necessarily* good evidence for *P*," and hence unclear whether it can be made to harmonize with the claim, also rife in the early literature of the topic, that someone who knows that face holding is a *criterion* for another person's having a toothache, knows, in a sense immune to philosophical skepticism, that the other person *has* a toothache.

It seems difficult, in short, to resist the conclusion that Albritton's initial interpretation saddles Wittgenstein with an account of the meaning of "criterion" that is actually internally incoherent. By 1966, indeed, Albritton, at least, had already granted the point. His postscript of that year concedes that

> there are no necessary or not quite contingent truths of any of the types that I suggested. There are only contingent facts of those types. But Wittgenstein never meant to deny that, and no denial of it is involved, I think now, in the observation (as he took it to be) that there are behavioural criteria of having a toothache and of other such things.[22]

(5) The result of deleting the element of necessity from Albritton's initial interpretation is, however, that the philosophical motivation of Wittgenstein's original distinction between criteria and symptoms becomes almost entirely opaque. A criterion ("for a thing's being so") is, on Albritton's account, a "phenomenon by which one may judge that it is so."[23] In other words, a truth-condition. But a symptom is also just such a phenomenon. And as Wittgenstein occasionally embarrassingly emphasises, a symptom can on occasion function as a criterion, and vice versa:

> The fluctuation in grammar between criteria and symptoms makes it look as if there were nothing at all but symptoms.[24]

But if symptoms and criteria are functionally interchangeable, and if both are truth-conditions, what conceivable philosophical motivation can there be for distinguishing between them? Why do we need to postulate two putatively distinct categories of truth-conditions? What is the ground of the distinction supposed to be?

The textually tempting answer is that "criteria" are, and "symptoms" are not, what one recurs to if one wishes to explain the *meaning* of a proposition, as distinct from merely offering reasons for taking an assertion of it to be warranted or justified. That, at any rate is the suggestion of BB 24–25. One can well imagine a conversation actually taking place along the lines of the distinction Wittgenstein sketches there. "Why do you say he has angina?" "Well, just look at that throat!" "Ah, so 'angina' means having a sore throat?" "No, angina *means* having a bacillus B infection. A sore throat is merely what happens, as a matter of empirical fact, to be what most people get if they happen to be infected with bacillus B." And no doubt people do say such things. The difficulty, however—a usual one with Wittgenstein, and one that he himself occasionally ruefully notes ("What we say will be easy, but to know why we say it will be very difficult"[25])—is to see why it should be of the slightest philosophical interest that they say such things.

That question becomes still more pointed if we contrast the position of Albritton's Wittgenstein with that of Quine. The Wittgenstein of BB 25 says that "it may be practical to define a word by taking one phenomenon as the defining criterion." If it is practical it is possible. Thus, it appears, Wittgenstein is committed to the view that one can give the meaning of a word by stating a criterion. According to Albritton's Wittgenstein, now, a criterion is a truth-condition. Albritton's Wittgenstein, it appears, is thus committed to the familiar doctrine, generally introduced with a nod to Frege, that to give the meaning of an expression is to state truth-conditions for assertions made by means of sentences in which it occurs. So is Quine. Quine in addition holds, entirely reasonably, that the enterprise of ascertaining the truth-conditions of assertions is an empirical one. But the conclusion Quine draws from those premises is, as is well known, that no distinction can be validly drawn between knowledge of meanings on the one hand and general empirical knowledge of the world on the other. There is, in other words, no distinction to be drawn between one set of truth-conditions—"criteria"—by appeal to which we establish the meaning, or the conceptual content, of "this is *X*," and another set—symptoms—that express the results of empirical investigation of *X*. All statements of truth conditions, if Quine is right, express the results of empirical investigation.

Despite the recent prestige of Quineanism, however, the literature of the topic is rich in attempts to maintain on Wittgenstein's behalf the sort of distinction between meaning-determining and non-meaning-determining truth-conditions that Quine's arguments strongly suggest to be in principle without foundation. In part this is no doubt because there seems little textual reason to doubt that in Wittgenstein's mind the ground of the distinction between symptoms and criteria is that criteria have more to do with the determination of meaning, or content, than symptoms do. The problem for the exegete is thus, it appears, to say what that more consists in. Attempts to meet this demand, however, so far as they are known to me, too often succeed merely in rephrasing the claim that criteria are in some way or other meaning-determining. One that does more is the following, from Cavell's *The Claim of Reason*:

> Criteria are not alternatives or additions to evidence. Without the control of criteria in applying concepts, we would not know what counts as evidence for any claim, nor for what claims evidence is needed.[26]

I would not wish to say that Cavell is far wrong here. Indeed, the thought that without criteria we would not know "what counts as evidence for any claim" seems to me to catch something quite central to Wittgenstein's thought on the topic. But how is that thought to be developed? Why, exactly, lacking access to "criteria," would we not know what counts as evidence for a claim? Or to put the question another way, what sort of "control" over the application of concepts do Wittgensteinian "criteria" supply, and how, exactly, do they supply it? It is time we moved on from the exegetical literature to direct discussion of these questions.

3. TRUTH, FALSEHOOD, AND MEANING

In section VIII of the Philosophical Remarks [PR],[27] we find the following remark:

> I don't describe a state of affairs by mentioning something that has nothing to do with it and stating it has nothing to do with it. That wouldn't be a negative description.

The thought here is, I take it, that a negative description, "$\sim Fx$" is, or can be, informative. To say, "x is not yellow," for instance, is at least to narrow the options for a positive characterization of x in terms of color, since if it is indeed not yellow there are only so many remaining possibilities. To say of a moving speck on the hillside, "It's not a domestic animal, certainly," is again to rule out certain options in favor of one or another of a residual collection of possibilities.

How are we to construe the notion of "possibility" at stake here? There is no simple answer to that question, because it and related notions have constituted a central bone of contention in the development of Wittgenstein's thought to this point. This is not, after all, the earliest point in Wittgenstein's work at which we find him postulating a connection between the concept of meaning and that of possibility. That there is such a connection, however it is to be explicated, is a also a central theme of

the *Tractatus*. In section VIII of PR, indeed, Wittgenstein explores the issue initially by reworking the Tractarian analogy between the fully analyzed proposition and a yardstick or ruler (*Maβstab*). In the Tractarian version of the analogy [2.152–2.1521],[28] the simple signs (names) in a proposition are analogous to the graduation marks on the ruler: they reach out and touch the "objects" that they name as the marks on the ruler "*touch* the object that is to be measured." The structure of the ruler corresponds to the "logical form" of the proposition, which matches that of the "state of affairs" composed by the named objects. One consideration that, for Wittgenstein, motivates this account of the relationship between proposition and state of affairs is the need to account for the fact that [4.02] "we understand the sense of a propositional sign without its having been explained to us." Wittgenstein's favored answer to this question is introduced immediately, at 4.021: "A proposition is a picture of reality: for if I understand a proposition, I know the situation that it represents." How does treating a proposition as a kind of picture make it any easier to see how acquaintance with the propositional sign can confer knowledge of "the situation it represents"? An answer of sorts to that question has already been given, at 2.201–2.202: "A picture depicts reality by representing a possibility of existence and non-existence of states of affairs. . . . A picture represents a possible situation in logical space." We can read off from the propositional sign "the situation that it represents," in other words, because we have on the one hand access to the logical space of all *possible* states of affairs, and on the other access to mapping conventions (the "logico-syntactical employment" of the signs, which, taken together with the sign, determines a"logical form" [3.327] mirroring that of the corresponding state of affairs) that yield a unique mapping of the propositional sign on to that space.

What these passages of the *Tractatus* share, it seems to me, with the brief observation from section VIII of PR, which we began by citing, is the thought that understanding the sense, the content of a proposition is in part a matter of understanding what possibilities its truth excludes. The conclusion suggested by that thought is indeed, it seems, that to understand any proposition requires a prior grasp of a web of alternative propositional possibilities, a "logical space" within which that proposition "represents a possible situation." In the *Tractatus*, as we know, that prior grasp of the possibilities of propositional assertion is provided simply by acquaintance with the "objects" picked out by the names in fully analyzed propositions. "In logic nothing is accidental: if a thing *can* occur in a state of affairs, the possibility of the state of affairs must be written into the thing itself" [2.012]. Hence, "[i]f I know an object I know all its possible occurrences in states of affairs."

That story will only work, however, if propositions, or at any rate "elementary propositions," can be regarded as logically independent of one another. By the time he was composing PR, however, Wittgenstein had ceased to believe in elementary propositions, on the grounds that there are pairs of propositions, such as "*a* is red" and "*a* is green," that clearly stand in logical or quasi-logical relationships of exclusion to one another, but that seem too basic to admit of any plausible program of analytical reduction. He now faces two connected problems. The first is the old one, of explaining how it is possible for us to read off the content of what is asserted by a proposition *P* from the propositional sign expressing it, given that that ability must include the capacity to say what propositionally formulable possibilities the truth of

P excludes. The second is the new question of how we are to account for the existence of relations of exclusion between propositions that can by no stretch of the imagination be regarded as nonelementary.

The reworking of the Tractarian analogy between propositions and yardsticks presented in section VIII of PR offers a schematic resolution of both these problems. In the new version of the analogy propositions no longer correspond to yardsticks, but to the gradations on the yardstick:

> [P]ropositions turn out to be even more like yardsticks than I previously believed.—The fact that *one* measurement is right automatically excludes all others. I say automatically: just as all the gradation marks are on *one* rod, the propositions corresponding to the gradation marks similarly belong together, and we can't measure with one of them without simultaneously measuring with all the others.—It isn't a proposition which I put against reality as a yardstick, it's a *system* of propositions. [PR 82, p. 110]

It is easy enough to convert this analogy into a more or less realistic model of part of a natural language, if we simply interpret the propositions in question as statements of length: "*x* is 1 cm long," "*x* is 2 cm long," and so on. What holds these propositions together into "a *system* of propositions" is, of course, not the yardstick considered as a piece of engraved wood or metal, but the practice of measuring with it. By the nature of that practice, statements of length couched in terms of its modulus form a connected set such that the truth of one member of the set "automatically" entails the falsity of each of the remaining members. The answer to Wittgenstein's second question, now, is that in this context one proposition excludes another because *they are not separate propositions*.

> The situation is misrepresented if we say we may not ascribe to an object two incompatible attributes. For seen like that, it looks as if in every case we must first investigate whether two determinations are incompatible or not. The truth is, *two* determinations of the same kind (co-ordinate) are impossible. [PR 84, p. 112]

The solution to the first problem, equally, is that it is a grasp of how to measure with a yardstick, or to put it more precisely, a competent mastery of the practice of comparing distances by recording the number of iterations of the same modulus required to span each, that confers on us the ability to say what other propositional possibilities are excluded by the truth of a statement of length: they are the competing statements of length that correspond to the remaining graduations on a measuring rod of that modulus.

It is possible to see the shift in Wittgenstein's thinking that takes place between the *Tractatus* and PR as in part a shift in what Wittgenstein understands by the notion of "logical space." A central Tractarian thought is that whatever objects are picked out by the names in an elementary proposition must possess possibilities of combination into states of affairs that characterize each object internally. It follows, as he says

at 2.013, that "each thing is, as it were, in a space of possible states of affairs." In PR we find:

> I should like to say: for any question there is always a corresponding *method* of finding.
>
> Or you might say, a question *denotes* a method of searching.
>
> You can only search in a *space*. For only in space do you stand in relation to where you are not. [PR 43, p. 77]

One could read at least the first two sentences of this as expressing a commitment to verificationism.[29] That would be to represent him as influenced, around 1929–30, by the most important philosophical tendency of the interwar years; it would also be to represent his thoughts as moving, at this point, in a direction sharply divorced from the concerns of the *Tractatus*. Suppose that, on the contrary, these remarks on "spaces" in the *Remarks* are to be understood as related to those on "logical space"in the *Tractatus*? There is textual warrant for this, after all, in the continuation of the passage from which we began.

> I don't describe a state of affairs by mentioning something that has nothing to do with it and stating it has nothing to do with it. That wouldn't be a negative description.
>
> "The sense consists in the possibility of recognition," but this is a logical possibility. I must be in the space in which what is to be expected is located.
>
> 83 The concept of an "elementary proposition" now loses all of its earlier significance.

What we have here, indeed, looks like a rejection of verificationism, at least as irrelevant to the matter in hand. Verificationism says that the meaning of a statement is the method or procedure by which its truth is to be recognized. What Wittgenstein is saying here, on the contrary, is that the meaning, the "sense" of a proposition is the *possibility* of arriving at a recognition of its truth or falsity; that this possibility has to do with the establishment of a "space" in which whatever is to constitute such a recognition is to be sought; and that the possibility of recognition established in establishing such a space is "a logical possibility." The opening of 83 now provides a further link back to the *Tractatus* in the shape of the remark "The concept of an 'elementary proposition' now loses all of its earlier significance."

Why, now, as a result of the string of remarks about propositions, yardsticks and "searching in a space" that we have been considering, should the concept of an elementary proposition lose its philosophical importance for Wittgenstein? Let us turn over the pieces of the jigsaw once more. In order to grasp what is asserted by a proposition we need to have some grasp of the propositionally formulable possibilities that its assertion excludes and that would be put into play once more by its denial. In the *Tractatus* scheme the "logical space" of propositional possibilities is constituted

metaphysically, in terms of the possibilities of combination into states of affairs built internally into the nature of the "objects" picked out by the basic names that go to make up elementary propositions. On the *Tractatus* model, therefore, if there are no elementary propositions there is no access to "logical space." What Wittgenstein has realized in the *Remarks*, however, is that the semantic task performed on the level of metaphysics by "logical space" in the *Tractatus* can equally well be performed on a naturalistic level, by relating sets of propositions to practices. A yardstick, taken in connection with the practice of comparing distances by numbering the iterations of a given modulus required to span each, connects statements of length employing that modulus into a "logical space"of alternatives in terms of which it is perfectly possible to grasp what propositional possibilities are excluded by the assertion, and returned to play by the denial, of any such statement. But if the "logical space" in which a proposition is located can be constituted by the adoption of a practice or a set of conventions, then the intelligibility of a proposition, its sense, can be established by relating it to one or another such practice or convention, and so does not need to be established by relating it *via a program of philosophical analysis* to some further class of propositions taken as "basic" or "elementary." The antireductionism of Wittgenstein's later philosophy is born at this point.

But can't an obvious objection be raised? Given that Wittgenstein at this stage of his thinking has abandoned so much of the *Tractatus*, why has he chosen to retain, in any form, the notion of "logical space" at all, never mind whether it is construed metaphysically or naturalistically? For how could what he has to say in section VIII of PR have a general application to language? Some terms, doubtless, will take their meaning from the place we have assigned to them in practices, like that of measuring, established by convention. But won't many others simply pick out features of experience? And in such cases, why do we need to think of propositions as related to one another via their occupancy of "places" in any sort of "logical space"? Why can't we simply take propositions one by one, in line with the logical and semantic pluralism advanced by the early Russell (and subsequently for the most part taken as read by mainstream analytic philosophy of language) and define the meaning of each by ostensively associating it with one set of features of experience designated as assertion-conditions, and another set designated as denial-conditions?

This, it seems to me, is the question that Wittgenstein is mainly addressing in the remarks on ostensive definition that extend, roughly, from I.28 to I.39 of *Philosophical Investigations* [PI]. The basic idea of ostensive definition is, precisely, that one can give the meaning of a term *T* by ostensively indicating one or more things of which "this is *T*" is true, supplementing this, if necessary, by indicating some things of which it is false. Wittgenstein's opening point is that any such definition can be misunderstood:

> Now one can ostensively define a proper name, the name of a colour, the name of a material, a numeral, the name of a point of the compass and so on. The definition of the number two, "That is called 'two'"—pointing to two nuts—is perfectly exact.—But how can two be defined like that? The person one gives the definition to doesn't know what one wants to call "two"; he will suppose that "two" is the name given to *this* group of nuts!—He *may* suppose this; but

> perhaps he does not. He might make the opposite mistake; when I want to assign a name to this group of nuts, he might understand it as a numeral. And he might equally well take the name of a person, of which I give an ostensive definition, as that of a colour, of a race, or even of a point of the compass. That is to say: an ostensive definition can be variously understood in *every* case. [PI, I.28]

Wittgenstein then goes on to argue that the possibility of misunderstanding will be reduced or eliminated if the learner can be made to see what kind of word is being defined: a name for a color, for a race, for a point of the compass, or what:

> [W]e can prevent misunderstandings by saying: "This *colour* is called so and so," "This *length* is called so-and-so," and so on. [PI, I.29]

Why, exactly, should coming to see this help to exclude the possibilities of misunderstanding to which Wittgenstein has just drawn attention? Coming to these paragraphs from the discussions of possibility and logical space in the *Tractatus* and the *Philosophical Remarks*, it is tempting to reply that what has changed is that the learner now has some idea of what would be implied by *denying* that something, *x*, was *T*: what would be implied would be that *x* is *a group of some other number*, or *some other point of the compass*, or *some other length*, or *some other color*.

Could one, now, fill in that kind of gap in the learner's comprehension by means of another series of ostensive definitions, only negative ones this time: "That's not a *T*" ("That's not what we call '*T*'")? Evidently not. For a negative ostensive definition would, just taken in itself, be as much subject to misunderstanding as a positive one. For how is the learner, merely on the basis of the data provided by a series of ostensions, however long, to distinguish between things that fail to be *T* because they are among the alternative possibilities invoked by the denial that a thing is *T*, and those that simply have nothing to do with being *T*? It follows that negative ostensive definition—pointing to something and saying, "This is not *T*"—must remain as enigmatic a proceeding as the positive variety—unless one has already some idea of what kind of word—a color word, a name for a point of the compass, an artifact, a visual quality of surfaces—"*T*" is, and thus some idea of what alternative possibilities thus opened up would close again if one were to add, "But no, maybe it is *T* after all!"

In both the negative and the positive cases the problem is the same: that the would-be learner has no means, to the extent that the data available to him are limited to those made available by the pointing-and-saying procedure, of inferring, from the circumstances offered as true-making for "This is *T*," any conclusions regarding the circumstances that would make "This is *T*" false, and vice versa. If he is to arrive at any conclusions concerning what "This is *T*" asserts he must grasp some relationship linking what it asserts to what it denies, and correlatively for "This is not *T*." He needs what I shall call a *truth-value switch*.

In arguing against ostensive definition, Wittgenstein is sometimes taken to be arguing for the impossibility of a naturalistic account of meaning; for the irreducibility, in other words, of some form of mentalism about meaning, or better, perhaps, for a type of semantic mysticism related to that of the *Tractatus*. On this

view the conclusion of the argument is that we can understand an explanation of the meaning of a word only if we already speak a language, or in other words that the question of what it is to speak a language is, at least from a naturalistic standpoint, intrinsically inscrutable, and that any attempt to offer an account of *how* we do it must therefore be misguided. This seems to me quite wrong: both wrong as an interpretation, and wrong as an estimate of the actual implications of the argument. What the argument of PI I.28–30 does *not* show is that the function of a truth-value switch cannot be performed by what Hume would have called a *natural relationship*. Indeed, throughout Wittgenstein's profoundly naturalistic later work, natural relationships are precisely what do that job. What the argument does show is that no natural relationship can *naturally possess* that function. If it could, the function of linking the assertion- and denial-conditions of a given statement would be a *natural feature* of the natural relationship that does that job, as for instance the function of linking two biochemical processes may be a *natural feature* of certain proteins. The foregoing argument shows such a supposition to be absurd. The conclusion to be drawn is that the function of linking the assertion- and denial-conditions of a statement is a logical one, not a physical or natural one. Therefore it has to be *stipulated* in some way, *as a matter of linguistic convention*, that the natural relationship in question *is to have* that function: it cannot, as the ostensive theorist would wish to persuade us, simply be *exhibited* as *possessing that function by nature*. The difficulty with the theory of ostensive definition, in other words, is not a merely practical one. It is not that what the theory proposes is, for some psychological or other reason, unworkable; it is that what it proposes is *unintelligible*. Assertion, contradiction, the contrast between assertion and denial are all, as Wittgenstein insists at PR 74, things belonging to language, or to logic, not to natural science:

> Immediate experience cannot contain any contradiction . . . [it] is beyond all speaking and contradicting.

The argument then is (1) the meaning of a proposition can be explained only by specifying an associated truth-value switch; and (2) there is no way of specifying a truth-value switch other than by stipulating a convention, or rule, or practice of some sort. That is why, at PI I.31, when Wittgenstein searches for an example of circumstances in which ostensive definition is functional—by contrast with the dysfunctional cases considered earlier—the case he considers is that of giving the explanation "this is the king" to someone who "already knows the rules of chess up to this last point: the shape of the king." Ostensive definition is not dysfunctional here because knowledge of the rules of chess has already equipped the learner with a truth-value switch. He knows, that is, what being a king is supposed to contrast with: *being another type of chess piece*. The connection of this with the observations at PR 43, about a question corresponding to a method of searching, and about that notion's in turn being unintelligible unless it can be posed relative to a "space" of some sort, now seems straightforward enough. To answer the question "Is this the king?" you need a space in which "you stand in relation to where you are not." The rules of chess, defining as they do the roles of a small array of possible types of piece, provide such a "space": a limited array of alternative options in terms of which the question

becomes answerable because it becomes clear, through the linking of assertion-conditions to denial-conditions, what, exactly, is being asked. And the "space" is a *logical* space, not a natural one: a space constituted by stipulation. The rules of chess are here analogous to the yardstick of PR 82–84. Like the statements "*x* is 1 cm long," "*x* is 2 cm long," and so on, the statements "*x* is a king," "*x* is a pawn," and so on form a set of *coordinate* statements of which it can be said [PR 84], "*two* determinations of the same kind are impossible."

Significantly Wittgenstein connects abandonment of the concept of an elementary proposition to his new conception of the specification of logical spaces (the reference is presumably to *Tractatus* 2.013–2.0131):

> In my old conception of an elementary proposition there was no determination of the value of a co-ordinate; although my remark that a coloured body is in a colour-space, etc., should have put me straight on to this. [PR 83, p. 111]

And yet it could also be argued that two of the main thoughts at work in the passages we have been examining—(1) that the assertoric content of a proposition cannot be equated with the experiential content of the circumstances in which an assertion effected by uttering it is true, and (2) that the reason for this is that unless we *already* know its assertoric content we have no means of knowing what assertion, or indeed that any assertion, is effected by uttering the sign-string which *ex hypothesi* expresses it—are already clearly articulated in the *Tractatus*:

> Every proposition must *already* have a sense: it cannot be given a sense by affirmation. Indeed its sense is just what is affirmed. And the same applies to negation, etc. [4.064]

What is new in the later work, from PR onward, is the realization that these two claims entail that the relationship between what is affirmed by the assertion of a given proposition as true, what is excluded by that assertion, and what is neither affirmed nor excluded by it (what "has nothing to do with it"), is one that can only be established by stipulation.

4. THE MEANING OF "CRITERION"

Among the numerous and diverse threads of discussion that go to make up the complex tissue of Wittgenstein's transitional texts, the foregoing arguments, it seems to me, are the ones we most need to take into account as forming the background to Wittgenstein's use of the term "criterion" from the *Blue and Brown Books* onward. Against that background I can now state, baldly and briefly, what I take the term to mean in many and possibly most contexts in his later writing. A criterion, for Wittgenstein, if I read him correctly, is a conventionally stipulated truth-value switch.

5. HOW WELL DOES THE NEW INTERPRETATION FIT THE TEXT?

If the meaning of "criterion" is the one that has emerged from sections 3–4, then there is a distinction to be drawn between a criterion and either of the sorts of thing commonly understood to be intended by the expression "truth-condition." A truth-condition for "*Fx*" is simply some natural circumstance whose obtaining makes it true that *Fx*, or, in the weaker version preferred by anti-Realists, warrants the assertion of "*Fx*." A criterion, on the other hand, is some conventionally stipulated practice or condition that makes clear what is denied by asserting, and what is asserted by denying, that *Fx*: one, in other words, that links the truth- or assertion-conditions of *Fx* to its falsity- or denial-conditions. On the other hand a criterion can perfectly well *function in a given context as* a truth-condition. The criterion, in Wittgenstein's terms, of a ball's being said to be "in touch" in football is that it has been kicked, while in play, across a white line painted on the ground. The reason for calling this a criterion is that it provides a conventionally established linkage between the truth- and falsity-conditions of "*x* is in touch": if a ball in play has not crossed the line it is not in touch; if it has, it is. But of course the ball's crossing the line is also what, in most ordinary circumstances, serves the linesman, the referee, and the crowd as the main truth-condition for assertions to the effect that the ball is in touch. Now, assuming (with sufficiently obvious textual warrant, perhaps, to remove the need to labor over this bit of the argument) that Wittgenstein means by "symptom" a truth-condition in the sense just defined, we can make sense of his remarks, at BB 24–25 and PI I.354, about the distinction between symptoms and criteria.

Suppose that medicine uses the word "angina" to denote an infection by Bacillus B. In other words, as medical men use the term, someone has angina if he has a Bacillus B infection, and not if he has not. In that case, according to medical usage, being infected with Bacillus B is a *criterion* of angina in the sense of "criterion" proposed in sections 3–4. Such an infection, in other words, is the condition singled out by linguistic stipulation as the one that is to link truth-conditions to falsity-conditions for the proposition "*X* has angina." That being so, it follows that the remark that angina is a Bacillus B infection advances no claim about the nature of Reality. Rather, such a remark merely explains a bit of linguistic stipulation. It explains what conditions of use medical science attaches to the term. In the same sort of way the remark "The ball is in touch because it has crossed the touchline" is not a remark about the ball as a constituent of the natural world (cf. "The ball has vaporized because the temperature in there is now 15,000°C"), it is a remark about the rules of football. So one would expect Wittgenstein to distinguish rather carefully, as he does, between a condition for something's *being X*, and a condition for something's *being called X*, and to choose, as Albritton grants that he does almost without exception, the latter expression when he is talking about criteria.

It follows that Albritton's remark "A criterion is in Wittgenstein's usage always a criterion for something or other's being the case" is mistaken. On the contrary, a criterion is in Wittgenstein's usage always, primarily, a criterion for something or other's *being called* something, and the difference of phrasing matters: it is not just an obfuscatory circumlocution.

Furthermore one of the conclusions to be drawn from the arguments that led Wittgenstein to his later notion of a criterion is, as we have seen, that without antecedent knowledge of some conventionally stipulated relationship linking the truth-conditions to the falsity-conditions of a putative proposition "*Fx*" one could not know what was being asserted by a speaker in uttering the corresponding string of signs, or whether anything was being asserted at all. So the implications of Cavell's perceptive, though cursory, remark that

> [c]riteria are not alternatives or additions to evidence. Without the control of criteria in applying concepts, we would not know what counts as evidence for any claim, nor for what claims evidence is needed,

turn out after all to be satisfactorily explicable in detail, and the remark itself to go, as we suspected, to the heart of the matter.

"Symptoms," on the other hand, *are* evidence. If "angina" is used as we stipulated above, then to say that sufferers experience sore throats is to state a fact about angina, not merely to indicate how the term is used. Thus, if one were to ask, "Why does angina lead to people's having sore throats?" he would be asking a question about biochemistry: about the interactions between the physiology of Bacillus B and that of the human body. On the other hand, if one were to ask, "Why does Bacillus B cause angina?" no such answer would be in order: all one could do would be to reply, "How do you mean?—'Angina' is just the medical *name* for a Bacillus B infection," and if that reply failed to produce enlightenment he would be reduced to scratching his head.

Earlier, in section 2, we asked what reason there could be for postulating two distinct categories of truth-conditions, one somehow more "meaning-determining" than the other. We have now reached a point at which we can grasp the nature of the confusion concerning Wittgenstein's intentions involved in putting things this way. To Frege is due the insight that to give the meaning of an expression is to say how the truth or falsity of statements in which it figures is to be established. There are of course many ways, including verificationist ones, of spelling out what this suggestion comes to in detail. Frege's insight is often expressed, for instance, as the claim that to state the meaning of a proposition is to state its truth-conditions, in the sense of "truth-condition" noted at the start of this section. If that were Wittgenstein's position it would follow that, for him, it would be possible to give the meaning of a proposition by exhibiting its truth-conditions. But we have already seen that Wittgenstein holds the contrary and why: "Every proposition must *already* have a sense: it cannot be given a sense by affirmation. Indeed its sense is just what is affirmed. *And the same applies to negation*" (my italics). So a "criterion" for Wittgenstein is not a kind of truth-condition: rather, it is a principle or rule that establishes, necessarily by stipulation, what is denied in affirming and affirmed in denying a given proposition, and in so doing establishes the meaning, the sense, of that proposition.

At the same time a criterion, once defined, can serve as a truth-condition. Equally a truth-condition can come to function as a criterion, if it is made, by stipulation, the condition that links what is denied in asserting the proposition concerned to

what is asserted in denying it. Thus the presence of a sore throat might come to be regarded as the criterion for "what is called 'angina,'" rather than merely a truth-condition for the statement that someone has angina. Such a change would of course—and here we come to another technical term of Wittgenstein's that has been found baffling—alter the "grammar" of the term: we might say, viewing it in terms of its previous "grammar," that the shift of criterion had turned it into a name for a bodily condition rather than for a disease. As Wittgenstein says in the BB passage, it is possible to get along in ordinary conversation without a pedantic regard for such shifts in grammar: "Doctors will use names of diseases without ever deciding which phenomena are to be taken as criteria and which as symptoms; and this need not be a deplorable lack of clarity." Nevertheless the shifts in "grammar" that turn on such decisions remain real, even if irrelevant in many contexts of discussion, and there is always the possibility of usage's being made more precise with respect to them if a need for resulting kinds of clarity arises.

The possibility of treating a criterion as a truth-condition creates "the fluctuation between criteria and symptoms," which, as Wittgenstein says at PI I.354, "makes it look as though there were nothing at all but symptoms." At 354 Wittgenstein illustrates the distinction between a criterion and a symptom by reference to the contrast between the falling barometer that presages rain and rain itself: "certain sensations of wet and cold." The fact that in each case our belief that it is going to rain, or that it is raining, might turn out to be mistaken, tempts us to think that in both cases we are "taught by experience," that is, that the judgment we make is in both cases based on induction. Wittgenstein's comment is that even when appearances in the second case are misleading, "the fact that the false appearance is precisely one of rain is founded on a definition."

By "definition" here Wittgenstein can't have in mind dictionary definition. Dictionaries merely record usage, and what is supposed to contrast with induction here is plainly not the recording of meanings but their constitution. And we have already traced out in Wittgenstein's earlier writings the genesis of a coherent and original structure of argument concerning the constitution of meaning. If we read him in accordance with the drift of those arguments, then to say that "rain" is *defined as* "certain sensations of wet and cold, or such-and-such visual impressions" is to say that those sensations and impressions are what link the assertion-conditions to the denial-conditions of "It's raining." That link establishes that what is affirmed by the assertion of "It's raining" is that those conditions obtain, that what is excluded is the obtaining of any weather unaccompanied by rain, and that nothing unconnected, causally or otherwise, with that difference has any bearing on the issue of whether such an assertion is true or not. So there is a difference, as Wittgenstein says, between symptom and criterion here, and the difference is the one he draws attention to in the succeeding paragraph, I. 355, to which one must go on, even though it contains no occurrence of the *word* "criterion," if one wishes to learn the conclusion aimed at by the argument of I.354:

> The point here is not that our sense-impressions can lie, but that we understand their language. (And this language, like any other, is founded on convention.)

In other words, we understand what the sound of raindrops pattering on a tin roof "is telling us" about the weather because *we* speak a language, not because Nature does. There are no books in the running brooks, and none in the falling rain either.

It follows that Albritton was right to say in 1959 that a criterion, for Wittgenstein, is "something by which one may be *justified in saying* that the thing is so *and by whose absence the thing is not so*."[30] So much squares with the suggestion we have been pursuing here: that a criterion for Wittgenstein is what we have called a truth-value switch. Where Albritton's 1959 exegesis begins to go wrong, if ours is right, is in the next step he takes, which is to go on to say,

> And a criterion for a thing's being so has this relation to the thing's being so not as a matter of fact, like what Wittgenstein calls a "symptom" of its being so, but as a matter of "logical" necessity. That is, on Wittgenstein's account of such necessity, its relation to the thing's being so is "founded on a definition" or "founded on convention," or is a matter of "grammar."[31]

The motivation for this move is, of course, the need to find some plausible reason why Wittgenstein should wish to differentiate between "criteria" and "symptoms." Since both appear to be truth-conditions in the conventional sense of that term there seems little that could differentiate them except modality, and that interpretation is fostered by Wittgenstein's choice of terminology—"founded on a definition," and so forth—vaguely redolent of Kant on analyticity or Vienna Circle positivism on the linguistic basis of necessary truth.

To take the issue of terminology first, there is no textual ground for supposing that Wittgenstein meant such terminology to mark the distinction between contingent truths or relationships and necessary ones, and every reason, as we have seen, to suppose that he meant it to mark the quite different distinction between the use of a propositional sign to express an empirically grounded judgment purporting to add to the description of reality and its use to draw attention to the nature of the conventional stipulations connecting its truth- and falsity-conditions to one another. Furthermore—moving now from terminology to substance—there is no need to appeal to modality to distinguish criteria from symptoms, since the role of criteria relative to the stipulation of truth- and falsity-conditions is already sufficient to do so. What the establishment, in terms of the actual meteorological condition, of a truth-value switch for "It's raining" does is to *give a sense to* "It's raining." What that means for the post-1929 Wittgenstein (as distinct from Frege: we shall come back to that in a moment) is specified—admittedly in Wittgenstein's habitual telegraphese, in the sentence of PR immediately following the one from which we set out:

> "The sense contains the possibility of recognition," but this is a logical possibility. I must be in the space in which what is to be expected is located. [PR 82, p. 111]

Of course, experience and inductive reasoning may teach one who hears pattering on a tin roof to expect to get wet if he goes out. Here is a "possibility of recognition" that is natural, not "logical," guaranteed by something in nature—the principles

of animal learning—not by anything that one might want to call *logic*. But, as we have seen, the existence of that natural kind of possibility will not help (pace a long series of attempts to elaborate one or another type of "causal theory of meaning") in solving the problem of what is asserted in uttering a string of signs, "*xyz*." The question here is not that of what is to be expected on the basis of the occurrence of a natural phenomenon, but what is to be expected on the basis of another speaker's assertion or denial of a proposition—to which at present one can attach no meaning. In "searching" for the likely consequences of dark clouds, or the likely concomitants of pattering on a roof, one can use ordinary methods of inductive enquiry. But how do I set about "searching" for what is to be expected if my interlocutor is correct in affirming that *xyz*? He may be asserting that it is raining—heavy rain is falling, after all—but, equally, he may be asserting that the fish will be rising or that the road will be too muddy now for a jeep to get through. This is, I take it, what Wittgenstein has in mind when he says that to realize the possibilities of recognition—of recognizing that "*xyz*" has been truly asserted, or that it has not—implicit in grasping a sense, one must be "in the space in which what is to be expected is to be located." But precisely because environmental circumstances provide *in themselves* no such space—do not, that is, arrange themselves as an array of alternative possibilities relative either to the affirmation or to the denial of "*xyz*"—the space in question must be a "logical" space, and the possibilities in question "logical" possibilities, determined by antecedent stipulation to the effect that the issue of truth or falsity for "*xyz*" is to hinge on the presence or absence of certain natural circumstances: in the present instance, rain.

But if symptoms are to be differentiated, as inductively established grounds for anticipating the truth of "*xyz*" from criteria considered as the conditions, stipulatively established as such, constitutive of the possibility of anticipating either the truth or the falsity of "*xyz*," then *necessity* as the basis of the distinction simply drops out of the picture. As Wittgenstein makes clear at PI I.354, when I judge that it is raining because I can see it is, the judgment I express by remarking that it is raining is as much founded upon experience, and as fallible, as the one I make on the basis of pattering on the roof (I have never known it not to be raining, in such a downpour, but then, perhaps I am out of touch with what film crews can do to achieve lifelike atmospheric effects with modern machinery). "Grammar," "definition," "convention" come in, for Wittgenstein, not at the level of truth-determination, but earlier, at the level at which language sets up the system of truth-value switches that establish the possibility of deciding between the options of truth and falsity for given sentences; or to put it another way, that establish, for Wittgenstein, the *sense* of those sentences.

Someone might object, though, that Wittgenstein cannot get clear as easily as that of the suspicion that adopting a given criterion renders a given range of truths necessarily true. Presumably, on Wittgenstein's hypothesis at BB 25, "Angina is a Bacillus B infection" must count, if any does, as a remark "about grammar." But if so nothing, presumably, could show it to be false: indeed, Wittgenstein elsewhere speaks of related claims as "infallible." But surely the lack of any possibility of falsification is precisely the mark of a necessary truth. So why isn't "Angina is a Bacillus B infection" a necessary truth? One possible answer might be that it is a truth about "*what is called* 'angina,'" and in that capacity is clearly not necessary, precisely because the criterion for what is called "angina" might be something else: something

that presently counts as a symptom of angina. But still, one might want to argue, if it *is* the criterion, then it does appear to follow that one who has a Bacillus B infection *could not fail,* in virtue of that, to have angina; so there is still an unexorcised smell of necessity about.

It cannot, plainly, be exorcised by once more invoking fallibilism. It would be a mere non sequitur, that is, to argue that "Someone who has a Bacillus B infection has angina" is not a necessary truth because no evidence that someone has a Bacillus B infection, however compelling, can exclude the possibility that in fact he has no such infection. For it still might be necessarily true that *if* someone has such an infection, *then* that person has angina. What the present objection alleges against Wittgenstein, in other words, is not that his account of criteria commits him to a denial of fallibilism, but only that it commits him to the existence of necessary truths about what *X is*, not merely to the existence of contingent ones about what *is called "X."*

There is, though, a deeper, as well as more authentically Wittgensteinian reason why statements "about grammar," however "infallible," are not to be construed as articulating necessary truths. A well-known statement of it occurs not far from the end of the *Philosophical Investigations:*

> I am not saying: if such-and-such facts of nature were different people would have different concepts (in the sense of a hypothesis). But: if anyone believes that certain concepts are absolutely the correct ones, and that having different ones would mean not realising something that we realise—then let him imagine certain very general facts of nature to be different from what we are used to, and the formation of concepts different from the usual ones will become intelligible to him. [PI, II.xii, p. 230]

Let us try applying this to the present case. Angina is a disease. Diseases (or some of them, including angina) are caused by interactions between human biochemistry and the biochemistry of pathogens. Suppose that, for some reason, such interactions become chemically impossible. The concepts of a human pathogen and of a pathogen-caused disease now become, in a certain sense, inaccessible to us, meaning by that that the point of making the distinctions that such concepts marked depended on the continued obtaining of "certain very general facts of nature" that have ceased to obtain. Suppose we now find Bacillus B in someone's tissues. Do we, now, continue to say that that person "has angina"? The most we can say, it appears, is that at one time he would have had angina, but now merely happens to have some Bacillus B organisms in his tissues.

Philosophy, in one way since Plato, and in another way since Kant, has enjoyed a prolonged love affair with the idea that whereas some features of the pictures we form for ourselves of Reality are contingent, other features of those pictures are noncontingent, in the sense that they would, necessarily, characterize any picture that *could* be formed of Reality; either (if we are Platonists) by any reasoning being whatsoever, or (if we are Kantians) by beings constituted as we are; and that these putatively necessary features of our world picture may therefore be taken as revelatory,

either of how Reality must (metaphysically) be in itself, or of how experience must (transcendentally) be for creatures like ourselves.

If Wittgenstein's views on criteria run along the lines suggested here, then he emerges as a rooted opponent of that idea. Take, for example, the very recent reworking of it which we owe to Saul Kripke. The Kripke of *Naming and Necessity* would hold, presumably, that "Angina is a Bacillus B infection" is, precisely, a truth that holds with metaphysical necessity. According to the picture offered by Kripke (or at any rate, by the shorthand Kripke I have in mind, who may be a different character from the real one) we give a meaning to "angina" by singling out a recognizable pathological condition. Then, through scientific inquiry, we discover that angina is a Bacillus B infection. It follows that nothing not a Bacillus B infection could be, or could have been, angina. And hence it follows that the truth, that angina is that, is true "across possible worlds." In Kripke, in short, we find a recrudescence of the philosophers" dream of finding features of our way of conceptualizing the world that not only holds in the world as it is but would hold in *any possible world*.

Wittgenstein, on the present interpretation, offers a very different picture. According to him, we choose to give a meaning to the proposition "*X* has angina" by stipulating that its truth or falsity is to turn on the issue of whether *X* has a Bacillus B infection. There is nothing necessary about this: it is a pure piece of stipulation: a "convention" or a "definition," though one that determines the "grammar" of the term "angina" (turns it into a term in a classification of diseases by pathogen rather than, say, by bodily condition, that is). Under ordinary circumstances it will now follow "infallibly," or be a "tautology," that if someone exhibits the characteristic pathology engendered by a Bacillus B infection, and has such an infection, then that person has angina. But note that though, according to Wittgenstein, such a connection is "infallible" for the sort of world in which we find ourselves, that "infallibility" carries no implications for other possible worlds and thus no implications for metaphysics, of either the dogmatic or the transcendental varieties. There will always turn out to be "certain very general facts of nature" upon which the utility, and so the intelligibility, of assigning certain natural features of the world to serve as truth-value switches depends, and it will always be the case that those aspects of reality can change, come to be "different from what we are used to" in ways that overturn such putative necessities by evacuating of sense the propositions that putatively express them. Metaphysics, for Wittgenstein, is precisely the attempt to detach what we say from such demeaning practical dependencies on stipulation undertaken against a background of "general facts of nature"; to speak as though we disposed of concepts whose application to all future, and indeed to all possible, realities could be established in an eyeblink, simply by the procedure, which the early Russell thought indispensable to Realism, of pointing at something and saying, in effect, "There! *That* is what '*F*' means!"

6. WITTGENSTEIN, SKEPTICISM, AND THE PHILOSOPHY OF LANGUAGE

J. A. Fodor and Charles Chihara published in 1965 a celebrated paper attacking Albritton's rather sympathetic account of what the latter took to be Wittgenstein's

argument against Other Minds skepticism. Fodor and Chihara argue that Wittgenstein's position is essentially a version of verificationalism or operationalism. From PR section VIII onward, Wittgenstein returns frequently to techniques of measurement as offering a central instance of the way in which grasping the senses of a body of related propositions is connected with learning to operate, and to grasp the point of, a practice. At PI II.xi, p. 225, Wittgenstein says "the meaning of the word 'length' is learnt by learning, among other things, what it is to determine length." Fodor and Chihara take the drift of this to be that "[reference to] relevant operations with, e.g., rulers, range-finders, etc. . . . will be essential in characterising the meaning of such predicates as 'three feet long.' It is in this manner that we are led to the view that the relevant operations for determining the applicability of a predicate are conceptually connected with the predicate."[32] Following Malcolm and others, Fodor and Chihara conclude that Wittgenstein's main argument against Other Minds skepticism is that the "meaning" (i.e., the content) of statements that someone else is in pain, or has experienced a certain sort of dream, is likewise to be explicated in terms of the public "operations" by appeal to which we determine the applicability of the corresponding predicates, with the result that the skeptic is left with nothing even putatively "private" to be skeptical about.

If we are right in what we have said so far, Fodor and Chihara entirely misconstrue the drift of remarks like the one they cite from PI p. 225. What Wittgenstein is precisely not saying, in other words, is that someone who asserts that (1) "*x* is three feet long" is asserting something "conceptually" equivalent to something along the lines of (2) "*x* fits exactly between the terminal gradations of some yardstick." Such an analysis is in any case hardly defensible, since the truth-values of (1) and (2) may in any actual situation diverge: a given yardstick may be inaccurate, a given measurer too careless or too drunk to do the job properly, and so on. What he *is* saying is something altogether different: namely, that it is only by explaining how a sentence such as "*x* is three feet long" fits into the practice of comparing distances by recording the relative numbers of iterations of a modulus required to span each that it can be made clear how the truth- and falsity-conditions of such a sentence are related to one another, or to put it another way, made clear what is denied in asserting it and what is asserted in denying it. Such a view not only fails to entail any program of reductive analysis of the sort characteristic of verificationism or operationalism, but is, as we noted earlier, hostile to philosophical reductionism in any form.

The actual strategy that Wittgenstein thinks should be adopted against philosophical skepticism is sketched, among other places, at *Philosophical Grammar* [PG] 83, p. 129:

> When one wants to show the senselessness of metaphysical turns of phrase, one often says, "I couldn't imagine the opposite of this," or "What would it be like if it were otherwise?" (When, for instance, someone has said that my images are private, that only I alone can know if I am feeling pain, etc.) Well, if I can't imagine how it might be otherwise, I can't imagine that it is *so*. For here "I can't imagine" doesn't indicate a lack of imaginative power. I can't even *try* to imagine it; it makes no sense to say "I imagine it." And that means, no

> connection has been made between this sentence and the method of representation by imagination (or by drawing).

The general fit between this diagnosis of what is ultimately wrong with skepticism and the account offered here of how Wittgenstein arrived at his notion of a criterion will by now, I think, be evident. Wittgenstein's skeptic exemplifies the philosophical tendency we encountered at the end of the last section: the tendency to forget that it is clear what it is to deny some assertion, or to be mistaken in asserting it, only if there is some practice, some decision, some stipulation that we have made or adopted, that makes that clear; and to forget, also, that unless it is clear what it is for the assertion made by a propositional sign, "*xyz*," to be mistaken, it is unclear not only what assertion is made, but whether any assertion is made, by uttering "*xyz*." The skeptic, on Wittgenstein's account of the nature of skepticism, in other words, commits himself to what appear to be descriptions of possible states of affairs. But since it is crucial to skepticism that there should be no way of determining when the "descriptions" in question fail to characterize our situation, and since it must therefore remain unclear what, if one were to assert that the terms of such a description were met, one would be asserting, the alleged "descriptions" fail to describe anything at all. Wittgenstein's claim, in short, is not that skepticism can be shown to be *false*, by way of the flimsy argument often ascribed to him, to the effect that the relationship between the truth of a proposition and the circumstances that make it true is sometimes "logically" or "conceptually" certified and sometimes not. It is that the hypotheses on which the skeptic depends if he is to raise his kind of doubts are not only one and all vacuous, but necessarily vacuous, given the role assigned to them in the skeptic's plan of argument, since if they are to do the job the skeptic requires of them they must be *in principle* nonfalsifiable. Such a strategy is already sketched at *Tractatus* 6.51:

> Skepticism is *not* irrefutable, but obviously nonsensical, when it tries to raise doubts where no questions can be asked.

Its working-out, in the version developed after 1929, is exemplified in Wittgenstein's discussion, at PI I.270, of the use of a manometer to train someone to recognize an inner sensation associated with rising blood pressure. Earlier Wittgenstein has discussed the famous diarist who attempts to record in his diary, by means of the sign "S," the occurrences of an inner sensation. The sensation in question is "private," in the sense that it inhabits the Cartesian realm of the mental, and so partakes of the absolute Cartesian separation of that realm and its contents from the physical. Because of that separation, Wittgenstein has in effect argued, the diarist could have grounds for thinking he has erred in identifying S only if the *criteria* for S, the considerations that make the difference between the diarist's being right about S's having recurred and his being wrong about that, could also be inhabitants of the private realm of Cartesian inwardness. But, argues Wittgenstein, a private criterion is no criterion: I cannot, for instance, check my beliefs about a train departure time against an imaginary timetable—unless I can confirm the results of doing that by appeal to a real one. Hence the diarist can have no means of discovering that he has

erred in writing "S" in his diary. And hence he cannot be correct in doing so either: the whole process is nugatory, and the "diary" a mock, or joke, diary. The conformity between the way in which Wittgenstein deploys the notion of a criterion in this, one of the central arguments of PI, and the account of the meaning of that term offered here is, I think, clear.

Now Wittgenstein turns to the manometer example as offering a case in which an inner process does dispose of an outer criterion. Using the manometer, I train myself to discriminate the sensation that accompanies the rise in blood pressure with sufficient accuracy to "be able to say that my blood pressure is rising without using any apparatus." Now, though, someone proposes a skeptical hypothesis—maybe I am mistaken in thinking that the sensation I have supposedly trained myself to "discriminate" is the same sensation at each recurrence: maybe it is a different sensation each time.

Wittgenstein's response is the following: "And now [i.e., from the point at which I can predict correctly from the occurrence of the sensation alone that my blood pressure is rising, without appealing to the manometer] it seems quite indifferent whether I have recognised the sensation *right* or not. Let us suppose I regularly identify it wrong, it does not matter in the least. *And that alone shows that the hypothesis that I make a mistake is mere show*" [PI I.270, p. 95e (my italics)].

Wittgenstein is, clearly, right that if my ability to recognize the sensation allows me to predict a rise in my blood pressure, the mere suggestion that I habitually make a mistake has no practical implications whatsoever. But why does that show that the skeptic's hypothesis is *mere show*? To say that is to say, presumably, that the hypothesis in question does not raise a genuine possibility; one that might actually be realized in the present situation. And that might seem not to have been shown. But it is at this point that we need to recall Wittgenstein's remark at PG 83—"if I can't imagine how it might be otherwise, I can't imagine that it is *so*"—and the connections between that remark and the train of argument linking the possibility of negative description to the concept of a criterion that we have been tracing out here. My power to discriminate a certain sensation as qualitatively the same at each of its recurrences appears to be established by the fact that its exercise allows me to correctly predict rises in my blood pressure that can be independently checked by means of a manometer. The skeptic wants to raise the possibility that, despite all that, I may nevertheless be mistaken: the sensation may "really" be different each time. But now one wants to ask: what sense can the skeptic attach, in this context, to "mistaken"? And if he can attach no sense to it, what sense can he attach to the adverb "really"? I know, after all, when I talk about the possibility of being mistaken about the qualitative character of a sensation, what possibility I am invoking. I would accept, other things being equal, that I was no longer able to discriminate the sensation in question from others qualitatively similar enough to be confused with it, *if I were to cease to be able to predict what a manometer would show about my blood pressure*. That is what (or at any rate, one way of putting what) a "criterion" in Wittgenstein's sense does for one: it gives one a ground for supposing that one has made a mistake. That is why, since the criterion for supposing oneself to be mistaken about an inner process can't itself be an *inner* criterion, "an 'inner process' stands in need of outward criteria" [PI I.580], and why the manometer supplies a particular

inner process with just such an "outer criterion." Being in possession of such a criterion I know what it would mean to say that my assessment of the identity of my inner state fails to correspond to "reality": it would mean that I had found reason, in my failure to predict the verdict of the manometer correctly, to suppose that my powers to discriminate one sensation from another were as yet insufficiently honed. The skeptic, on the other hand, cannot say what it would be to make a mistake of the kind he envisages. He cannot say that because the qualitative differences he envisages can be assigned no "outward" criterion. And, moreover, the reason why they can be assigned no outward criterion is a reason *internal to his philosophical position*. The moment he equips the possibilities he envisages with outward criteria, that is, they become possibilities capable of being excluded by appeal to those criteria, and thus possibilities useless for the purpose of fueling *skeptical* doubt. He is thus confronted with a dilemma: either he specifies criteria for the possibilities he envisages, in which case they cease to be grist for the mill of skepticism, or else he does not, in which case they remain "mere show": a simulacrum of envisaged possibility buttressed by terms such as "mistake" or "reality" that, whatever meaning may attach to them in other contexts, remain in this one, in the absence of criteria in the sense of that term explicated above, vacuous.

That, it seems to me, is roughly how Wittgenstein intends his remarks on criteria to bear on the issue of skepticism about inner processes. A fuller development of this part of the argument will be found elsewhere.[33] But I would like to suggest, very briefly, in conclusion, that the most interesting bearings of what Wittgenstein has to say about criteria may lie elsewhere: inter alia, in what they have to teach us about the nature of the connection between meaning and truth.

The idea that there is such a connection, and that it is philosophically of the utmost importance, originates with Frege. According to Michael Dummett, Frege held that reference is not an ingredient in meaning, meaning by that that "the understanding which a speaker of a language has of a word in that language . . . can never consist merely in his associating a certain thing with its referent; there must be some particular *means* by which this association is effected, the knowledge of which constitutes his grasp of its sense."[34] And, again according to Dummett, for Frege, "the sense of an expression is . . . that part of its meaning which is relevant to the determination of the truth-value of sentences in which the expression occurs.[35]

Dummett observes[36] that this preliminary characterization of the concept of sense is largely programmatic. A long train of philosophers, beginning with Russell, have found Frege's entire doctrine of sense ultimately programmatic, and have treated it with at best caution and at worst outright rejection. What has proved most influential in Frege's account is not his doctrine of *Sinn*, but the idea that we know the meaning of an expression when we know how to determine the truth-value of sentences in which it occurs. Frege has thus come to appear as the originator of a program that might not have greatly interested him: that of providing an explication of the concept of meaning in terms of the concept of truth. The challenge posed by this program is, as we know, that of giving a reasonably precise characterization of what is known in knowing how to attach a truth-value to a sentence, and of saying how, precisely, such knowledge bears on knowledge of meanings. Around this pair of questions it has proved possible to reconstruct and reanimate a surprisingly wide

range of traditional philosophical issues, as instanced by familiar disputes opposing realists to antirealists with respect to truth, supporters of Quine's version of pragmatism to reductivist versions of positivism, fallibilists to believers in the type of metaphysical necessity espoused by Kripke, and so on. The philosophy of language has become, in short, a major vehicle for the continuing discussion of issues that would in earlier ages have been classed as metaphysical.

What is not generally noticed about Wittgenstein's concept of a criterion is that it is intended to do more or less the same work as Frege's concept of *Sinn*. Thus, for instance, at PG 84, p. 130, Wittgenstein says,

> The role of a sentence in the calculus is its sense.
>
> A *method* of measurement—of length, for example—has exactly the same relation to the correctness of a statement of length as the sense of a sentence has to its truth or falsehood.

And at pp. 23–24 of the *Lectures on the Foundations of Mathematics*,[37]

> Suppose you say, "What does it mean for a man to understand a sign?—You might say, "It means he gets hold of a certain idea." . . .
>
> "Having the same idea" is only interesting if (a) we have a criterion for having the same idea, (b) this guarantees that we use the word in the same way.

A criterion then, for Wittgenstein, does much of the work that *Sinn* does for Frege. A grasp by different speakers of the criteria governing the use of a word "guarantees that [they] use the word in the same way." And it guarantees that by ensuring that they determine in the same way the "correctness"—the truth or falsity—of statements employing it. But Wittgenstein's notion of a criterion, as we have seen, is far less programmatic than Frege's notion of sense. A criterion settles the question of what is relevant to the truth or falsity of a proposition in the sort of way in which grasping a method of measurement employing a certain modulus—grasping, that is, how distances can be compared by numbering the iterations of that modulus required to span them— settles the question of what is relevant to the truth or falsity of statements of length couched in terms of that modulus. To grasp a criterion, for Wittgenstein, is to grasp how propositions fit, in terms of the kinds of thing relevant to their truth or falsity, into the context of practices, or as he is later to call them, language-games.

The connection of Wittgenstein's later philosophy to questions of sense, reference, and truth has largely been missed, mainly because of the authority of the widespread, but mistaken, belief that the later work represents a complete break with the concerns of the *Tractatus*, and that the supposed break consists in Wittgenstein's having substituted, for the interest in the relationships between meaning and truth that characterized the earlier work, a new and altogether unrelated interest in the relationships between meaning and "use." One thing about this familiar conception of Wittgenstein's intellectual development is correct, however. The later Wittgenstein is

not interested in the project of explicating the concept of meaning, taken as conceptually problematic, in terms of a supposedly unproblematic concept of truth. It would be truer to say that although for the later Wittgenstein the connections between meaning and truth remain of interest, neither concept, for him, is unproblematic. Both, for him, are semimystical notions defying naturalistic understanding as they stand, and both endlessly productive of "philosophy," that is, of intrinsically interminable metaphysical dispute. His solution is to explicate both in terms of practice. In the course of such explications the "cloud of philosophy" through which gleam, dully and numinously, such entities and relations as meanings, propositions, "internal relations," truth, falsity, contradiction, condenses into "a drop of grammar." We are left confronting the prosaic landscape of our own stipulative acts, together with the background of nonnecessary "facts of nature" against which their intelligibility is buttressed, though never more than provisionally so, and the endlessly multiplying practices—counting, measurement, arranging colours in qualitative series, keeping track of direction by means of a compass, and so on, and so on—that they bring into being.

The transformation of Frege's notion of sense into that of a criterion is one of the steps toward this goal. Wittgenstein's notion carries none of the suggestions of mentalism that, as Putnam has pointed out,[38] cling obstinately to Frege's notion of sense. As Wittgenstein says [PG p. 131]:

> The sense of a proposition (or a thought) isn't anything spiritual: it's what is given as an answer to a request for an explanation of the sense. . . .
>
> The sense of a proposition is not a soul.

What Wittgenstein has in mind here, I take it, given the avenue of thought down which we have pursued him, is that the sort of explanation one gives, or might give, as an answer to a request for an explanation of the sense of "*x* is three inches long" is, or might be, an explanation of the point of the practice of comparing lengths by iterating the same modulus, with a demonstration of the modulus in question, and if necessary some practice in counting.[39] And that the sort of explanation one might give of the sense of "God, I can feel my blood pressure going up!" might take the form of recounting the details of my training in sharpening my discrimination of inner sensations by appeal to a manometer. To work through the implications of such examples, and of the view of the relationships between truth, meaning, and practice that they sustain, might lead one very close to the conclusion that, whatever may be the intrinsic interest of the essentially metaphysical disputes that have formed the main matter of the philosophy of language since Russell, they are quite inessential to the pursuit of their ostensible goal of establishing the form and content of an adequate theory of meaning.

NOTES

1. This paper is the third in a series of essays on Wittgenstein that I hope will eventually coalesce into a book. The other two are "Wittgenstein and Scepticism," in Klaus Puhl, ed., *Meaning*

Scepticism (Berlin: Walter de Gruyter, 1991), 34–69; and "Truth, Yardsticks and Language-Games,"*Philosophical Investigations* 19:2 (April 1996), 105–130.

2. Cf. Stanley Cavell, *The Claim of Reason* (Oxford: Clarendon, 1979), 7: "The thought that Wittgenstein is counting on the ordinary notion of a criterion ought to seem an unpromising line for a beginning. There seems no prospect that the ordinary notion could do all the work he can appear to count on his appeals to criteria to do, whatever that work turns out to be; . . ."

3. Rogers Albritton, "On Wittgenstein's Use of the Term 'Criterion,'" *Journal of Philosophy* 56 (1959), 845–57; reprinted in George Pitcher, ed., *Wittgenstein: The Philosophical Investigations* (New York: Doubleday, 1966), 231–50 [OWC].

4. P. M. S. Hacker, *Insight and Illusion: Wittgenstein on Philosophy and the Metaphysics of Experience* (London: Oxford University Press, 1972) [I&I].

5. G. P. Baker, "Criteria: A New Foundation for Semantics," *Ratio* 16 (1974), 156–189; "Defeasibility and Meaning," in P. M. S. Hacker and J. Raz, eds., *Law, Morality and Society* (Oxford: Oxford University Press, 1977).

6. W. G. Lycan, "Non-Inductive Evidence: Recent Work on Wittgenstein's 'Criteria,'" *American Philosophical Quarterly* 8:2 (1971), 109–25.

7. Mark Addis, "Criteria: The State of the Debate," *Journal of Philosophical Research* 20 (1995), 139–74.

8. Crispin Wright, "Second Thoughts about Criteria," *Synthese* 58 (1984), 383–405.

9. Richard Rorty, "Criteria and Necessity," *Nous* 7 (1973), 313–29.

10. Charles Chihara and J. A. Fodor, "Operationalism and Ordinary Language: A Critique of Wittgenstein," in George Pitcher, ed., *Wittgenstein: The Philosophical Investigations* (New York: Doubleday, 1966), 384–419; Charles Chihara, "Operationalism and Ordinary Language Revisited," *Philosophical Studies* 24 (1973), 137–56.

11. John McDowell, "Criteria, Defeasibility and Knowledge," *Proceedings of the British Academy* 68 (1982), 456–79.

12. Cavell, op. cit., 37–48.

13. In "Wittgenstein and Scepticism."

14. Wright, op. cit., 383.

15. Ludwig Wittgenstein, *Preliminary Studies for the "Philosophical Investigations," Generally Known as The Blue and Brown Books* (Oxford: Blackwell, 1960).

16. Albritton, op. cit., 243–44.

17. Ibid., 235n.5.

18. Ibid., 236.

19. Ibid., 236.

20. Ibid., 244.

21. Wright, op. cit., 383.

22. Albritton, op. cit., 249.

23. Ibid., 237.

24. Ludwig Wittgenstein, *Philosophical Investigations* (Oxford: Blackwell, 1958), I.354.

25. Alice Ambrose, ed., *Wittgenstein's Lectures: Cambridge 1932–35* (Oxford: Basil Blackwell, 1979), 77.

26. Cavell, op. cit., 14.

27. Ludwig Wittgenstein, *Philosophical Remarks*, ed. Rush Rhees, trans. Raymond Hargreaves and Roger White (Oxford: Blackwell, 1975), 111.

28. Ludwig Wittgenstein, *Tractatus Logico-Philosophicus*, trans. D. F. Pears and B. F. McGuinness (London: Routledge, 1961), 15.

29. As, for example, P. M. S. Hacker does in *Insight and Illusion*.

30. Albritton, op. cit., 244 (second italics mine).

31. Albritton, ibid.

32. Chihara and Fodor, op. cit., 389.

33. Bernard Harrison, "Wittgenstein and Scepticism," loc. cit.

34. Michael Dummett, *Frege: Philosophy of Language*, 2nd ed. (London: Duckworth, 1981), 93.

35. Ibid., 89.

36. Ibid.

37. Cora Diamond, ed., *Wittgenstein's Lectures on the Foundations of Mathematics, Cambridge 1939* (Hassocks, England: Harvester Press, 1976).

38. Hilary Putnam, *Mind, Language and Reality* (Cambridge: Cambridge University Press, 1975), 218.

39. Cf. L. Goddard, "Counting," *Australasian Journal of Philosophy and Psychology* 40 (1962), 222–48. Goddard's paper fits very neatly with the present account.