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ABBREVIATIONS

Abbreviations used in referring to the following editions of Ludwig Wittgenstein's writings:

- Bl.B. Preliminary Studies for the "Philosophical Investigations,"
- Br.B. Generally Known as The Blue and Brown Books. Harper Torch-
books. New York: Harper & Row, Publishers, 1965.

- C.&V. Culture and Value. Edited by G. H. von Wright in colla-
boration with Heikki Nyman. Translated by Peter Winch.
Chicago: The University of Chicago Press, 1980.

- L.&C. Lectures and Conversations on Aesthetics, Psychology and
Religious Belief. Compiled from notes taken by Yorick
Smythies, Rush Rhees, and James Taylor. Edited by Cyril
Barrett. Los Angeles: University of California Press,
1972.

- N.f.L. "Notes for Lectures on 'Private Experience' and 'Sense
Data'." Edited by Rush Rhees. Philosophical Review, LXXVIII
(1968), 271-320.

- N.f.P.L. "Notes for the 'Philosophical Lecture'." Nachlass. Volume 69.

- O.C. On Certainty. Edited by G. E. M. Anscombe and G. H. von
Wright. Translated by Denis Paul and G. E. M. Anscombe.
Harper Torchbooks. New York: Harper & Row, Publishers,
1969.

- P.G. Philosophical Grammar. Edited by Rush Rhees. Translated
by Anthony Kenny. Los Angeles: University of California
Press, 1978.

- P.I. Philosophical Investigations. Third edition. Translated
by G. E. M. Anscombe. New York: The Macmillan Company,
1958.

- R.F.M. Remarks on the Foundations of Mathematics. Edited by G. H.
von Wright, R. Rhees, and G. E. M. Anscombe. Translated
by G. E. M. Anscombe. Cambridge, Massachusetts: The M.I.T.
Press, 1967.

- R.P.P. I Remarks on the Philosophy of Psychology. Volume I. Edited
by G. E. M. Anscombe and G. H. von Wright. Translated by
G. E. M. Anscombe. Chicago: The University of Chicago
Press, 1980.

- Z. Zettel. Edited by G. E. M. Anscombe and G. H. von Wright.
Translated by G. E. M. Anscombe. Los Angeles: University
of California Press, 1970.

CRITERIA

CHAPTER I

THE PROBLEM: THE RELATIONSHIP BETWEEN CRITERIA AND WHAT THEY ARE CRITERIA OF

In the Preface to the Philosophical Investigations, Wittgenstein writes that the Investigations and the Tractatus should be published together because the Investigations can be understood only by contrast with and against the background of the Tractatus. After writing the Tractatus, Wittgenstein came to believe that it contained serious mistakes, which he hoped to remedy in the Investigations. One of the most serious of these was his earlier method of doing philosophy. The entire procedure of the Tractatus was a priori: Wittgenstein asked, "What must language be like for us to be able to use it to talk about the world?" His answer was that it must be a picture of the world. Every sentence or proposition must be either elementary or nonelementary (a nonelementary proposition being a truth function of elementary propositions and an elementary proposition being a combination of names, or simple signs, that pictures an atomic fact by sharing a common form or structure with it);

and the meaning of a name, or simple sign, must be the object that it names.

In the Investigations, however, Wittgenstein changes his method of doing philosophy. There, the procedure is a posteriori. He asks not what language must be like, but what it is like. And upon examining the actual phenomenon, he finds that language is really quite different from the ideal that he had constructed in the Tractatus. That ideal included the view that all words are names and that the meaning of a word is the object that it names. Much of the Investigations is an attack on this view. In the first forty-nine sections of that work, Wittgenstein argues that the view that all words are names oversimplifies the uses of words by making it look as if all words function in the same way. And in many of the later sections he attacks that view's application to psychological terms like "pain," "fear," and "thinking." On this application, psychological terms name mental states, events, or processes that you discover by turning your attention inward on the workings of your own mind. To facilitate discussion, I will call this view of the nature of psychological terms "mentalism," and I will call the view that a general term must name some common element that is present in all the cases to which it applies "essentialism."¹ As I use the terms, "mentalism" is simply

¹Cf. Jerome A. Shaffer, Philosophy of Mind, Foundations of Philosophy Series (Englewood Cliffs, New Jersey: Prentice Hall, 1968), pp. 21-22; Robert Richman, "Something Common," The Journal of Philosophy, LIX (Dec. 20, 1962), 822; Nicholas Griffin, "Wittgenstein, Universals, and Family Resemblances," Canadian Journal of Philosophy, III, 4 (June 1974), 635.

"essentialism" applied to psychological terms. It is simply the view that a psychological term must name some mental state, event, or process that is present in all the cases to which it applies.

Wittgenstein attacks mentalism in his later writings, and the notion of a criterion plays an important role in his attack. But its role is unclear largely because the notion itself is so obscure. Wittgenstein never discusses it in much detail, and the few cursory remarks he does make about it are themselves extremely obscure. In the dissertation, I will examine both Wittgenstein's remarks on the notion of a criterion and his use of that notion in his attack on mentalism. On the basis of those examinations, I will attempt to clarify Wittgenstein's notion of a criterion.

In this chapter, I will survey the role of criteria in Wittgenstein's attack on mentalism and explain what I take to be the major difficulty that must be resolved before Wittgenstein's notion of a criterion can be clearly understood, viz., the nature of the relationship between criteria and what they are the criteria of.

Survey of the Role of Criteria in Wittgenstein's Attack on Mentalism

The notion of a criterion figures prominently in Wittgenstein's discussions of mentalism. Wittgenstein uses that notion in his characterizations and criticisms of this view and in his presentation of his own alternative view.

Wittgenstein sometimes characterizes the view that he is attacking as the view that there is and must be one and only one real criterion for something psychological. In discussing reading, for example, he attacks the view that "the one real criterion for anybody's reading is the conscious act of reading" (P.I. #159), that "the conscious mental act" is "the only real criterion distinguishing reading from not reading" (Br.B. p. 121).

Similarly, in discussing having a toothache, he tells us that it is tempting to distinguish the personal experience of having a toothache from its behavioral expressions, such as moaning and holding one's cheek, and to make the personal experience the one real criterion for someone's having a toothache (N.f.L. pp. 275-286).

Wittgenstein attacks mentalism, arguing that it misconstrues both the use of words and expressions like "reading" and "having a toothache" and the relationship between the experience of reading or having a toothache and its expressions. The notion of a criterion figures prominently in these attacks. To convince us that mentalism misconstrues the use of words and expressions like "reading" and "having a toothache," Wittgenstein presents examples which show that such words and expressions are not used as names for hidden mental states, events, or processes as well as the private-language argument which shows that such words and expressions cannot be so used. To convince us that mentalism misconstrues the relationship between the personal experience and its expressions, he argues that "the 'personal experience' stands

in need of behavioral expressions that can serve as its criteria" (P.I. #580).

Wittgenstein presents examples to show us that we use general terms like "reading" not for hidden mental states, but for "a family of cases," and that "in different circumstances we apply different criteria for a person's reading" (P.I. #164). This criticism is important because it ties together the appeal to particular cases, the notion of a family resemblance, and the notion of a criterion. When interpreters discuss the role of family resemblances in Wittgenstein's attack on essentialism, they generally focus on sections 66 and 67 of the Investigations, where Wittgenstein talks about games and family resemblances. Since he does not use the notion of a criterion there, they frequently ignore its relationship to the notion of a family resemblance. This relationship, however, should not be ignored, for an understanding of it would shed light on two of the most significant and obscure notions in Wittgenstein's later philosophy.

The tie between criteria and family resemblances is indicated in Wittgenstein's discussions of reading and believing what you say. In his discussions of reading, Wittgenstein presents examples to show that we use the word "reading" not for a particular mental act, but for a family of cases. Since the mentalist assumes that all cases of reading must contain a common element, he concludes that all particular cases can do is show us the essence of reading through a veil of inessential features

that must be stripped away if we want to see the essence of reading. But Wittgenstein insists that when we strip away the features of the particular case, reading itself disappears; for what is essential to reading is not some mental activity hidden beneath the features of the particular case, but the features that are characteristic of the family of cases of reading. This is why Wittgenstein describes the use of the word "reading" by presenting us with a selection of particular cases that exhibits the various characteristic features of reading and includes some cases showing these features in exaggeration, others showing transitions, and still others showing the trailing off of such features (P.I. #156-171 & Br.B. pp. 119-125).

Although Wittgenstein never explicitly states the connection between "reading's" being a family-resemblance term and its being a term for which we apply different criteria in different circumstances, his remarks seem to indicate that the tie is roughly this: the different criteria we apply in different circumstances are identical to the various characteristic features found in the family of particular cases of reading. Thus, there seems to be a very close connection indeed between Wittgenstein's notion of a criterion and his notion of a family resemblance.

Wittgenstein says more about family resemblances and criteria in his discussion of someone's believing what he says. There he tells us that we regard certain facial expressions, gestures, and tones of voice as characteristic of the expression of belief even though they do not occur in all cases of someone's

believing what he says and do occur in cases of someone's not believing what he says. He also indicates that these features both characterize the main branches of the family of cases of someone's believing what he says and serve as the different criteria that distinguish cases of someone's believing what he says from those of his not believing what he says. Thus, the tie between criteria and family resemblances seems to be that (for things such as someone's reading or believing what he says) the different criteria are identical with the characteristic features that form family resemblances among the particular cases.

Wittgenstein tries to convince us that mentalism misconstrues the use of words not only by presenting particular cases that show the many different characteristic features that form family resemblances and serve as our criteria, but also by arguing that words and phrases like "reading," "believing," "having a toothache," and "being in pain" cannot name private experiences. Here, too, the notion of a criterion plays an important role. As I mentioned earlier, the mentalist distinguishes the private personal experience from its public behavioral expressions and says that words like "reading" and "believing" must refer to private experiences, and words like "pain" and "toothache" to private objects, which justify, or are criteria for, their use. Wittgenstein offers the private-language argument as a demonstration that words cannot function as names for private objects and experiences and that a private language composed of such names is, therefore, impossible.

Before sketching this argument, however, I should clarify what sort of private language Wittgenstein argues is impossible. He does not argue that there cannot be a 'factually private language', that is, a language that someone invents for his own private use, so that he is the only one who understands it, although others could understand it. Rather, he argues that there cannot be a 'logically private language', that is, a language that someone uses to refer to what can only be known to him, viz., his private personal experiences, so that he is the only one who can understand it (P.I. #243, 256).²

In presenting this argument, Wittgenstein imagines a case in which someone tries to use a logically private language. (Like Wittgenstein, I will present the case in the first person.) Wanting to keep a record of the recurrence of a certain sensation, I associate it with the sign "S" and write "S" in a calendar for every day I have the sensation. I associate the sensation with the sign by concentrating on the sensation while I write down the sign. In this way I impress on myself the connection between the sign and the sensation and create a private language in which "S" refers to a certain sensation. But, Wittgenstein continues,

. . . "I impress it on myself" can only mean: this process brings it about that I remember the connexion right in the future. But in the present case I have

²Cf. Norman Malcolm, "Wittgenstein's Philosophical Investigations," in Wittgenstein: The Philosophical Investigations (A Collection of Critical Essays), edited by George Pitcher, Anchor Books (Garden City, New York: Doubleday & Company, Inc., 1966), pp. 66, 97.

no criterion of correctness. One would like to say:
 whatever is going to seem right to me is right. And
 that only means that here we can't talk about 'right'.
 (P.I. #258)

Therefore, a logically private language is impossible. That is Wittgenstein's conclusion, but what is his argument? To answer that question, we must examine #258 and the sections surrounding it. But we should not stop there, for much that precedes those sections and many remarks in Wittgenstein's "Notes for Lectures on 'Private Experience' and 'Sense Data'" and his "Notes for the Philosophical Lecture" are relevant to the argument. In fact, the argument is substantially complete long before #258.

In the early sections of the Investigations, Wittgenstein argues that Augustine's view that all words name objects and are learned by ostensive definition is an oversimplification partly because an ostensive definition alone cannot explain the use of a word: it explains the use only when the overall role of the word in the language is already understood (P.I. #30). Pointing to an apple and saying the word "apple," for example, cannot teach a child the use of the word "apple" unless he already knows the overall role of that word in our language. If he knows the overall role, an ostensive definition will give him the last bit of information he needs to be able to use the word "apple." But, if he does not know the overall role, an ostensive definition cannot teach him the use of the word. It may teach him to associate the word "apple" with the thing pointed to, but once he has made that association there are still many ways he could go on and use the word. He could, for example, use it as a word for a color or shape.

Wittgenstein thinks that what is true of the role of ostension in explaining the use of a word is also true of its role in establishing a word's use: ostension alone is not enough; it must be combined with an understanding of the word's overall role in the language (P.I. #244, 257 & N.f.L. pp. 290-291). The premise that ostension alone cannot establish the use of a word is essential to the private-language argument because the meaning of the sign "S" is supposed to be established by my concentrating my attention on the sensation while I write down the sign and thus giving myself a kind of ostensive definition of "S." If the overall role of "S" in my private language is unclear, then this ceremony cannot establish the use of "S" because even if I manage to associate "S" with the sensation, there will still be many ways I could go on and use it. To use Wittgenstein's terms, merely associating it with the sensation establishes no criterion for its correct use. After making the association, I could go on and use "S" in any way I pleased; for whatever seemed right to me would be right, which only means that here we cannot talk about right.

But don't I clarify the overall role of "S" in my private language by saying that "S" is the name for a sensation? Not according to Wittgenstein. He insists that "sensation" is not a word in my private language, but a word in our common language and, as such, requires a justification that everyone can understand. And it will not help me to say that what I have

need not be a sensation, but is something; and when I have it I write "S." For "have" and "something" also belong to our common language and require justifications that everyone can understand. Nor will it help me to say that "S" is a name, for "there is a name only where there is a technique of using it," and there can be no technique for using "S" as a name for a private object (N.f.P.L. pp. 6-7).

But why must there be a technique for me to be able to use "S" as a name? Can't I simply concentrate my attention on this and intend to call it "S" in the future? Intention, after all, does not require the existence of a technique, so my intention to call this "S" in the future can be the criterion for the correct use of "S." If I use "S" in accordance with my intention, I will be using it correctly; if not, incorrectly (P.I. #205 & Br.B. p. 142). But, according to Wittgenstein, my intention alone cannot be the criterion for the correct use of "S" because it presupposes the existence of a technique of use. Intending is not a queer mental process that can go on regardless of what techniques or customs exist. On the contrary, intentions presuppose the existence of human customs and institutions. The intention to play a game of chess, for example, presupposes the existence of the technique of the game of chess (P.I. #337). And my intention to use "S" as a sign for my private object presupposes the existence of the technique of using a sign like "S" as the name for a private object.

Well, can't I invent such a technique and then intend to use "S" as a sign for my private object? Not according to

Wittgenstein. He argues that to create and employ such a technique, I must be able to identify my private object. But I can't identify it because there can be no criterion of identity for a private object. We think there is such a criterion because we are thinking of criteria similar to those for physical objects, but I cannot apply any such criteria to my private object. For if it is as private as it is supposed to be, there is no reason to call it one object rather than a hundred objects; indeed, there is no reason to say there is anything there at all. In fact, if my private object is as private as it is supposed to be, I cannot say anything at all about it either to others or to myself (P.I. #288, 293 & N.f.P.L. pp. 18-30).

In summary, Wittgenstein's argument is that a private language such as the one in which I use "S" to refer to a certain 'sensation' is impossible because merely concentrating my attention on the sensation while I write down the sign "S" is not enough to establish a criterion for the correct use of "S"; there must be a technique for using such a sign as the name of a private object. But no such technique is possible, for there can be no criterion of identity for a private object.

It should now be clear that the notion of a criterion is crucial to Wittgenstein's private-language argument. To understand the argument, we have to know what Wittgenstein means by "criterion of correct use" and "criterion of identity." Our interpretation of these notions will influence and be influenced by our understanding of the argument.

Thus far, we have seen that the notion of a criterion plays an important role in both Wittgenstein's characterization of mentalism and his argument that it misconstrues the use of psychological terms. The notion of a criterion also plays an important role in his argument that mentalism misconstrues the relationship between an experience and its expressions. Before we examine this argument, however, we need to understand what Wittgenstein believes the mentalist's view of this relationship to be.

Wittgenstein tells us that when we attempt to find a simple explanation for the difference between cases of actual experience and cases of pretence, we are led to distinguish the personal experience from its expressions and to say that in cases of actual experience the personal experience is present; but in cases of pretence, although the expressions are present, the personal experience is not. When looking for a simple explanation of the difference between actually reading and only pretending to read, for example, we are inclined to say that there must be a special mental act of reading that is present in the one case but absent in the other (P.I. #156-159 & Br.B. pp. 120-121). Similarly, when looking for an explanation of the difference between actually having a toothache and only pretending to have one, we are inclined to say that the difference lies in the presence or absence of a special experience behind the expressions of toothache (N.f.L. p. 275). We are also led to distinguish the personal experience from its expressions when we attempt to

explain the fact that we can have an experience without expressing it. A person can, for example, have a toothache without ever showing that he has one; and this fact, together with the fact that a person can pretend to have a toothache, leads us to embrace the mentalist's view that the personal experience of having a toothache is entirely independent of the behavior that expresses that experience. Consider moaning. Moaning is an expression of toothache, but a person can moan when he does not have a toothache, or not moan when he does. And according to Wittgenstein, this leads us to say that having a toothache is one thing, and moaning is another; and all they have to do with each other is that they sometimes coincide. They have the same connections as being red and being sweet: sometimes what is red is sweet, sometimes not, and vice versa (N.f.L. p. 286).

According to Wittgenstein, the mentalist holds that there are two separate things--the personal experience and its expression--between which there is a purely accidental connection. Wittgenstein attacks this view, arguing that there is a very close connection between the experience and its expression: the 'personal experience' stands in need of behavioral expressions that can serve as its criteria (P.I. #580). Why the need for such behavioral expressions? Because, Wittgenstein argues, a private personal experience cannot justify the use of a word. The use of words like "reading," "pain," and "toothache," therefore, requires the existence of behavioral expressions. Indeed, Wittgenstein says we would have "no use for these words if their application was severed from the criteria of behavior," for the language-games

we play with them require that the people who play them behave in certain ways (N.f.L. p. 286). "The game we play with the word 'toothache'," for example, "entirely depends upon there being a behavior which we call the expression of toothache" (N.f.L. p. 290). Thus, our use of the word "toothache" requires that we behave in certain ways, e.g., that we moan and hold our cheeks, and that we agree in calling such behavior "expressions of toothache."

But Wittgenstein agrees with the mentalist's view that we can have an experience without expressing it or express an experience without having it, so how can he hold that the use of a word like "toothache" depends on behavioral expressions? He can hold this because although he agrees that we can distinguish the experience from its expressions in certain cases, e.g., in cases of pretence, he does not agree that we can make the distinction in all cases. Indeed, he argues that if we call a certain type of behavior the expression of a certain experience, then under certain circumstances the possibility of that type of behavior's occurring without the experience must not enter the language-game (N.f.L. p. 293). The circumstances in question include those in which we are dealing with small children. We are inclined to think that since we adults can moan with or without having a toothache, the child can, too. But Wittgenstein maintains that although we distinguish our 'moaning with toothache' from our 'moaning without toothache', we cannot go on to say that of course we make the same distinction in the child. That we make the distinction in some cases does not show that we

make it in all cases, and in the case of the child, we do not make it. We do not say that the child, small as it is, may already pretend. We teach the child to use the words "I have a toothache" to replace its moans, and we do not allow a doubt as to whether the experience of having a toothache is really behind its moans to enter here. In this way, the language-games with words like "toothache" are based on language-games in which we do not say that the behavioral expressions may lie (N.f.L. pp. 293-301).

Thus, Wittgenstein argues that the mentalist is mistaken in thinking that the connections between personal experiences and their behavioral expressions are purely accidental, for there is actually a very close connection between them: the language-games in which we talk about personal experiences entirely depend on the existence of types of behavior that we call expressions of those experiences. We teach the child to replace its natural behavioral expressions with words. In this way, words for 'personal experiences' are connected with the primitive, natural expressions of those experiences and used in their place (P.I. #244). They are new expressions of the experience and function in the same way as the old expressions, i.e., as our criteria for someone's having the experience.

This concludes my survey of the role of criteria in Wittgenstein's attack on mentalism. We have seen that Wittgenstein attacks the view that the personal experience is the one and only real criterion by showing the different criteria that we apply in different circumstances, by arguing that the personal experience

cannot be the criterion, and by showing that the personal experience is tied to the natural expressions that serve as its criteria.

In attacking mentalism, Wittgenstein speaks of criteria for things like someone's reading, believing what he says, having a certain sensation, or having a toothache. He also speaks of criteria distinguishing reading from not reading and of criteria distinguishing cases of someone's believing what he says from cases of his not believing what he says. In the private-language argument, he mentions criteria of correct use and criteria for identity. Indeed, Wittgensteinian criteria are always criteria of or for something. And in surveying the role of criteria in Wittgenstein's attack on mentalism, one sees that criteria are a kind of ground; they provide support for what they are criteria of. But it is unclear what kind of support they provide. In fact, the most problematic aspect of Wittgenstein's notion of a criterion is the nature of the type of support that criteria provide for what they are criteria of.

Problem: the Type of Support Criteria Provide
for What They are Criteria of

When Wittgenstein introduces the notion of a criterion, he tells us that we sometimes answer the question "How do you know that so-and-so is the case?" by giving criteria. If someone asks you, "How do you know that Jones has a toothache?", for example, you may answer by saying, "I know he has a toothache because he's holding his cheek" (Bl.B. pp. 24-25). Thus, criteria can provide

support for our knowledge claims. But, it is unclear what kind of support they provide because they seem to fit neither of the standard patterns for providing support. They do not logically entail what they are criteria of, nor do they provide the simple sort of inductive evidence provided by symptoms.

Not Logical Entailment

It is tempting to think that criteria logically entail what they are criteria of. Indeed, Wittgenstein says things that support such an interpretation. When introducing the terms "criteria" and "symptoms," he first states that the presence of a certain bacillus in someone's blood is the defining criterion of angina and that an inflamed throat is a symptom of it and then tells us that to say "A man has angina if this bacillus is in him" is to utter a tautology or give the definition of "angina," whereas to say "A man has angina whenever he has an inflamed throat" is to make a hypothesis (Bl.B. pp. 24-25). These remarks suggest that criteria may logically entail what they are criteria of, but we cannot conclude that Wittgenstein thinks all criteria entail what they are criteria of until we have examined both his other remarks on the notion of a criterion and his use of that notion in his attack on mentalism.

Before making those examinations, however, I should mention an advantage of the view that all criteria logically entail what they are criteria of. This view easily distinguishes criteria from symptoms, for though both may be appealed to in answering the question "How do you know that so-and-so is the

case?", criteria always provide deductive certainty while symptoms never do. The presence of a criterion for something always logically entails the thing's presence, whereas the presence of a symptom never logically entails the thing's presence. Thus, if moaning is a criterion of having a toothache, then I know for certain that someone who moans has a toothache because his moaning logically entails his having one. But, if a red patch on the cheek is a symptom of having a toothache, then I do not know for certain that someone who has a red patch on his cheek has a toothache because his having a red patch there provides only inductive evidence for his having a toothache. On this view, a criterion is one of the primary phenomena by which we judge that something is so. We are entitled to regard a phenomenon as a thing's criterion because it is a sufficient condition for the thing's being so. But we are entitled to regard a phenomenon as a thing's symptom only because experience teaches us that it coincides with one or more of the thing's criteria.

The view that all criteria logically entail what they are criteria of is tempting because it seems to fit Wittgenstein's remarks on criteria and symptoms for angina and because it provides an easy way of distinguishing criteria from symptoms. Nonetheless, we must reject it, for Wittgensteinian criteria generally are not sufficient conditions for what they are criteria of. In discussing criteria and symptoms of rain, Wittgenstein acknowledges that the presence of criteria for rain can deceive us and thus indicates that the satisfaction of criteria for rain does not logically entail the presence of rain (P.I.

#354-355). He also implies that both criteria for a change of taste and criteria for someone's believing something are less than sufficient conditions for what they are criteria of. He says that although we might cite the production of a new style as a criterion for a man's having changed his taste, a man could design a new style without having changed his taste. Similarly, although we might cite someone's statement that he believes something as criterial evidence for his believing it, someone can say that he believes something without believing it (Br.B. pp. 143-144). Moreover, Wittgenstein makes someone's moaning a criterion for his having a toothache even though he acknowledges that someone can moan without having a toothache (N.f.L. p. 295).

Thus, Wittgensteinian criteria generally do not entail what they are criteria of. But if that is so, then what type of support do they generally provide? Is it the same sort of inductive support provided by symptoms?

Not the Simple Sort of Inductive Evidence

Provided by Symptoms

Like criteria, symptoms can provide support for knowledge claims. When Wittgenstein introduces the notion of a symptom, he tells us that we sometimes answer the question "How do you know that so-and-so is the case?" by giving symptoms. If someone asks you, "How do you know that Jones has a toothache?", for example, you may answer by saying, "I know he has a toothache because he's got a red patch on his cheek." And if he then asks you

how you know that Jones has a toothache when you see a red patch on his cheek, you may point out that you infer that Jones has a toothache when you see a red patch on his cheek because in the past you observed that a person's having a red patch on his cheek generally coincided with his having criteria which showed that he had a toothache. The red patch is thus a symptom of toothache, and its appearance provides a simple form of inductive evidence for someone's having a toothache.

It is tempting to think that the behavioral expressions that Wittgenstein calls our criteria provide the same sort of inductive evidence that symptoms do. After all, if a red patch is evidence for someone's having a toothache because it has been found to coincide with the behavioral expressions that serve as our criteria for someone's having a toothache, then why not conclude that those behavioral expressions are evidence for someone's having a toothache because they have been found to coincide with that experience? Accordingly, if someone asks you how you know that Jones has a toothache, you will answer by saying, "I know that he has a toothache because he is moaning and holding his cheek." And if he then asks you how you know that Jones has a toothache when he moans and holds his cheek, you will answer that you infer that Jones has a toothache when he moans and holds his cheek because in the past you have observed that someone's moaning and holding his cheek generally coincided with his having a toothache. There is, however, an obvious problem with this view; for when you talk about behavior coinciding with the experience, you have taken the mentalist's view that the personal

experience and its behavioral expressions are two separate things. And from this view it follows that you observe the coincidence of behavioral expressions with personal experiences only in your own case. For when you say you know that Jones has a toothache because he is moaning and holding his cheek, you are supposing that when he does those things he has the same personal experience that you have when you do them. But you can never verify your supposition because you cannot have someone else's experiences. Hence, you can never really know whether Jones has a toothache. Thus, mentalism leads to skepticism about the possibility of knowledge of other minds (Bl.B. pp. 24-5 & N.f.L. p. 281).

The view that the behavioral expressions that serve as our criteria provide the simple sort of inductive evidence provided by symptoms is not part of Wittgenstein's view but part of the mentalist's view, which Wittgenstein attacks. Wittgenstein holds that the evidential value of the behavioral expressions that serve as our criteria is determined not by empirical correlations, but by linguistic conventions:

The fluctuation in grammar between criteria and symptoms makes it look as if there were nothing at all but symptoms. We say, for example: "Experience teaches that there is rain when the barometer falls, but it also teaches that there is rain when we have certain sensations of wet and cold, or such-and-such visual impressions." In defense of this one says that these sense impressions can deceive us. But here one fails to reflect that the fact that the false appearance is precisely one of rain is founded on a definition.

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.) (P.I. #354-355)

It is tempting to think that a falling barometer, sensations of

wet and cold, and such-and-such visual impressions all provide a similar form of inductive evidence for rain. After all, doesn't experience teach us that each of these is evidence of rain? Wittgenstein does not think so. He agrees that a falling barometer provides a simple form of inductive evidence for rain and characterizes it as a symptom of rain. But he does not agree that sensations of wet and cold and such-and-such visual impressions provide a similar form of inductive evidence for rain; he thinks that their providing support is a matter of convention. To justify using them as grounds, we must appeal not to empirical correlations, but to linguistic conventions. We can answer the question "How do you know that there is rain when the barometer falls?" by appealing to an empirical correlation between the fall of the barometer and sensations of wet and cold and such-and-such visual impressions. But we can answer the question "How do you know that there is rain when you have sensations of wet and cold and such-and-such visual impressions?" only by appealing to a linguistic convention: when we have sensations of wet and cold and such-and-such visual impressions, we say, "It's raining."

We have now seen that, for Wittgenstein, criteria do not provide the kind of inductive evidence provided by symptoms. A red patch provides inductive evidence of someone's having a toothache because it has been found by experience to coincide with our criteria for someone's having a toothache. Someone's moaning and holding his cheek, however, provide grounds for his having a toothache because their supportive role is determined by linguistic conventions.

Thus, the notion of a criterion is obscure because it is unclear what type of support a criterion provides for what it is a criterion of. If it need not logically entail what it is a criterion of and does not provide the simple sort of inductive evidence provided by a symptom, then what kind of evidence does it provide; and how does the evidence it provides differ from that provided by symptoms?

Criteria and Symptoms: not the Distinction Used in
Actual Diagnoses

Wittgenstein's using a medical example in the passage in which he introduces the terms "criterion" and "symptom" (Bl.B. pp. 24-25) suggests that his notions of a criterion and a symptom are similar to those used in actual medical diagnoses. Jerry S. Clegg takes this suggestion to heart, arguing that to understand Wittgenstein's notions of a criterion and a symptom, we must look at the notions used in actual diagnoses.³ Clegg's interpretation is tempting, for it is consistent with Wittgenstein's view that criteria need not be sufficient conditions for what they are criteria of, but is it adequate? To answer that question, I will sketch his interpretation and then examine it to see if it fits Wittgenstein's remarks.

Clegg begins his analysis of the role of criteria and symptoms in actual diagnoses by pointing out that although it is

³Jerry S. Clegg, "Symptoms," Analysis, XXXII (January 1972), 90-98.

tempting to think of symptoms as mere signs of a disease, they generally are not. Generally, the symptoms of a disease are constitutive of the disease. An inflamed throat, for example, is not just a sign of angina; it is part of what having angina consists in: angina is "an inflammation caused by a particular bacillus" (Bl.B. p. 25; emphasis mine). Since the symptoms are generally constitutive of the disease, they may function as evidence that someone has the disease. But their ability to do this is limited: most symptoms by themselves are neither sufficient nor necessary conditions for having the disease, and even in clusters, they tend not to be sufficient conditions for someone's having a particular disease: a headache, fever, and cough, for example, are symptomatic of many different diseases.

When symptoms alone do not enable us to confirm a diagnosis, we need something else, viz. a criterion. This may be, but generally is not, considered part of the disease. The essential thing is that we find an empirical correlation between a set of symptoms that pass for a disease and a phenomenon that can combine with them to confirm a diagnosis. Often, the discovered cause of a disease is such a phenomenon. Thus, a doctor may suspect that a patient with an inflamed throat has angina, but since an inflamed throat is symptomatic of many different diseases, he needs something else to confirm his diagnosis: he needs to determine whether a certain bacillus that has been found to be the cause of angina is present. In this case, the presence of the bacillus is the criterion of angina; it alleviates the ambiguity of the symptom of an inflamed throat and allows the diagnosis to be confirmed.

Although it allows diagnoses to be confirmed, a criterion such as the presence of the anginal bacillus need be neither a sufficient nor a necessary condition for having a disease. It need not be a sufficient condition because a carrier of a disease has what is taken to be the criterion, but does not have the disease. The symptoms of a disease generally are not present in a carrier, but some may be present. A person may have an inflamed throat and the anginal bacillus and yet not have angina, but some other disease--which shows that even if symptoms are present, the criterion still does not logically entail the presence of the disease.

A criterion need not be a necessary condition for a disease because

. . . there are often several criteria for the same disease. There are, for example, four types of animal parasite that cause malaria and that function as criteria for having that ailment. Failure to have a specific type of parasite in one's blood does not eliminate the possibility that one has malaria.⁴

Thus, the absence of one among a number of criteria for a disease need not entail the absence of the disease because something else that can also serve as a criterion may be present. Thus, criteria for diseases function as means of knowing and confirming diagnoses by eliminating the ambiguity of symptoms, but to do this they need become neither necessary nor sufficient conditions.

Based on the role of criteria and symptoms in actual diagnoses and consistent with Wittgenstein's view that criteria

⁴Ibid., 92.

need be neither necessary nor sufficient conditions, Clegg's interpretation is tempting. Nonetheless, it must be rejected, for it is inconsistent with many of Wittgenstein's remarks. (1) Clegg's interpretation reverses the roles of criteria and symptoms. Wittgenstein holds that symptoms depend on criteria; Clegg makes criteria depend on symptoms. (2) Clegg holds that symptoms of X are conceptually connected to "X" and used in teaching the term "X." Wittgenstein holds these things to be true not of symptoms, but of criteria. (3) Furthermore, Wittgenstein is primarily concerned with criteria for mental states; and in discussing such criteria, he rejects the view that they function like criteria for diseases.

(1) Clegg's interpretation is inadequate because it reverses the roles of criteria and symptoms.⁵ Clegg makes criteria depend on symptoms. On his analysis, symptoms can function alone as means of knowing what disease someone has, but criteria cannot; for a criterion is merely a phenomenon that has been found to coincide with a set of symptoms and to rid them of their "ambiguity." To have a disease, a person need not have a criterion; for some diseases have no criterion, but only symptoms: "a headache, fever, and sore eyes, for example, are parts of what it is to have a cold, and in their case the ailment just is a set of symptoms."⁶

In contrast to Clegg, Wittgenstein makes symptoms depend

⁵Cf. William H. Hyde, Wittgenstein and Criteria (Ph.D. dissertation, University of California, Santa Barbara, 1975), p. 60.

⁶Clegg, "Symptoms," 90.

on criteria: criteria can function alone as means of knowing that for which they are criteria, but a symptom is merely a phenomenon that has been found to coincide with one or more criteria. Whatever has symptoms must have criteria, but something might have criteria and no symptoms (Bl.B. pp. 24-25 & P.I. #354-355).

(2) Clegg's interpretation reverses the roles of criteria and symptoms not only by making criteria depend on symptoms, but also by connecting a thing's symptoms, rather than its criteria, with the concept of the thing. Clegg says that symptoms are usually "constitutive" of the ailments for which they are symptoms. Having an inflamed throat, for example, is part of what it is to have angina. Criteria, in contrast, are generally not "constitutive" of the ailments for which they are criteria. Often, the cause of a disease serves as its criterion. But, since the cause is not a part of the effect, such a criterion is not a part of the disease. The anginal bacillus, for example, is the cause of angina and serves as its criterion, but it is not part of what constitutes having angina.⁷

But what is meant by all his talk of the symptoms or criteria for something being part of, or constitutive of, the thing? An inflamed throat is not part of angina the way walls are part of a building. According to Clegg, an inflamed throat is constitutive of angina because what is at issue here is not substantial constitution, but conceptual constitution: "Symptoms, in constituting an ailment, are connected in meaning with the

⁷Ibid., 94.

terms denoting the ailment. They are not mere signs of a disorder."⁸ Thus, when Clegg says that an inflamed throat is constitutive of angina, he is saying that "throat inflammation" is connected in meaning with the term "angina," rather than being a mere sign of the disease.

According to Clegg, since symptoms of X are generally constitutive of the concept of X and thus connected in meaning with the term "X," they are used in teaching the term "X." "Throat inflammation," for example, is connected in meaning with the term "angina" and is used in teaching it. But, since criteria of X generally are not conceptually constitutive of X and thus are not connected in meaning with the term "X," they generally are not used in teaching that term. "Anginal bacillus," for example, is not connected in meaning with the term "angina" and is not used in teaching it. Clegg thinks this is shown by the fact that a person may know what angina is without ever having seen an anginal bacillus or learned how to recognize one.⁹

Unlike Clegg, Wittgenstein does not make a thing's symptoms conceptually constitutive of the thing. For Wittgenstein, the symptoms of X are mere signs of it, while its criteria are connected in meaning with the term "X" and used in teaching it.¹⁰

⁸Ibid.

⁹Ibid., 97. Clegg's criticism ignores the possibility that we let experts determine the meanings of our terms for diseases.

¹⁰The view that the criteria of X are connected in meaning with the term "X" will be explained in chapter IV.

We teach a child to say "I have a toothache" instead of moaning and holding its cheek, and we teach it to say that someone else has a toothache when that person moans and holds his cheek. Wittgenstein calls the types of behavior that are pointed out in teaching a child to use the word "toothache" "criteria for toothache." He calls "symptoms of toothache" things that are not used in teaching the word "toothache," but that are later discovered to coincide with the behavior that is so used (Bl.B. p. 24 & N.f.L. p. 295). Wittgenstein does not merely say that criteria are used in teaching language, he implies that if something is not so used, it is not a criterion:

When I say the ABC to myself, what is the criterion of my doing the same as someone else who silently repeats it to himself? It might be found that the same thing took place in my larynx and in his. . . . But then did we learn to use the words: "to say such-and-such to oneself" by someone's pointing to a process in the larynx or the brain? (P.I. #376)

In this passage, Wittgenstein implies that since we did not learn to use the words "to say such-and-such to oneself" by someone's pointing to a process in the larynx, the same thing happening in my larynx and in someone else's is not a criterion for our doing the same thing.

We have now seen that Clegg's interpretation of Wittgenstein's distinction is inadequate because it reverses the roles of criteria and symptoms. But, in introducing his distinction with an example taken from medical diagnoses, Wittgenstein himself seems to indicate that his distinction is the one used in actual diagnoses. We must remember, however, that Wittgenstein is

primarily concerned with the role of criteria in our justifications of claims to know about someone else's mental states. That role is what an adequate interpretation of Wittgenstein's notion of a criterion must explain.

(3) According to Clegg, the notions of a criterion and a symptom used in actual diagnoses apply to justifications of claims to know about others' mental state because Wittgenstein works with this underlying analogy:

. . . human behavior--in terms of which we judge states of mind--can seem like a set of medical symptoms in that it may be ambiguous. A groan may, for example, indicate a toothache, disgust, frustration, or a good many other mental states just as a fever can indicate a variety of diseases. Deciding what a person is thinking or feeling is like deciding what ailment a patient has. Criteria are needed to eliminate the ambiguous possibilities suggested by what may strike us as symptomatic bodily states and behavior.¹¹

This is all Clegg says about the role of criteria in deciding what someone else is thinking or feeling. He gives no examples of criteria for mental states and only one example of a symptom for mental states: he says that a groan may be a symptom of toothache, disgust, or frustration. But if a groan is a symptom of toothache, what is a criterion of toothache? The cause of disease symptoms is often the criterion of the disease, so perhaps the cause of the groan is the criterion of toothache. Perhaps there is something we cannot observe that causes the groan and is the criterion of toothache. That view sounds plausible enough, but Wittgenstein rejects it.

When Wittgenstein discusses criteria and symptoms for

¹¹Clegg, "Symptoms," 93.

"B's being able to go on," he rejects as misleading the notion of criteria and symptoms used in medical diagnoses:

. . . we are inclined to say "to be able to . . ." must mean more than just uttering the formula . . . And this, we go on, shows that saying the formula is only a symptom of B's being able to go on, and that it is not the ability of going on itself. Now what is misleading in this is that we seem to intimate that there is one peculiar activity, process, or state called "being able to go on" which somehow is hidden from our eyes but manifests itself in those occurrents which we call symptoms (as an inflammation of the mucous membranes of the nose produces the symptom of sneezing). This is the way talking of symptoms, in this case, misleads us. (Bl.B. p. 113)

The point here is that it is misleading to think of B's saying the formula as a mere symptom produced by a peculiar mental state called "being able to go on." And yet that is just what using "criterion" and "symptom" as they are used in actual diagnoses leads us to do. It leads us to think that just as an inflammation of the mucous membranes of the nose produces the symptom of sneezing, or just as the anginal bacillus produces the symptom of an inflamed throat, so a certain mental state called "being able to go on" produces the symptom of saying the formula, and a certain mental state called "toothache" produces the symptom of moaning. Wittgenstein warns us that if we think criteria and symptoms for things like being able to go on and having a toothache are like criteria and symptoms for diseases, we will be misled into thinking that being able to go on and toothache are hidden mental states. We must, therefore, conclude that Clegg is mistaken in thinking that Wittgenstein works with an underlying analogy between criteria and symptoms for mental states and criteria and symptoms used in actual medical diagnoses.

We have now seen that if we follow Clegg in taking Wittgenstein's distinction between criteria and symptoms to be the distinction used in actual medical diagnoses, we fail to understand it. But if looking at the role of criteria and symptoms in medical diagnoses cannot help us to understand the special type of support that criteria can provide, then what can? Perhaps taking a broader view. Instead of concentrating only on the notions of a criterion and a symptom, we could also look at such closely related concepts as family resemblance, circumstance, and meaning. In the next three chapters, I do just that. In II, I examine the connection between family resemblances and criteria; in III, I investigate the types of circumstances and their relationships to criteria, and in IV, I examine the connections between criteria and meaning. After conducting these investigations and explaining what type of support criteria provide, I clarify the role of criteria in Wittgenstein's attack on mentalism and explore the implications of that notion for some central problems in epistemology and the philosophy of mind.

CHAPTER II

CRITERIA AND FAMILY RESEMBLANCES

In chapter I, I mentioned how some of Wittgenstein's remarks make criteria the features that form family resemblances. Few interpreters acknowledge the existence of a connection between Wittgensteinian family resemblances and criteria, and none give a detailed characterisation of the connection.¹² In this chapter, I examine the connection between Wittgenstein's notion of a family resemblance and his notion of a criterion, for clarifying that

¹²Mendel F. Cohen ["Wittgenstein's Anti-Essentialism," Australasian Journal of Philosophy, XLVI, 3 (Dec. 1968), 223] equates family resemblances with the criteria "which logically justify the application of a given predicate to different sorts of instances." W. Gregory Lycan ["Noninductive Evidence: Recent Work on Wittgenstein's 'Criteria'," American Philosophical Quarterly, VIII, 2 (April, 1971), 121] remarks that "it seems that the criteriological view is closely connected to Wittgenstein's notion of 'family resemblances', inasmuch as a family-resemblance term might well be construed to be one whose applicability is governed by a loose set of criteria, whose members overlap but do not disjunctively constitute a strict definition of the term." John T. E. Richardson [The Grammar of Justification (An Interpretation of Wittgenstein's Philosophy of Language) (New York: St. Martin's Press, 1976), p. 126] argues that "Wittgenstein's discussion of criteria makes precisely the same points as the theses of family resemblances and broad borderlines." Hjalmar Wennerberg ["The Concept of Family Resemblance in Wittgenstein's later Philosophy," Theoria, XXXIII (1967), 120-121] uses Wittgenstein's remarks on the fluctuation between criteria and symptoms to support his interpretation of Wittgenstein's notion of a family resemblance.

connection will illuminate both of these important notions. First, I briefly examine the connection between the notion of a family resemblance and the notion of a criterion. Then, I clarify in detail the notion of a family resemblance. Finally, I note what insights our understanding of the notion of a family resemblance provides concerning the nature of criteria and the relationship of criteria to what they are criteria of.

The Connection between Family Resemblances
and Criteria

It is in discussing human actions, capacities, and dispositions that Wittgenstein connects his notion of a family resemblance with his notion of a criterion. In discussing the actions of deriving and reading, he presents examples to show us that we use the general terms "deriving" and "reading" not for particular mental acts, but for families of cases and that in different circumstances we apply different criteria for a person's deriving or reading (P.I. #164; emphasis mine). In discussing human capacities in the Brown Book, he remarks that "a vast net of family likenesses connects the cases in which the expression of possibility, 'can', 'to be able to', etc., are used. Certain characteristic features, we may say, appear in these cases in different combinations" (Br.B. p. 117; emphasis mine). And in the Investigations he writes that "The criteria which we accept for 'fitting', 'being able to', 'understanding', are much more complicated than might appear at first sight" (P.I. #182; emphasis mine). Finally, in discussing the disposition of belief, he writes both that there is a family of cases of believing what you

say (Br.B. p. 145; emphasis mine) and that "many different criteria distinguish, under different circumstances, cases of believing what you say from those of not believing what you say" (Br.B. p. 144; emphasis mine). These passages indicate that for Wittgenstein a family-resemblance term is one for which we apply different criteria in different circumstances rather than one criterion in all circumstances. We can learn more about this connection between family resemblances and criteria by examining the discussions in which these passages occur.

In his discussions of the concepts of reading and deriving (P.I. #156-171 & Br.B. pp. 119-125), Wittgenstein presents examples to show that the mentalist's view that we use words like "deriving" and "reading" to refer to particular mental acts is incorrect. The mentalist is a kind of essentialist and believes that all examples can do is show us the essence of deriving (or reading) through a veil of inessential features that must be stripped away if we want to see the essence of deriving (or reading). Wittgenstein, however, insists that stripping away the features of the particular case to find the true essence of deriving is like stripping the leaves from an artichoke in order to find the real plant. Just as what is essential to the artichoke is not something hidden beneath its leaves, so what is essential to deriving is not ~~something hidden beneath the features of the particular cases.~~ Rather, each particular case is a member of the family of cases of deriving. "And in the same way we also use the word 'to read' for a family of cases. And in different circumstances we apply different

criteria for a person's reading" (P.I. #164, cf. Br.B. p. 125). Thus, Wittgenstein maintains that the explanation of the use of the words "deriving" and "reading" consists not in describing some hidden mental activity, but "in describing a selection of examples exhibiting characteristic features, some examples showing these features in exaggeration, others showing transitions, certain series of examples showing the trailing off of such features" (Br.B. p. 125).

Wittgenstein emphasizes and clarifies his view that "deriving" and "reading" are family-resemblance terms by comparing his description of examples of deriving and reading to what someone might do if he wanted to give us an idea of the facial characteristics of a certain family: he might show us a set of family portraits and draw our attention to certain characteristic features. His main task would be to arrange the portraits so that we could see how certain influences gradually changed the features, in what characteristic ways the family members aged, and which features appeared more strongly as they did so (Br.B. p. 125). Just as the person's goal in exhibiting and arranging the portraits is to give us an idea of the characteristic features of a certain family, so Wittgenstein's goal in presenting and arranging examples of deriving (or reading) is to give us an idea of the characteristic features of the family of cases of deriving (or reading). And these characteristic features seem to be identical to the different criteria that we apply in different circumstances for a person's deriving (or reading).

Additional evidence that criteria are identical with characteristic features can be found in Wittgenstein's discussion

of the concept of belief (Br.B. pp. 144-146). There, Wittgenstein tells us that we regard certain facial expressions, gestures, and tones of voice as characteristic of the expression of belief even though they are not always present when someone believes what he says. We regard the 'tone of conviction', for example, as characteristic of the expression of belief even though it is clear that the tone of conviction is not always present when someone believes what he says. The mentalist thinks this shows that there must be something else behind the tone of voice, facial expression, etc., that is the real belief. But Wittgenstein insists that it does not show this at all; it shows that "many different criteria distinguish, under different circumstances, cases of [your] believing what you say from those of [your] not believing what you say" (Br.B. p. 144). Sometimes the criteria that distinguish the two are your facial expression, tone of voice, gestures, etc. Sometimes the criteria that distinguish them are not things that happen while you speak, but a variety of actions and experiences of different kinds that happen before and after you speak. And there may be cases where the criterion that distinguishes them is the presence of a sensation other than those bound up with facial expressions, gestures, tone of voice, etc (Br.B. pp. 144-145).

Wittgenstein thinks that there is a 'family of cases' of someone's believing what he says that is analogous to the 'family of friendly facial expressions'. When we are first asked "What feature is it that characterizes a friendly face?", we may think that there are certain 'friendly traits' each of which makes a face look friendly to a certain degree and which when present in

large number constitute the friendly facial expression. Our talking about "friendly eyes," "a friendly mouth," etc., seems to support this idea. But the same eyes that make a face look friendly do not look friendly, or even look unfriendly, when combined with certain wrinkles of the forehead, lines around the mouth, etc. Then why do we say that these eyes make the face look friendly? Because in the family of friendly faces there is a main branch characterized by this kind of eyes, although these same eyes are found in the family of unfriendly faces where they do not mitigate the unfriendliness of the expression. And because when we notice the friendly expression of a face, our attention is drawn to a particular feature, such as the 'friendly eyes', and does not rest on other features, although they too are responsible for the friendly expression (Br.B. p. 145).

When we draw out the implications of Wittgenstein's analogy between the family of cases of someone's believing what he says and the family of friendly facial expressions, we see that Wittgenstein holds that although at first we may think that there are certain traits or features each of which contributes to belief and which when present in large number constitute it, and although our talking about the "tone of conviction" seems to support this idea, it is not so; for the same feature that characterizes a case of someone's believing what he says may not contribute to belief, or may even contribute to disbelief, in different surrounding circumstances. Such features as the tone of conviction characterize cases of someone's believing what he says not because they always contribute to belief, but because in the family of cases of

someone's believing what he says there is a main branch characterized by the tone of conviction, although the same tone of voice is found in cases of someone's disbelieving what he says where it does not mitigate the disbelief. And because when we notice that someone believes what he says, our attention is drawn to a particular feature, such as the tone of voice, and does not rest on other features, although they too are responsible for this being a case of someone's believing what he says (Cp. Br.B. pp. 145-146).

We have now seen that Wittgenstein considers certain facial expressions, gestures, and tones of voice, and certain actions and experiences that happen before and after someone speaks to be characteristic features of someone's believing what he says even though they do not occur in all cases of someone's believing what he says and do occur in cases of someone's disbelieving what he says. These features characterize the main branches of the family of cases of someone's believing what he says and serve as the different criteria that distinguish, under different circumstances, cases of someone's believing what he says from those of his not believing what he says.

Thus, family resemblances and criteria are connected in that for family-resemblance concepts, such as someone's reading or believing what he says, the many different characteristic features that form the resemblances among the family of particular cases are identical with the different criteria that we apply in different circumstances. The clarification of this connection illuminates both the notion of a family resemblance and the notion of a criterion.

Family Resemblances

In the Tractatus, Wittgenstein sought to elucidate the essence or general form of all propositions and all language. But, when he abandoned the a priori method of the Tractatus and began to look at the actual phenomena of language, he found that "these phenomena have no one thing in common which makes us use the same word for all, but are related to one another in many different ways" (P.I. #65). In the Tractatus, he had maintained that words are names or simple signs which refer to objects and that the meaning of a word is the object that it names. But, when he began to look at how words are actually used, he found that their use was much more complicated than he had supposed. He had assumed that a general term must name an element (or combination of elements) that is present in all the cases to which it applies and absent from all the cases to which it does not apply, but he found that the use of many such terms is based not on the presence of a common element, but on the presence of family resemblances.

When Wittgenstein introduced the notion of a family resemblance in the Blue Book and in the Philosophical Investigations, he used "game" as an example of a general term whose use is based not on a common element, but on family resemblances.

We are inclined to think that there must be something in common to all games, say, and that this common property is the justification for applying the general term "game" to the various games; whereas games form a family the members of which have family likenesses. Some of them have the same nose, others the same eyebrows and others again the same way of walking; and these likenesses overlap. (Bl.B. p. 17)

Consider for example the proceedings that we call "games". I mean board-games, card-games, ball-games,

Olympic games, and so on. What is common to them all?-- Don't say: "There must be something common, or they would not be called 'games'"--but look and see whether there is anything common to all.--For if you look at them you will not see something that is common to all, but similarities, relationships, and a whole series of them at that. To repeat: don't think, but look!--Look for example at board-games; with their multifarious relationships. Now pass to card-games; here you find many correspondences with the first group, but many common features drop out, and others appear. When we pass next to ball-games, much that is common is retained, but much is lost.--Are they all 'amusing'? Compare chess with noughts and crosses. Or is there always winning and losing, or competition between players? Think of patience. In ball games there is winning and losing; but when a child throws his ball at the wall and catches it again, this feature has disappeared. Look at the parts played by skill and luck; and at the difference between skill in chess and skill in tennis. Think now of games like ring-a-ring-a-roses; here is the element of amusement, but how many other characteristic features have disappeared! And we can go through the many, many other groups of games in the same way; can see how similarities crop up and disappear.

And the result of this examination is: we see a complicated network of similarities overlapping and criss-crossing: sometimes overall similarities, sometimes similarities of detail.

I can think of no better expression to characterize these similarities than "family resemblances"; for the various resemblances between members of a family: build, features, colour of eyes, gait, temperament, etc. etc. overlap and criss-cross in the same way.--And I shall say: 'games' form a family. (P.I. #66-67)

In these passages, Wittgenstein attacks what he considers to be a primitive, oversimplified idea of the way general terms function, viz., the idea that the meaning of a general term is some element (or combination of elements) common to everything to which it applies (Bl.B. pp. 17-19). Following Richman, Griffin, et al., I have called this view "essentialism" and characterized it as the view that the referents of a general term must have something in

common.¹³ I underline the word "must" to emphasize that Wittgenstein is attacking not the view that the referents of a general term have something in common, but the view that they must have something in common. Wittgenstein thinks that essentialists (including the early Wittgenstein) have not examined the use of general terms and found that they refer to common elements, but have merely assumed that general terms must refer to such elements. For if they had looked at how general terms such as "game" actually function, they would have found not common elements, but family resemblances.

After considering a few features that might serve as the element common to all games, Wittgenstein concludes that there is nothing common to all games (P.I. #66). But how can he conclude this with such confidence? Couldn't there be a common element that he has overlooked? Several of his critics contend that they have found such an element. Khatchadourian argues that all games "have a common capacity to produce pleasure...in the player or players and/or the spectators...under standard conditions or in normal contexts."¹⁴ Mandelbaum suggests that all games have in common the purpose for which they were invented, "e.g., the potentiality of a game to be of absorbing non-practical interest to either participants or spectators."¹⁵ And Manser argues that all games

¹³See c.I. p. 2. Cf. Richman, "Something Common," 822; Griffin, "Wittgenstein, Universals, and Family Resemblances," 635.

¹⁴Haig Khatchadourian, "Common Names and 'Family Resemblances'," in Pitcher, Collection, pp. 210-211.

¹⁵Maurice Mandelbaum, "Family Resemblances and Generalization Concerning the Arts," American Philosophical Quarterly, II 3 (July 1965), 221.

are so called "because they all have a similar role in human activity," viz. "the area of a game is 'marked off' either literally or conceptually from the normal area of human life, that of genuine 'action' to which moral predicates apply."¹⁶ But these critics fail to realize that Wittgenstein's contention is not simply that all the things that we call "games" have nothing in common. If it were, it would certainly be false; for all games have in common that they are activities, that they have at least one participant, and that they take place within a certain specifiable region of space at a certain specifiable time.¹⁷ Indeed, Wittgenstein himself indicates that all games are proceedings (P.I. #66). His contention is not that games have nothing in common, but that they have nothing in common "which makes us use the same word for all" (P.I. #65).

Essentialists, after all, assume not merely that there is some element common to all the referents of a general term, but that the use of a general term is such that there must be a common element. And according to Wittgenstein, they make this assumption for two reasons. First, they think the existence of a common element is necessary to explain why a term applies to so many different things. They think that all games, for example, must have something in common or they would not all be called

¹⁶Anthony R. Manser, "Games and Family Resemblances," Philosophy, XLII (1967), 217-218.

¹⁷Cf. Keith Campbell, "Family Resemblance Predicates," American Philosophical Quarterly, II, 3 (July 1965), 241; Griffin, "Wittgenstein, Universals, and Family Resemblances," 637.

"games" (P.I. #66). Second, they think the existence of a common element is necessary to explain why a term applies to a particular thing. They think we must be aware of a common element whenever we correctly apply a general term to something and that the awareness of this common element justifies our applying the term. Thus, whenever we correctly call something a game, we must first have identified it by noting the presence of the element common to all games (Br.B. pp. 130, 136).

Wittgenstein thinks that if there were an element that performed these important functions, we would surely either know what it was or be able to discover it quite easily. That is why he instructs us to look and see whether there is anything common to all the things that we call "games" (P.I. #66). Richman and Manser contend that Wittgenstein's instruction is unclear because Wittgenstein has not told us "what we are to look for"; he has not specified what is to count as "something common."¹⁸ Wittgenstein does leave himself open to this criticism, for while searching for an element common to all games, he says nothing about the functions that such an element is supposed to perform. Nonetheless, if we look at the passages immediately before and after his search for a common element, we will see that this element is supposed to explain why we apply the same term to various things. And if we look at related passages in the Blue and Brown Books (Bl.B. p. 17 & Br.B. pp. 130, 136), we will see that this element is also supposed to explain why we apply a given term to a particular thing.

¹⁸Richman, "Something Common," 823-824; Manser, "Games and Family Resemblances," 212-213.

In attacking essentialism, Wittgenstein considers the functions that the common element is supposed to perform and argues that there need not be, and generally is not, a common element that performs those functions. Most interpreters concentrate on Wittgenstein's attacks on the assumption that there must be an element that explains why we apply a term to so many different things and largely ignore his attacks on the assumption that there must be an element that explains why we apply a term to a particular thing. Perhaps one reason for this is that while many of Wittgenstein's attacks on the former assumption occur in the Investigations, most of his attacks on the latter occur in the Blue and Brown Books. It seems clear to me that no adequate interpretation of Wittgenstein's doctrine of family resemblances will be forthcoming until his attacks on both assumptions have been carefully examined.

According to Wittgenstein, essentialists assume that the referents of a general term must have some element in common partly because they think the existence of such an element is necessary to explain why a general term such as "game" applies to so many different kinds of things. In section sixty-six of the Investigations, Wittgenstein considers various elements that might explain why all the different kinds of games are called "games" and then rejects each one because he finds a game, or games, which lacks that element. He rejects amusement because he does not consider chess to be amusing.¹⁹ He rejects competition between players

¹⁹One could argue that Wittgenstein is saying not that chess is unamusing, but that amusement in chess is different from amusement in noughts and crosses. Although I find the latter interpretation a more plausible account of the facts, I accept the former because it seems to be a more accurate rendering of the passage in question.

because in patience there is no such element. He rejects winning and losing because "when a child throws his ball at the wall and catches it again, this feature has disappeared." And he rejects skill and luck because neither is present in children's games like ring-a-ring-a-roses. Wittgenstein's strategy in this section is to undermine the strong essentialist's view that all games must have something unique in common by arguing that the various candidates for the unique common element are not even common to all games.²⁰ Put differently, he attacks the strong essentialist's view that there must be an element (or combination of elements) that can function as a necessary and sufficient condition for a general term's application by arguing that the various proposed elements cannot even function as necessary conditions for its application.²¹ Of course, if this were the whole of Wittgenstein's attack, he would have left open the possibility that there is an element common and peculiar to all games, which can function as a necessary and sufficient condition for something's being a game, that he has overlooked. This is not the whole of his attack,

²⁰"Strong essentialism" is the view that the referents of a general term must have in common some element (or combination of elements) that is peculiar to them and that can function as a necessary and sufficient condition for the term's application. It is contrasted with the view that the referents of a general term must have in common some element (or combination of elements) that need not be peculiar to them, but that can function as a necessary condition for the term's application.

²¹Cp. J.E. Llewelyn, "Family Resemblance," Philosophical Quarterly, XVIII (1968), 344; Griffin, "Wittgenstein, Universals, and Family Resemblances," 636; Wennerberg, "The Concept of Family Resemblance," 107-110; Cohen, "Wittgenstein's Anti-Essentialism," 212.

however, and I shall examine its other aspects after discussing the problems with this one.

Until now, I have said nothing about either the strong essentialist's view of definition or Wittgenstein's attack on it. One of the corollaries of strong essentialism is that a general term can be strictly defined by appealing to the element (or combination of elements) that is common and unique to its referents and that serves as a necessary and sufficient condition for its application. Thus, we can define "human being" as "rational animal" because the combination of rationality and animality is common and peculiar to human beings and serves as a necessary and sufficient condition for something's being human. Wittgenstein believes that by attacking strong essentialism he is undermining the view that every general term can be strictly defined in this way. But, several of his critics point out that even if there is no common and unique element that serves as a necessary and sufficient condition for something's being a game, the term "game" might still be strictly defined by forming a disjunction of the characteristic features--amusement, competition between players, winning and losing, and skill and luck--that form the family resemblances among the various games.²² At first glance, this criticism seems warranted. For if Wittgenstein's contention that "game," e.g., is a family-resemblance term is merely the contention

²²Richman, "Something Common," 825-826; Griffin, "Wittgenstein, Universals, and Family Resemblances," 648-649; Wennerberg, "The Concept of Family Resemblance," 119; Richardson, The Grammar of Justification p. 84; Ardon Lyon, "Family Resemblance, Vagueness, and Change of Meaning," Theoria, XXXIV (1968), 70-72.

that there is no element common and peculiar to all games that can function as a necessary and sufficient condition for the correct application of the term "game," then the characteristic features that form the family resemblances among the various games might serve as sufficient, though not as necessary, conditions for the term's correct application; and it could then be strictly defined by forming their disjunction. Indeed, we might go so far as to argue that the referents of a family-resemblance term do have something in common, viz., the disjunction of characteristic features. Wittgenstein, however, rightly rejects this last proposal as "only playing with words":

But if someone wished to say: "There is something common to all these constructions--namely the disjunction of all their common properties"--I should reply: Now you are only playing with words. One might as well say: "Something runs through the whole thread--namely the continuous overlapping of those fibres. (P.I. #67)

We could, however, withdraw our last proposal and still insist that a family-resemblance term can be strictly defined by forming the disjunction of its characteristic features. I shall soon present an interpretation of Wittgenstein's notion of a family resemblance that eliminates the possibility of disjunctive definition. But before I do, I want to sketch the other problems with which such an interpretation must deal.

We have seen that, according to Wittgenstein, the essentialist posits the existence of a common element partly to answer the question "Why do we call all these different things by the same name?" And if we look at the passages immediately before and after Wittgenstein's search for the common element, we see that

Wittgenstein introduces family resemblances as an alternative answer to the same question. He introduces the game analogy to make it plausible that we call the various parts of language "language" because they are related to one another in many different ways. And in searching for the element common to all games, he wants us to see that the various games are called "games" because of family resemblances between them. Finally, when he compares games to numbers to clarify his assertion that games form a family, he begins with the question "Why do we call something a 'number'?" (P.I. #67)

When the existence of family resemblances is taken to be an alternative answer to the question "Why do we call all these different things by the same name?" a number of problems arise, including what Richman calls the Problem of Wide-Open Texture:

...the notion of family resemblances may account for our extending the application of a given general term; but it does not seem to place any limit on this process. If it is to serve as an alternative to the essentialist ("something common") view of (some or all) general terms, it must account for our limiting their application on pain of failing to account for their usefulness.²³

Richman acknowledges that proponents of the family-resemblance view do not intend to imply that a general term's application is unlimited, but insists that if they are to avoid this absurd implication, they must specify what sorts of similarities determine the applicability of a general term. Or as Simon puts it, they must specify when a resemblance is a family resemblance.²⁴ Pompa also discusses this

²³Richman, "Something Common," 329.

²⁴Michael A. Simon, "When is a Resemblance a Family Resemblance?," Mind, LXXVIII (1969), 409.

problem, arguing that since any two things either resemble each other in some way or can be related to one another by a series of intermediate cases, Wittgenstein's notion of a family resemblance is useless unless someone can give us a criterion for deciding which resemblances are family resemblances. We certainly would not want to say that all resemblances are family resemblances, for then street fighting, which resembles boxing at least as much as boxing resembles chess, would have to be classified as a game. Hence, the need for a criterion that determines which resemblances are family resemblances.²⁵

Closely tied to the problem of wide-open texture is what I will call the Problem of Inappropriate Analogy. Several interpreters argue that it is inappropriate to compare the similarities shared by the referents of a general term, such as "game," to the resemblances shared by the members of a family because while Wittgenstein appeals to family resemblances to answer the question "Why do we call all these different things by the same name?", the analogous question "Why do we call all these different people members of the same family?" is answered by appealing not to family resemblances, but to ancestry. As Pompa explains, the analogy breaks down because "the concept of a family is independent of, and logically prior to, that of the resemblances between its members," whereas the concept of a game is supposed to depend on, and be logically posterior to, that of the similarities between

²⁵L. Pompa, "Family Resemblance," Philosophical Quarterly, XVII (1967), 65-66; also cf. Griffin, "Wittgenstein, Universals, and Family Resemblances," 644, and Wennerberg, "The Concept of Family Resemblance," 115-117.

its referents. The concept of a family is independent of that of family resemblances, for a person's family membership is determined by his ancestry, not by whether he resembles other members of the family.²⁶ As Simon points out, it is conceivable that a person have no obvious characteristic features in common with other members of his own family.²⁷

Yet, Wittgenstein apparently holds that the concept of a game depends on that of the similarities between its referents, for he believes that we cannot justify our claim that something is a game without establishing that it resembles other games. Indeed, for Wittgenstein, it is inconceivable that one game have no characteristic features in common with others. Pompa asserts that the concept of a family is logically prior to that of family resemblances because while we can establish that people belong to the same family without establishing that there are family resemblances between them, we cannot establish the existence of family resemblances without establishing family membership. Yet, Wittgenstein apparently maintains that the concept of a game is logically posterior to that of the similarities between its referents, for he uses those similarities to explain how we extend our concept of a game.

It should now be clear that if we take the existence of family resemblances to be an alternative answer to the question "Why do we call these different things by the same name?", we will be faced with the problems of wide-open texture and inappropriate

²⁶Pompa, "Family Resemblance," 65.

²⁷Simon, "When is a Resemblance a Family Resemblance?" 409.

analogy. I do take the existence of family resemblances to be an alternative answer to this question, but I think that an adequate interpretation of the doctrine of family resemblances can solve these problems. Such an interpretation must take into account not only Wittgenstein's attack on the assumption that there must be a common element to explain why we apply the same general term to so many different kinds of things, but also his attack on the assumption that there must be a common element to explain why we apply a general term to a particular thing. Having examined Wittgenstein's attack on the first assumption, I now turn to his attack on the second.

Wittgenstein discusses the second assumption in the Brown Book, where he tells us that the essentialist thinks that whenever we correctly apply a general term to something, a certain intermediary step must take place, viz., noticing the presence of a common element. We might expect Wittgenstein to agree that there must be an intermediary step and then to argue that it consists in noticing not the presence of a common element, but the presence of some of the characteristic features that form family resemblance. Yet, he does not do this, but argues that there need be no intermediary step; for we can immediately apply a general term to something. The essentialist assumes that noticing the presence of a common element is a separate act that must precede the act of applying the general term. But Wittgenstein argues that there need be no separate act, for what we call "noticing the presence of the common element" may consist partially or wholly in being prompted to apply the general term. He also insists that although the grammar of

certain general terms seems to suggest the necessity of an intermediary step, there need be no such step; for such terms are used in cases where there is none (Br.B. p. 130). Accordingly, an essentialist might think that there must be an element such as amusement that is common to all games, for we cannot correctly call something a game until we have taken the intermediary step of noticing that it is amusing. But Wittgenstein would argue that we often correctly call something a game without having taken any such step. According to him, such steps are possible, but not necessary. I may notice that something is amusing before I call it a game, but I need not do so. The correct use of the word does not require such intermediary steps, and sometimes we do not take them. Moreover, when we do take them, what we notice is not the presence of a common element, but the presence of some of the various characteristic features that form family resemblances.

Having examined Wittgenstein's attacks on the essentialist's assumptions, I can now address the problems with the notion of a family resemblance. Earlier we saw that if the different characteristic features that form the family resemblances among a general term's referents were sufficient conditions for its application, it could be strictly defined by forming their disjunction. But since characteristic features are identical with criteria, which need not be and generally are not sufficient conditions for what they are criteria of; characteristic features need not be and generally are not sufficient conditions for a term's application.

If we reexamine Wittgenstein's discussion of the concept of belief, we find that the features that characterize the various

cases of someone's believing what he says are not sufficient conditions for the ascription of belief. For Wittgenstein maintains that those features do not always contribute to belief and sometimes even contribute to disbelief (Br.B. pp. 145-146). Clearly, the characteristic features of belief are insufficient for the term's application, and the same seems to be true of the features that characterize the various games. Being amusing is a characteristic feature of games, but it is not a sufficient condition for something's being a game because many amusing things are not games. And the same is true of competition, winning and losing, and skill and luck; they are not sufficient conditions for being a game because many things that have these characteristics are not games. Thus, we cannot strictly define the term "game" by saying that something is a game if and only if it involves either amusement or competition between players or winning and losing or skill and luck. And the same is true of all family-resemblance terms: they cannot be strictly defined by forming the disjunction of the characteristic features that serve as our criteria for their application because those features are not sufficient conditions for their application. Lycan is thus correct in suggesting that a family-resemblance term is a term whose applicability is governed by criteria that "do not disjunctively constitute a strict definition of the term."²⁸

Having eliminated the possibility of disjunctive definition, I turn to the problems of wide-open texture and inappropriate

²⁸Lycan, "Noninductive Evidence," 121.

analogy. We saw earlier that interpreters contend that we can solve the problem of wide-open texture by determining which resemblances are family resemblances. And since family resemblances are formed by characteristic features, we could also solve the problem by specifying which features are characteristic. The features that Wittgenstein considers to be candidates for the element common to all games are all characteristic features of games. They stick out as somehow being important to something's being a game. We appeal to them to explain why two very different things are both called 'games' and emphasize them when using "game" metaphorically. We also appeal to them to settle disagreements about whether something is a game. Characteristic features explain why we call such different things as solitaire, tennis, and chess 'games' by helping to show the connections between them.

Wittgenstein talks about characteristic features in discussing the concept of belief. When asked why we say that a certain type of eyes makes a face look friendly, he answers that we say this because in the family of friendly faces there is a "main branch" characterized by that type of eyes and because when we notice the friendly expression of a face, our attention is drawn to that particular feature and not to others, although they too are responsible for the friendly expression (Br.B. p. 145). Thus, characteristic features mark the main branches of a family-resemblance concept and often capture our attention when we notice that particular things fall under such concepts.

None of this seems very helpful, however, for we will not solve the problem of wide-open texture until we explain how

characteristic features determine whether a term applies to particular things. At first, we thought that they provided sufficient conditions for the term's application, so that two or more things could be subsumed under the same family-resemblance term if and only if each had at least one of the features characteristic of the term's referents. But, we now know this will not do because individual characteristic features are not sufficient conditions for the term's application. Well, then, perhaps the possession of two or three or some larger minimum number of characteristic features is sufficient. Pompa and Manser propose this interpretation when they suggest that in introducing the notion of a family resemblance Wittgenstein claims that the possession of a certain minimum number of characteristics out of a specified set is a sufficient condition for the classification of something under a given general concept.²⁹ Simon attacks this interpretation, arguing that the existence of family resemblances between different things can explain why we apply a general term to them only when combined with the notion of a "paradigm case," i.e., a case that includes all the features characteristic of a given general concept. According to Simon, a general term like "game" applies to two or more different things if and only if each possesses some of the characteristics possessed by the paradigm case of a game. Thus, although there is no feature, or set of

²⁹Pompa, "Family Resemblance," 66-67; Manser, "Games and Family Resemblances," 211; David Coder, "Family Resemblances and Paradigm Cases," Dialogue, VI (1967) 362.

features, that a thing must have to be a game, there is a set of features that defines a paradigm case of a game.³⁰

I find Simon's interpretation unsatisfactory because there is no textual evidence for it and because it rules out something that Wittgenstein's doctrine of family resemblances allows, viz. mutually exclusive characteristic features. On Simon's interpretation, none of the features characteristic of a general concept like game can be mutually exclusive because every such concept must have a paradigm case that includes all its characteristic features.

Simon's interpretation seems acceptable at first, for none of the characteristic features of games mentioned by Wittgenstein--amusement, competition between players, winning and losing, and skill and luck--are mutually exclusive. Indeed, Wittgenstein even mentions games that have all of these characteristic features: tennis, board-games, card-games, and ball-games. Nonetheless, if we look carefully at the nature of actual family resemblances and at Wittgenstein's applications of the notion of a family resemblance, we will find that his notion allows a general concept to have mutually exclusive characteristic features.

In the Investigations, Wittgenstein remarks that he can think of no better expression to characterize the similarities between the various games than "'family resemblances'; for the various resemblances between members of a family: build, features,

³⁰Simon, "When is a Resemblance a Family Resemblance?," 412-43; Cf. Coder, "Family Resemblances and Paradigm Cases," 363.

colour of eyes, gait, temperament, etc. etc. overlap and criss-cross in the same way" (P.I. #67). Considering the resemblances Wittgenstein mentions here, we see that for some families there can be no paradigm because the various members of the family exhibit more than one characteristic build, type of nose, etc. And the various characteristic builds, noses, etc., are mutually exclusive; for it is inconceivable that one person have two different builds (slight and stocky) or two different noses (Roman and pug).

Wittgenstein's application of the doctrine of family resemblances to the concept of belief provides further evidence that characteristic features may be mutually exclusive. In discussing someone's believing what he says (Br.B. pp. 144-146), Wittgenstein tells us that its characteristic features include certain facial expressions, gestures, and tones of voice which are comparable to the characteristic features of a friendly face. But certainly some of the features characteristic of a friendly face are mutually exclusive. There is, for example, more than one sort of friendly mouth; and since a person cannot have two sorts of mouths at once, the various sorts of friendly mouths are mutually exclusive. Similarly, there might be more than one tone of voice that is characteristic of belief, and since a person cannot have two different tones of voice at once, the various tones of voice that are characteristic of belief would be mutually exclusive.

I think we can now conclude that Wittgenstein's doctrine of family resemblances allows a general term's referents to have mutually exclusive characteristic features and is, therefore,

incompatible with Simon's notion of a paradigm case. We must, therefore, reject Simon's interpretation and return to Pompa and Manser's suggestion that the possession of a certain minimum number of characteristics out of a specified set is sufficient for a general term's application. This interpretation seems promising, for it neither makes individual characteristic features sufficient conditions nor disallows mutually exclusive characteristic features. Yet, I join Richardson in rejecting it because there is no textual evidence for it.³¹ I would only add that there is textual evidence that Wittgenstein rejects it. For in discussing the concept of belief, he writes that the same characteristic features that contribute to belief in one context may not contribute to belief, or may even contribute to disbelief, in different surrounding circumstances. Thus, Wittgenstein holds that characteristic features are not the only things that determine the general term's applicability; rather, they combine with the circumstances in which they occur to determine it. Now it looks as if we can provide a precise formulation of the notion of a family resemblance that solves the problem of wide-open texture by including the circumstances in our formulation. I will determine whether this can be done in chapter III.

I must now turn to the problem of inappropriate analogy. We saw earlier that both Pompa and Simon find it inappropriate to compare the similarities shared by the referents of a general term such as "game" to the resemblances shared by the members of a family

³¹Richardson, The Grammar of Justification, p. 84.

because while Wittgenstein introduces family resemblances at least partly to answer the question "Why do we call all these different things by the same name?", the analogous question "Why do we call all these different people members of the same family?" is answered by appealing not to family resemblances, but to ancestry. In defense of Wittgenstein, I would first point out that he compares the similarities between a general term's referents to a variety of things. In the Brown Book, he compares the similarities between the cases of comparing to the fibers of a thread or rope:

We find that what connects all the cases of comparing is a vast number of overlapping similarities, and as soon as we see this, we feel no longer compelled to say that there must be some one feature common to them all. What ties the ship to the wharf is a rope, and the rope consists of fibres, but it does not get its strength from any fibre which runs through it from one end to the other, but from the fact that there is a vast number of fibres overlapping. (Br.B. p. 87; Cf. P.I. #26, 67)

And, as we saw earlier, he compares the features of particular examples of deriving to the leaves of an artichoke and says that we misguidedly believe that to find the real artichoke we must divest it of its leaves (Br.B. p. 125 & P.I. #164). Moreover, when Wittgenstein compares the similarities between the various games to the resemblances between the members of a family, he is not implying that the two are alike in every respect, but is only emphasizing that they are alike in their complexity: in both "we see a complicated network of similarities overlapping and criss-crossing" (P.I. #66).

Since the analogy of family resemblances is supposed to illustrate the complexity of the similarities between the referents of a general term like "game," its strength or weakness lies in the

degree to which the network of resemblances between the referents of such a term is like that between the various members of a family. Wittgenstein asserts that the two networks of resemblances are alike in that both involve the overlapping and criss-crossing of similarities. But what does Wittgenstein mean when he speaks of "similarities overlapping and criss-crossing" (P.I. #66)? Most interpreters never raise this question, perhaps because they think Wittgenstein's meaning is clear. But Keith Campbell raises it and gives a satisfactory answer to it.³²

Campbell argues that to say that a family-resemblance term's similarities or characteristic features "overlap" is to say that each characteristic feature occurs with at least two different combinations of other characteristic features and to say that they "criss-cross" is to say that no two logically independent characteristic features always occur together. To determine whether Campbell's formulation adequately captures Wittgenstein's meaning, I will attempt to apply it to both the resemblances between family members that Wittgenstein mentions and the resemblances between games that he mentions.

In introducing the notion of a family resemblance in the Blue Book, Wittgenstein mentions three resemblances between family members: "some of them have the same nose, others the same eyebrows, and others again the same way of walking; and these likenesses overlap" (Bl.B. p. 17). To satisfy Campbell's version of the overlapping requirement, each characteristic feature must

³²Campbell, "Family Resemblance Predicates," 238-244.

occur with at least two different combinations of other characteristic features. The characteristic nose, for example, cannot occur only with the characteristic eyebrows and the characteristic walk, but must also occur either with the characteristic eyebrows but without the characteristic walk, or without the characteristic eyebrows but with the characteristic walk, or with neither the characteristic eyebrows nor the characteristic walk. Of course, if we look at various families, we may find some in which a characteristic nose always occurs together with characteristic eyebrows and a characteristic walk; but Campbell's requirement applies not to all the actual members of a family, but to all its possible members.

To satisfy Campbell's criss-crossing requirement, no two logically independent characteristic features can always occur together. The characteristic nose and the characteristic walk, for example, are logically independent and cannot always occur together. Again, if we look at various families, we may find some in which a characteristic nose and a characteristic walk always occur together; but Campbell's requirement applies not to all the actual members of a family, but to all its possible members. Indeed, it seems clear that since Campbell considers all possible family members, the 'family' we have been considering would have to include individuals exhibiting all of the following combinations of characteristics:

| <u>FAMILY MEMBER</u> | <u>CHARACTERISTIC FEATURES</u> | | |
|----------------------|--------------------------------|-----------------|-------------|
| | <u>Nose</u> | <u>Eyebrows</u> | <u>Walk</u> |
| a | X | X | X |
| b | X | X | O |
| c | X | O | X |
| d | X | O | O |
| e | O | X | X |
| f | O | X | O |
| g | O | O | X |
| h | O | O | O |

This table enables us to see that the family in question satisfies Campbell's explanation of Wittgenstein's talk of overlapping and criss-crossing similarities, according to which every characteristic feature occurs with at least two combinations of other characteristic features and no two logically independent characteristic features always occur together.

The family that we have been considering includes no mutually exclusive characteristic features, but a family that did include such features could fit Campbell's explanation. We can see this if we add to our family a second type of characteristic nose, for our family would then have two mutually exclusive characteristic features and would include individuals exhibiting all of the following combinations of characteristics:

| <u>FAMILY MEMBER</u> | <u>CHARACTERISTIC FEATURES</u> | | | |
|----------------------|--------------------------------|--------------|-----------------|-------------|
| | <u>Nose1</u> | <u>Nose2</u> | <u>Eyebrows</u> | <u>Walk</u> |
| a | X | O | X | X |
| b | X | O | X | O |
| c | X | O | O | X |
| d | X | O | O | O |
| e | O | X | X | X |
| f | O | X | X | O |
| g | O | X | O | X |
| h | O | X | O | O |
| i | O | O | X | X |
| j | O | O | X | O |
| k | O | O | O | X |
| l | O | O | O | O |

A quick glance at the preceding table shows that a family that includes mutually exclusive characteristic features, as this one does, can fit Campbell's explanation of Wittgenstein's talk of overlapping and criss-crossing similarities. We can, therefore, conclude that Campbell's explanation is compatible with my criticism of Simon's interpretation of Wittgenstein's doctrine of family resemblances.

Having applied Campbell's interpretation to the resemblances between family members mentioned by Wittgenstein, I shall now apply it to the resemblances between games mentioned by him. When Wittgenstein discusses the various games (P.I. #66), he chooses examples that illustrate the various characteristic features of games and the way in which those features overlap and criss-cross. He explicitly mentions the characteristic features of amusement, winning and losing, competition between players, and skill and luck. The particular games and types of games he mentions are board-games, card-games, ball-games, Olympic games, chess, noughts and crosses, patience, the children's games of throwing a ball against a wall and catching it and ring-a-ring-a-roses, and tennis. The occurrence of the various characteristic features in the particular games that Wittgenstein mentions can be represented by the following table.³³

³³I omit the features of skill and luck for unlike amusement, winning and losing, and competition between players; these two features are not simply present in or absent from various games. They occur in various games in differing degrees that are relative to one another. The more skill a game requires, the less luck it involves and vice versa.

| <u>GAMES</u> | <u>CHARACTERISTIC FEATURES</u> | | |
|---|--------------------------------|-------------------------------|--|
| | <u>Amusement</u> | <u>Winning and Losing</u> | <u>Competition between Players</u> |
| Chess | 0 | X | X |
| Noughts and Crosses | X | X | X |
| Patience | X | X ³⁴ | 0 |
| Throwing a Ball Against a Wall and Catching It | X | 0 | 0 |
| Ring-a-Ring-a-Roses | X | 0 | 0 |
| Tennis | X | X | X |

The games Wittgenstein mentions fit Campbell's interpretation, for each of the three characteristic features occurs with at least two different combinations of other features, and no two of these logically independent features occur together in every game mentioned.

Our success in applying Campbell's explication of Wittgenstein's talk of overlapping and criss-crossing similarities to both the resemblances between family members and the resemblances between games mentioned by Wittgenstein gives us good reason to think that Campbell's explication adequately captures Wittgenstein's view of the nature of the complicated network of overlapping and

³⁴I maintain that Wittgenstein held that patience involves winning and losing. But he is unclear on this point, and one could argue that he held that patience does not involve winning and losing and that winning and losing and competition between players occur together in all of the games he mentions. But if Wittgenstein did hold that there is no winning and losing in patience, his reasoning must have been that winning and losing presuppose competition between players and that since there is no such competition in patience, there can be no winning and losing in it either. On this interpretation, winning and losing are logically dependent on competition between players; and since the criss-crossing requirement does not apply to two logically dependent characteristic features, Campbell's version of the overlapping and criss-crossing requirements would still be satisfied by the games Wittgenstein mentions.

criss-crossing resemblances between both the referents of a general term like "game" and the members of a family.

In applying Campbell's explication to both the resemblances between games and those between family members, we encountered what Simon and Pompa consider to be a crucial difference between those resemblances, viz., that the class of all possible family members includes an individual who has none of the features characteristic of the family, whereas the class of all possible games does not include a game that has none of the features characteristic of games. For while it is conceivable that there is a family member who has no characteristic features in common with other members of his family, it is inconceivable that there is a game that has no characteristic features in common with other games; a game must possess characteristic features to which we can appeal to justify calling it a game. I agree that the class of family members differs from the class of games in that the former includes individuals having none of the features characteristic of the class while the latter excludes them. But unlike Pompa and Simon, I do not consider this to be a crucial difference between the complex networks of resemblances between the members of the two classes. For Wittgenstein's purpose in introducing the doctrine of family resemblances was to call attention to the complex network of resemblances among the referents of a general term like "game," and those resemblances are exactly like the resemblances among the members of a family in that both satisfy Campbell's interpretation of Wittgenstein's view that a family-resemblance concept's characteristic features overlap and criss-cross.

Having examined the notion of a family resemblance and its connection to the notion of a criterion and having dealt with the problems of disjunctive definition, wide-open texture, and inappropriate analogy, I now turn to the central concern of the dissertation, viz. the relationship between criteria and what they are criteria of.

Criteria

Upon examining the connection between the notion of a family resemblance and the notion of a criterion, we found that the many characteristic features that form the family resemblances among a general term's referents are identical to the different criteria that we apply in different circumstances for that term. And upon examining the doctrine of family resemblances, we found that a family-resemblance term has (1) several characteristic features that are (2) neither necessary (3) nor sufficient conditions for, but nevertheless justify its correct application, and (4) which may be mutually exclusive, and (5) must overlap and criss-cross. From these findings, we can draw several conclusions about the nature of criteria and their relationship to what they are criteria of.

(1) When Wittgenstein introduces the term "criterion" in the Blue Book, he talks about the presence of a certain bacillus in someone's blood being "the criterion, or what we may call the defining criterion of angina" (Bl.B. pp. 24-25). By using the definite article and the qualifier "defining" and by remarking that "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'" (Bl.B. p. 25), Wittgenstein indicates that he thinks that there is only one criterion of angina--the presence of the bacillus so-and-so in someone's blood--which provides a necessary and sufficient condition for a person's having angina. Since the angina passage is where Wittgenstein first introduces the term "criterion," it is natural to assume that, like "angina," other terms that have criteria each have one and only one defining criterion, which serves as a necessary and sufficient condition for their correct application. Although we are naturally led to make this assumption, a quick glance at some of the passages we have examined in this chapter will show that it is incorrect. For, as we have seen, Wittgenstein talks about both "different criteria for a person's reading" (P.I. #164), and "many different criteria [that] distinguish, under different circumstances, cases of believing what you say from those of not believing what you say" (Br.B. p. 144). He also generally uses the expressions "criteria of X" and "a criterion of X" rather than the expression "the criterion of X," which we would expect him to use if he held that a general term can have only one criterion. It now seems clear that Wittgenstein thinks a general term may have more than one criterion. We have also learned that Wittgenstein believes that many general terms are family-resemblance terms, i.e., terms whose referents possess not a common and peculiar element that serves as a necessary and sufficient condition for their application, but many different characteristic features that serve as the different criteria for their application. Therefore, a general term that is a family-resemblance term must have more than one criterion.

(2) As we saw earlier, Wittgenstein attacks the strong essentialists' view that there must be an element that is common and peculiar to all of a general term's referents and that serves as a necessary and sufficient condition for its application by arguing that the various candidates for the element essential to all games are not even necessary conditions for something's being a game. Since the various candidates for the essential element are the characteristic features of games and since the characteristic features of games are identical with the criteria for something's being a game, the criteria for something's being a game are not necessary conditions for something's being a game. Thus, Wittgensteinian criteria need not be necessary conditions for what they are criteria of.

(3) As we saw earlier, Wittgenstein's contention that for a general term such as "game" there is no element common and peculiar to its referents that serves as a necessary and sufficient condition for its application seems to allow such a term to be defined by forming the disjunction of its characteristic features. But in examining the connection between family resemblances and criteria, we learned that the possibility of disjunctively defining a family-resemblance term is ruled out because the individual characteristic features that serve as our criteria do not provide sufficient conditions for the term's application. Yet, this leaves open the possibility that the combination of a certain minimum number of criteria would provide a sufficient condition for the term's application. (Indeed, Pompa and Manser suggest

that this is Wittgenstein's view.) But on Wittgenstein's view this possibility is ruled out because the circumstances in which criteria occur also play a role in determining whether the term applies. Indeed, his remarks suggest that things function as criteria only in certain circumstances. The role of circumstances in the criterial relationship will be investigated in the next chapter. Before beginning that investigation, however, I want to list the other conclusions that we may now draw concerning the nature of criteria and their relationship to what they are criteria of.

(4) In searching for a precise formulation of the notion of a family resemblance that would solve the problem of wide-open texture, we considered and rejected both Pompe and Manser's and Simon's interpretations. We had to reject Simon's interpretation because we discovered that Wittgenstein's doctrine of family resemblances allows characteristic features to be mutually exclusive. Since we now know that characteristic features are identical with criteria, we can conclude that a thing's criteria can be mutually exclusive and that we cannot use Simon's notion of a paradigm case in explicating Wittgenstein's view of the criterial relationship.³⁵

(5) Finally, in searching for a solution to the problem of inappropriate analogy, we learned that Wittgenstein thinks that the similarities between the various games are like the resemblances

³⁵For a theory that combines the notion of a paradigm case with the notion of a criterion, see Michael Anthony Slote, "The Theory of Important Criteria," *Journal of Philosophy*, LXIII (1966), 211-224. Slote recognizes that his theory is incompatible with Wittgenstein's notion because his theory makes criteria logically necessary conditions.

between the various members of a certain family in that in both "we see a complicated network of similarities overlapping and criss-crossing" (P.I. #66). Since we now know that the characteristic features that form this complicated network of overlapping and criss-crossing similarities are our criteria, we can conclude that according to Wittgenstein, the criteria for general terms may, and the criteria for family-resemblance terms must, overlap and criss-cross. And according to Campbell's explication, this means that it must be possible for each criterion of a family-resemblance term to occur with at least two different combinations of other criteria for that term and without any one of the other criteria for that term that are logically independent of it.

This concludes our examination of Wittgenstein's notion of a family resemblance and its connection to his notion of a criterion. It has led us to a number of insights concerning the nature of criteria and their relationship to what they are criteria of. We have learned (1) that a general term may, and a family-resemblance term must, have more than one criterion, (2) that criteria need not be necessary conditions for what they are criteria of, (3) that neither one nor a certain minimum number of the criteria for a family-resemblance term provide a sufficient condition for its application, (4) that a general term's criteria may be mutually exclusive, and (5) may overlap and criss-cross. Nonetheless, the notion of a criterion remains obscure, for it is still unclear how criteria are connected to what they are criteria of.

Happily, our investigations have given us some indication of what other notions we might examine to gain additional insights

into the criterial relationship. One such notion is that of the context, surroundings, or circumstances in which criteria are present. In Chapter III, I examine Wittgenstein's remarks on the types of circumstances and their roles in the criterial relationship.

CHAPTER III

CRITERIA AND CIRCUMSTANCES

We find Wittgenstein's view of the relationship between criteria and what they are criteria of obscure partly because we fail to realize that circumstances play a crucial role in that relationship. It is only natural to think that the criterial relationship contains just two important elements; criteria and what they are criteria of. But it actually contains three: criteria, what they are criteria of, and circumstances. And to understand it, we must know how these three elements are connected.

Wittgenstein writes that "many different criteria distinguish, under different circumstances, cases of believing what you say from those of not believing what you say" (Br.B. p. 144) and that "in different circumstances we apply different criteria for a person's reading" (P.I. #164). But he tells us neither the nature of these "different circumstances" nor their role in criterial relations. The only hints he gives us are obscure remarks like this:

When we say "Surely there must be something else behind the mere uttering of the formula [which is a criterion

of being able to go on⁷ as this alone we should not call 'being able to. . .', the word "behind" here is certainly used metaphorically, and 'behind' the utterance of the formula may be the circumstances under which it is uttered. (Br.B. p. 113)

Although most interpreters mention circumstances when discussing criterial relations, some fail to acknowledge the important role circumstances play in such relations. And those interpreters who do acknowledge their role explain it differently.

Albritton asserts that in the Blue Book Wittgenstein's view is that language dictates that under certain circumstances, a criterion of X entails X.³⁶ Canfield calls this "the entailment view," and states it like this: "II. It is a rule of language that: If C, and if the background circumstances are such and such, then S."³⁷ On this view, if S is the state of having a toothache and C is a certain kind of behavior that is a criterion for S, holding your cheek, for example, then provided that the background circumstances are appropriate, the statement that someone is holding his cheek plus a statement of the circumstances in which he is doing so entail the statement that he has a toothache.

Canfield argues that the entailment view appears to fit Wittgenstein's remarks in both the Blue Book and the Investigations only because it is deceptively similar to the following view which does fit them: "I. In certain background circumstances (things

³⁶Rogers Albritton, "On Wittgenstein's Use of the Term 'Criterion'," in Pitcher, Collection, pp. 230-241.

³⁷John Canfield, "Criteria and Rules of Language," Philosophical Review, LXXIII (January 1974), 78; see also his Wittgenstein: Language and World (Amherst: University of Massachusetts Press, 1981), pp. 65-67.

as they generally are when the piece of language in question is used): it is a rule of language that if C, then S."³⁸ First espoused by Albritton in the 1966 postscript to his article, this view resembles the entailment view in many respects. Each includes circumstances; each is a hypothetical statement whose antecedent contains the criterion and whose consequent is the thing for which it is a criterion, and each is a rule of language that allows a thing to have several criteria. The only difference between the two views appears to be that while the entailment view makes background circumstances an explicit part of the antecedent, Canfield's view makes them an implicit part; and that difference seems insignificant. Indeed, Canfield himself says that it would be insignificant if the background circumstances were readily statable by the speakers of the language.

But, since we do not know the background circumstances for our criterial rules, the difference between the two views is the significant distinction between rules of language that include statements of the relevant background circumstances and rules of language that do not include such statements, but operate against an unexamined, and therefore unstatable, background of normally existing circumstances. To clarify this distinction, Canfield gives the following example:

If I say that I shall call the sentence in the right-hand corner "A" I have stated a criterion: the criterion for a sentence's being A (in this context) is that it be the sentence in the right-hand corner. One of the background conditions relevant here is that sentences do not wander

³⁸Canfield, "Criteria and Rules of Language," 78.

about on blackboards, so that what is at one moment in the right-hand corner might appear in the next in the left-hand corner.³⁹

Having given this example, Canfield writes that if we ignore background conditions other than the one mentioned and instantiate both (I.) his view and (II.) the entailment view for this example, we get:

I*. It is the case that sentences do not wander about on blackboards and it is a rule of language that if something is a sentence in the right-hand corner of the board, then it is A.

II*. It is a rule of language that: If sentences do not wander about on blackboards, and if something is a sentence in the right-hand corner of the board, then it is A.⁴⁰

The difference between the rules of language in I* and II* is that II* contains a statement of the background circumstance--sentences do not wander about on blackboards--whereas I* does not, although it does operate in a world in which sentences do not wander about on blackboards. Accordingly, if there were a people who did not possess a language rich enough to state this background circumstance, or who were unaware of its existence, they could use I*, but not II*.

Canfield argues that Wittgenstein holds criterial rules of language to be like I*: they are made against a background of normally existing circumstances, but do not include a statement of those circumstances. Indeed, Canfield insists that Wittgenstein thinks we do not know the background circumstances for our criterial

³⁹Ibid., 79.

⁴⁰Ibid.

rules and could only state them, if we could ever state them at all, after a complete conceptual analysis of criterially governed concepts.⁴¹

Canfield claims that failure to recognize the difference between his view and the entailment view led Kenny, Lycan, Hacker, Chihara and Fodor to adopt the noninductive-evidence view according to which it is a necessary truth that a criterion of X is evidence for X.⁴² In presenting this interpretation, both Kenny and Lycan appeal to the notion of a criterion proposed in Sydney Shoemaker's

Self-Knowledge and Self-Identity:

We may characterize the criteria for the truth of a judgement as those states of affairs that are (whose existence would be) direct and noninductive evidence in favor of the truth of the judgement. . . . If so-and-so's being the case is a criterion for the truth of a judgement. . . , the assertion that it is evidence in favor of the truth of the judgement is necessarily (logically) rather than contingently true.⁴³

Kenny captures the heart of Shoemaker's explanation in this slogan:

"If X is a criterion of Y, then it is a necessary truth that X is evidence for Y."⁴⁴ He then adds that this interpretation allows

⁴¹Ibid., 79-81; and his Wittgenstein: Language and World, pp. 57-58, 65-69.

⁴²Ibid., 77-87, and his Wittgenstein: Language and World, pp. 65-69. Kenny, "Criterion," Encyclopedia of Philosophy, 1967, II, 259-261. Lycan, "Noninductive Evidence." P. M. S. Hacker, Insight and Illusion (Wittgenstein on Philosophy and the Metaphysics of Experience) (New York: Oxford University Press, 1972), pp. 283-309. Charles S. Chihara and J. A. Fodor, "Operationalism and Ordinary Language: A Critique of Wittgenstein," in Pitcher, Collection, pp. 384-419.

⁴³Sydney Shoemaker, Self-Knowledge and Self-Identity (Ithaca: Cornell University Press, 1963), pp. 3-4.

⁴⁴Kenny, "Criterion," 259.

for more than one criterion of the same state of affairs since there is nothing contradictory in several things being, by logical necessity, evidence for a particular state of affairs.

Chihara and Fodor write that for Wittgenstein:

X is a criterion of Y in situations of type S if the very meaning or definition of 'Y' (or, as Wittgenstein might have put it, if the "grammatical" rules for the use of 'Y') justify the claim that one can recognize, see, detect, or determine the applicability of 'Y' on the basis of X in normal situations of type S. Hence, if the above relation obtains between X and Y, and if someone admits that X but denies Y, the burden of proof is upon him to show that something is abnormal in the situation.⁴⁵

Like Canfield's view and the entailment view, various formulations of the noninductive-evidence view acknowledge that circumstances play a role in criterial relations. Chihara and Fodor's formulation refers to the situation in which criteria function, and Lycan's three explanations all mention the situation or case in which criteria obtain. Lycan explains "If X is a criterion of Y, then it is a necessary truth that X is evidence for Y" in the following three ways. First, if someone supposes X-but-not-Y in some situation, then he must show that there is something extraordinary about that situation in order to establish his claim. Second, in an ordinary case in which I know that X obtains and in which there is no reason to think that Y does not, though it is not logically incoherent for me to suppose that Y does not obtain, it is logically incoherent for me to demand further justification that Y obtains. Third, someone who understands the way Y-language works will see that in an ordinary case, asking for further justification is improper.⁴⁶

⁴⁵Chihara and Fodor, "Operationalism," p. 397.

⁴⁶Lycan, "Noninductive Evidence," 110; emphasis mine.

Although Canfield's view, the entailment view, and the noninductive-evidence view all give circumstances a role in the criterial relationship, each characterizes that relationship differently. If we let P stand for a certain psychological state, event, or process and B for a certain kind of behavior that is a criterion for P, then the three views can be stated as follows:

1. the entailment view: It is a rule of language that:
If B, and if the background
circumstances are such and such,
then P.
2. Canfield's view: In certain background circumstances:
it is a rule of language that if B,
then P.
3. noninductive-evidence
view: It is a necessary truth that B is
evidence for P.

Thus, it looks as if we must either choose between these views or reject all three. Indeed, Canfield indicates that these are our alternatives. But he fails to realize that there is another alternative: we can reject the assumption on which these views seem to be based, viz., that Wittgenstein thinks all types of circumstances play the same role in criterial relations. In this chapter, I argue that Wittgenstein thinks there are two types of circumstances--general and particular--that play different roles in criterial relations. I also discuss misunderstandings that result from failing to realize the differences in these roles. Finally, I attempt to formulate a satisfactory interpretation of Wittgenstein's criterial relationship by combining portions of the three interpretations.

General Circumstances

In the Investigations, Wittgenstein writes that he is interested in the correspondence between concepts and very general facts of nature: facts that are seldom noticed because of their great generality (P.I. pp. 56, 230). Often these are facts about various regularities in nature, including the characteristic behavior of human beings. In discussing the concept of a toothache, for example, Wittgenstein emphasizes the fact that people characteristically behave in certain ways which we call expressions of toothache (N.f.L. p. 290). In discussing the concept of "seeing red," he emphasizes both the fact that people characteristically express what they see and the fact that people sometimes conceal what they see (N.f.L. pp. 286-287). And in discussing the concept of personal identity, he emphasizes both the fact that a person's body changes its appearance only gradually and comparatively little and the fact that a person's voice, characteristic habits, etc., only change slowly and within a narrow range (Bl.B. p. 61).

Wittgenstein talks about the role of such general facts of nature in criterial relations in discussing the problem of personal identity:

This leads us to considering the criteria for the identity of a person. Under what circumstances do we say: "This is the same person whom I saw an hour ago"? Our actual use of the phrase "the same person" and of the name of a person is based on the fact that many characteristics which we use as criteria for identity coincide in the vast majority of cases. I am as a rule recognized by the appearance of my body. My body changes its appearance only gradually and comparatively little, and likewise my voice, characteristic habits, etc. only change slowly and

within a narrow range. We are inclined to use personal names in the way we do, only as a consequence of these facts. (Bl.B. p. 61; emphasis mine)

Thus, according to Wittgenstein, our concept of personal identity is based on the fact that the characteristics which serve as our criteria for personal identity are relatively permanent: they change slowly and within a narrow range and so generally coincide.

To help us understand the significance of this fact, Wittgenstein imagines what would happen if it changed. First he imagines that all human bodies look alike and different sets of characteristics change their habitation among these bodies. "Such a set of characteristics might be, say, mildness, together with a high pitched voice, and slow movements, or a choleric temperament, a deep voice, and jerky movements. . ." (Bl.B. p. 61). Then he tells us that in these circumstances, although it would be possible to give the bodies names, we would be as little inclined to do so as we are to give names to the chairs of our dining-room set; we would, however, be inclined to give names to the sets of characteristics. In other words, if all bodies looked alike, we would not be inclined to use bodily appearance as a criterion of personal identity; but if different sets of characteristics changed their habitation among the identical bodies, we would be inclined to use those characteristics as criteria of personal identity.

Next, Wittgenstein imagines that it is usual for human beings to have two characters so that a person's size, shape, and behavior periodically undergo a complete change. Each person has two such states and lapses from one to the other like Dr. Jekyll

and Mr. Hyde. In these circumstances, Wittgenstein writes, we would still be inclined to use bodily appearance, voice, characteristic habits, etc., as criteria for personal identity. But instead of saying there was one person inhabiting each human body, we would be inclined to say there were two and to give each a name.

In discussing these imaginary cases, Wittgenstein is not making hypotheses about what causes us to choose our criteria. He is not saying that if certain general facts of nature were different, we would decide to use different criteria and would, therefore, have different concepts. He discusses such cases because he thinks that if someone believes (as he once did) that certain criteria and thus certain concepts are absolutely the correct ones and that having different ones would mean not realizing something that we realize, then imagining certain very general facts of nature to be different from what we are used to will make the use of different criteria, and thus the formation of different concepts, intelligible to him (P.I. p. 230).

Wittgenstein's view of the role of general facts of nature in criterial relations is obscure because Wittgenstein imagines different general facts of nature to show both the arbitrariness and the nonarbitrariness of criteria (Z. #358). He imagines them to show that our criteria are arbitrary in that they are not the only ones conceivable and in that they are things "we fix."⁴⁷ But he also imagines them to show that our criteria are non-arbitrary in that they cannot be chosen at pleasure, for their

⁴⁷Wittgenstein's view that criteria are things "we fix" will be discussed in Chapter IV.

significant use requires a background of certain general facts.

According to Wittgenstein, criteria and the concepts they govern function significantly only given certain general facts of nature:

. . .we should have no use for these words ["seeing red"] if their application was severed from the criteria of behavior. That is to say: to the language game which we play with these words it is both essential that people who play it behave in the particular way we call expressing (saying, showing) what they see, and also that sometimes they more or less entirely conceal what they see.

Balance. The point of the game depends on what usually happens. . . . (N.f.L. pp. 286-287)

Here Wittgenstein tells us that the language-game with the words "seeing red" depends on two general facts of nature: the fact that people characteristically express what they see and the fact that people sometimes more or less entirely conceal what they see. He then mentions balance and says the point of the language-game depends on what usually happens, which is that people express what they see. This notion of balance is explained in the following passage:

And if things were quite different from what they actually are--if there were for instance no characteristic expression of pain, of fear, of joy; if rule became exception and exception rule; or if both became phenomena of roughly equal frequency--this would make our normal language-games lose their point.--The procedure of putting a lump of cheese on a balance and fixing the price by the turn of the scale would lose its point if it frequently happened for such lumps to suddenly grow or shrink for no obvious reason. (P.I. #142)

This passage makes it clear that by "balance" Wittgenstein means a balance between rule and exception. In the language-game with the words "seeing red," the rule, or what usually happens, is that

people express what they see by exhibiting behavioral criteria for seeing red (by saying or showing that they see something red). The exception, or what occasionally happens, is that people conceal what they see either by failing to exhibit behavioral criteria for seeing red or by exhibiting behavioral criteria for seeing other colors. Wittgenstein's point is that the language-game with the words "seeing red" works only so long as this balance between rule and exception is maintained. If we apply this reasoning to the language-game with the word "toothache," the resulting view is that the language-game with the word "toothache" depends on the fact that people characteristically express the fact that they have toothaches by doing things like moaning, holding their cheeks, and saying, "I have a toothache," and on the fact that people occasionally conceal their toothaches by not doing such things or by saying, "I do not have a toothache." So long as this balance is maintained, the language-game will work; but if people completely stopped doing things like holding their cheeks, moaning, and saying, "I have a toothache," when they had toothaches, or if doing so became the exception rather than the rule, our language-game with the word "toothache" would become pointless.

Thus, according to Wittgenstein, the significance of a language-game in which we use certain kinds of behavior as criteria for a certain psychological state depends on the fact that people characteristically (or usually, or as a rule) exhibit such behavior when they are in that state. If doing so became uncharacteristic (or infrequent, or the exception), then using such behavior as the criterion for the state in question would be pointless.

Wittgenstein clearly thinks the significant use of criteria and the concepts they govern depends upon, or presupposes, the existence of certain general facts of nature. If we imagine those facts to be different, then we can no longer imagine the application of our concepts, for the rules for their application have no analogue in the new circumstances. Wittgenstein explains his view of the role of general circumstances in criterial relations by comparing a criterial rule to a law. A law, he tells us, is designed to apply to human beings. And a jurist can apply this law to any case that ordinarily comes his way. Thus, the law has its use; it makes sense. Nevertheless, its validity presupposes all sorts of things. And if the creature who is to be judged is quite different from ordinary human beings, it will then be impossible to apply the law to him (Z. #350). Explicating the analogy, we find that Wittgenstein thinks a criterial rule for a given concept is designed to function under certain general circumstances. And we can apply that rule so long as the relevant general facts of nature remain the same. Thus, the criterial rule and the concept that it governs have their use; they make sense. Nevertheless, their validity presupposes all sorts of things. And if the general circumstances under which the rule is to be used are quite different from the ordinary ones, it will then be impossible to use it.

We have seen that Wittgenstein takes certain very general facts of nature to be the necessary background for the significant functioning of criterial rules. He does not seem to think that

these facts are stated in the criterial rules, for he writes that they are hardly ever mentioned and mostly do not strike us because of their great generality (P.I. pp. 56, 230). But if general circumstances are the necessary background for, but not stated in, criterial rules, then their role is accurately portrayed by Canfield's view: in certain background circumstances, it is a rule of language that if B, then P. No doubt, this is why Canfield thinks he has found an adequate interpretation of Wittgenstein's view of the criterial relation. What Canfield fails to realize, however, is that Wittgenstein thinks there are two types of circumstances which play different roles in the criterial relation: there are the general circumstances that serve as the necessary background for the operation of criteria, and there are the particular circumstances which play other roles in the criterial relation.

Canfield apparently includes both the relevant general facts of nature and the circumstances of the particular case in his "background circumstances." In writing that our not having determined what the background circumstances are does not bother us because although it is logically possible for them to change, they in fact remain unchanged,⁴⁸ he is discussing general facts of nature. Like Wittgenstein, he imagines cases in which certain general facts of nature have changed. But he also cites "past behavior and the surroundings that would exclude the possibility that Jones is acting in a play"⁴⁹ as background conditions, and

⁴⁸Canfield, "Criteria and Rules of Language," 80-81.

⁴⁹Ibid., 77.

they are clearly particular circumstances. He also quotes Zettel section 116 in which Wittgenstein explicitly refers to "particular circumstances." In writing "in general, in a criterial rule used to teach a language game or used in the practice of one, there will be no statement given of general facts of nature and normally existing circumstances that form the background against which the criterion is used,"⁵⁰ Canfield apparently uses "normally existing circumstances" to refer to normally existing particular circumstances.

Wittgenstein says things that seem to support Canfield's view of the role of particular circumstances in the criterial relation. In discussing the use of the word "cube," he asks us to suppose that when someone hears the word "cube," both a picture of a cube and a method of projection come before his mind; and various methods of projection are explained to him so that he may go on to apply them. Now, Wittgenstein writes:

. . . let us ask ourselves when we should say that the method that I intend comes before his mind.

Now clearly we accept two different kinds of criteria for this: on the one hand the picture (of whatever kind) that at some time or other comes before his mind; on the other, the application which--in the course of time--he makes of what he imagines. . . .

Can there be a collision between picture and application? There can, inasmuch as the picture makes us expect a different use, because people in general apply this picture like this.

I want to say: we have here a normal case, and abnormal cases.

It is only in normal cases that the use of a word

⁵⁰Ibid., 79; emphasis mine.

is clearly prescribed; we know, are in no doubt, what to say in this or that case. The more abnormal the case, the more doubtful it becomes what we are to say. (P.I. #141-142)

According to Wittgenstein, the use of a word or expression is clearly prescribed so that we know what to say only in normal cases; and Wittgenstein seems to mean by "normal cases" "cases in which the criteria for the use of a word or expression coincide." In abnormal cases in which the criteria for a word's use collide, the word's use is not clearly prescribed, and we do not know what to say. It now looks as if Canfield's view may correctly represent the roles of both types of circumstances in the criterial relation, for Wittgenstein himself writes that the use of a word is clearly prescribed only in normal cases, which can be taken to mean that like certain general facts of nature, normal particular circumstances provide the necessary background for the significant functioning of criterial rules.

But there is a problem with Canfield's interpretation of the role of particular circumstances in criterial relations: although it appears to be supported by a passage in which Wittgenstein apparently talks about a collision of criteria, it seems to make such a collision impossible. It asserts that criteria function significantly only in normal particular circumstances, and if "normal particular circumstances" means "circumstances in which criteria coincide," then an actual collision of criteria is impossible. Newton Garver argues that Wittgenstein thought an actual collision of criteria is impossible, so perhaps we can solve this problem with Canfield's interpretation by appealing to

Garver's analysis of Wittgenstein's position on the possibility of criterial conflicts.⁵¹

Criterial Conflicts

Garver argues that although Wittgenstein's notion of a criterion makes a conflict of criteria conceivable, it does not allow an actual conflict among the various criteria of a given concept. To support his view, Garver appeals to the following passage:

. . .the ordinary use of the word "person" is what one might call a composite use suitable under the ordinary circumstances. If I assume, as I do, that these circumstances are changed, the application of the term "person" or "personality" has thereby changed; and if I wish to preserve this term and give it a use analogous to its former use, I am at liberty to choose between many uses, that is, between many different kinds of analogy. One might say in such a case that the term "personality" hasn't got one legitimate heir only. (Bl.B. p. 62)

According to Garver, this passage indicates that if the criteria for a given concept cease to coincide, the concept breaks apart; and the expression for it no longer has any clear use. Consequently, there would be no sense in continuing to call the phenomena that used to function as criteria "criteria" and no sense in speaking of a "conflict of criteria." Thus, Garver concludes that Wittgenstein holds the seemingly paradoxical position that "criteria which in fact coincide might possibly conflict, but that there could not be an actual conflict among the various criteria

⁵¹Newton Garver, "Wittgenstein on Criteria," symposium in Knowledge and Experience, edited by C. D. Rollins (Pittsburgh: University Press, 1962), pp. 69-70.

of a single concept."⁵² He then adds that the apparent paradox disappears when we remember that the application of criteria presupposes the circumstances that normally obtain and that where these circumstances do not obtain, our criteria do not apply and, for all practical purposes, cease to exist.

Garver's analysis of criterial conflicts is inaccurate because Wittgenstein never claims that for every term whose application is governed by criteria, the various phenomena that serve as its criteria invariably coincide. On the contrary, as we saw in chapter II, Wittgenstein argues that many general terms are family-resemblance terms whose criteria do not invariably coincide, but overlap and criss-cross. Nor does Wittgenstein claim that the various phenomena which commonly serve as our criteria for a given term justify the term's application only when they are coinstantiated. For him, such behavioral expressions as a person's moaning, holding his cheek, and saying "I have a toothache" serve as our criteria for someone's having a toothache; and when a person moans and says "I have a toothache" without holding his cheek, his moaning and saying "I have a toothache" can serve as our criteria for his having a toothache. According to Garver, on the other hand, when a person moans and says "I have a toothache" without holding his cheek, his moaning and saying "I have a toothache" cannot serve as our criteria for his having a toothache. If they could, this would be a case of actual criterial conflict; but since they cannot, it is only a case in which some of the

⁵²Ibid.

phenomena that serve as our criteria for toothache in other circumstances are present.

For Wittgenstein, moaning and saying "I have a toothache" can function as our criteria for someone's having a toothache apart from the behavior of holding the cheek. And when they do, we have a case in which criteria fail to coincide, but not a case in which criteria conflict because, for Wittgenstein, cases in which some but not all of the phenomena that normally serve as our criteria for a given concept are present and function as criteria are cases in which criteria fail to coincide, but they are not cases in which criteria conflict. Garver's equation of "a conflict of criteria" with "a case in which some, but not all, of the criteria for a given concept are present" is not Wittgenstein's. Wittgenstein's cases in which criteria conflict are cases in which conflicting criteria--i.e., criteria for various conflicting things--are present. In discussing the many different criteria that a man may have for pointing to his eye, Wittgenstein writes: "we can imagine a person having the kinaesthetic sensation of moving his hand, and the tactual sensation, in his fingers and face, of his fingers moving over his face, whereas his kinaesthetic and visual sensations should have to be described as those of his fingers moving over his knee" (Bl.B. p. 52). This is a case of crieterial conflict because it includes criteria for two conflicting things--"his fingers moving over his face" and "his fingers moving over his knee." In discussing the collision between the criteria for when the intended method of projection

comes before someone's mind, Wittgenstein writes that the two criteria--the picture and the application--can collide in that the picture makes us expect a different application. This is a case of criterial conflict because the picture makes us expect an application different from, and thus in conflict with, the actual application (P.I. #141-142).

For Wittgenstein, a case in which criteria 'coincide' may be either (1) a case in which all the criteria for a given concept are present, (2) a case in which no conflicting criteria are present, or (3) a case in which all the criteria for a given concept are present and no conflicting criteria are present. Garver is apparently unaware of this ambiguity. Citing pages sixty-three and sixty-four of the Blue Book, he asserts that when Wittgenstein says the criteria for 'P' coincide, he means "the various phenomena, each of which is commonly (or sometimes) used as a criterion for 'P' in particular circumstances, are invariably associated (or very nearly so)."⁵³ But in the very passage Garver cites, Wittgenstein contrasts cases in which criteria "coincide" both with cases in which criteria fail to coincide because only some of the criteria for the thing in question are present and with cases in which criteria conflict because criteria for conflicting things are present. Wittgenstein imagines that while his eyes are shut and visual criteria are, therefore, absent, he has the kinaesthetic experience of raising his hand to his eye and the peculiar tactile sensation of touching his eye. This is a case in

⁵³Garver, "Wittgenstein on Criteria," p. 69.

which criteria fail to coincide, and it is contrasted with cases in which both these experiences and visual criteria are present, i.e., with cases in which criteria 'coincide' in the sense that all those for a given concept are present. Someone's having the kinaesthetic experience of raising his hand to his eye and the tactile sensation of touching his nose, on the other hand, is a case in which criteria conflict; and it is contrasted with cases in which someone has the kinaesthetic experience of raising his hand to his eye and the tactile sensation of touching his eye, i.e., with cases in which criteria 'coincide' in the sense that they are all criteria for the same thing. Failing to recognize that Wittgenstein distinguishes different senses in which criteria "coincide" probably led Garver to equate "cases in which criteria fail to coincide" with "cases in which criteria conflict."

Garver's view that Wittgenstein allows no actual cases of criterial conflict, i.e. no actual cases in which criteria fail to coincide, is unacceptable; for Wittgenstein allows both actual cases in which criteria fail to coincide and actual cases in which criteria conflict. Wittgenstein holds that many general terms are family-resemblance terms whose criteria characteristically fail to coincide. And he explicitly states that there can be an actual collision between the different kinds of criteria for the intended method of projection coming before someone's mind (P.I. #141). Furthermore, in discussing the problem of personal identity (which Garver uses to support his interpretation), Wittgenstein writes that the many characteristics that serve as our criteria for

personal identity coincide in the "vast majority" of cases and, thus, implies that in a few actual cases, they fail to coincide (Bl.B. p. 61).⁵⁴ Against Freud, he argues that it would be interesting and important if the various criteria for the right interpretation of a dream generally coincided, but it is queer to claim (as Freud seems to) that they must always coincide (L.&C. p. 46). With slight modification, Wittgenstein's criticism of Freud applies to Garver: it is interesting and important if the various criteria for something generally coincide, but it is queer to claim (as Garver does) that they must always coincide. Indeed, no one who realized that Wittgenstein equates a family-resemblance term's criteria with its characteristic features would make such a claim.

Garver confuses particular circumstances with general ones. In interpreting the passage on personal identity (Bl.B. p. 62), he takes "ordinary circumstances" to mean "the normal circumstances in which criteria coincide" and "assuming that these circumstances are changed" to mean "assuming that the circumstances of the particular case are abnormal in that criteria do not coincide." Inspecting both Wittgenstein's use of "abnormal case" in sections 141 and 142 of the Investigations and his examples of what occurs when the ordinary circumstances under which we use the word "person" are changed (Bl.B. pp. 61-62) will show that Garver's equations are not Wittgenstein's. When Wittgenstein discusses

⁵⁴E.g., after someone has gone on a crash diet, had a sex-change operation, or been badly mutilated in a car wreck.

abnormal cases (P.I. #141-142), he discusses exceptional cases that occur when the relevant general facts of nature remain the same. He maintains that, the relevant general facts of nature being what they are, there can be a collision between the two criteria for when the intended method of projection comes before someone's mind. The picture and the application can conflict because although people generally apply this picture like this (normal cases), they may and sometimes do apply it differently (abnormal cases).

When Wittgenstein discusses what would happen if the ordinary circumstances under which we use the word "person" were changed, however, he discusses not exceptional cases that occur when the relevant general facts of nature remain the same, but imaginary cases which could occur if the relevant general facts of nature were different. He imagines what would happen if all human bodies looked alike and different sets of characteristics changed their habitation among these bodies or if it were usual for human beings to have two characters, like Dr. Jekyll and Mr. Hyde (Bl.B. pp. 61-62).

In equating "abnormal cases in which criteria conflict" with "cases occurring when the ordinary circumstances are changed," Garver assimilates "cases occurring as exceptions when the general facts of nature remain the same" to "cases imagined to occur when the general facts of nature are different" and takes Wittgenstein to be saying that in an abnormal case where the criteria for personal identity do not coincide, the concept

of a person breaks apart, and the term "person" and people's names no longer have any clear use. But Wittgenstein is not saying that; he is saying that if the general facts of nature on which our use of the term "person" and people's names are based were different, the concept of a person would break apart, and the term "person" and people's names would no longer have any clear use. Thus, Wittgenstein thinks our concepts are sturdier and more flexible than Garver would have us believe. Garver would have us believe that Wittgenstein thinks our concepts allow no actual conflicts of criteria. But Wittgenstein maintains that our concepts allow actual conflicts of criteria in exceptional cases. What they do not allow is that those cases become the rule, for then our expressions would lose their point (P.I. #142).

We can now conclude that Garver's analysis of criterial conflicts must be rejected. Nonetheless, we may be able to salvage Canfield's interpretation, for Canfield never states that "normal particular circumstances" are "circumstances in which criteria coincide," and that equation is what would make his interpretation incompatible with Wittgenstein's doctrine of criterial conflicts. I shall now examine Wittgenstein's remarks on particular circumstances and then see whether an explanation of "normal particular circumstances" can be given that will make Canfield's interpretation acceptable.

Particular Circumstances

In talking about the particular circumstances, or the circumstances of the particular case, Wittgenstein is talking about the particular situation or context in which someone does something, including not only the physical and temporal setting in which he does it, but also what happens before and afterwards. Discussing what pointing to a thing's shape rather than its color consists in, he writes that whether we should say that someone pointed to the shape and not the color would depend on "the circumstances--that is, on what happened before and after the pointing" (P.I. #35). He also writes: "We use the words 'meaning', 'believing', 'intending', in such a way that they refer to certain acts, states of mind given certain circumstances" and explains this by discussing the use of the expression "checkmating somebody" (Br.B. p. 147; emphasis mine). If two people were playing a game of chess and one attacked the other's king so that no escape or defense was possible, we would say that the one partner had checkmated the other. But if a child playing with chessmen placed some of them on a chess board and went through the motions of attacking a king, we would not say that the child had checkmated someone (Br.B. p. 147). Attacking a king so that no escape or defense is possible is checkmating somebody only in the particular circumstances of "playing a game of chess," "solving a chess problem," and so on (P.I. #33). Similarly, following the outline of something with your eyes as you point to it is pointing to the thing's shape only in such particular circumstances as playing a game of picking out shapes (P.I. #33-35).

For Wittgenstein, the difference between general circumstances and particular circumstances is the obvious difference between general facts of nature and the particulars of an individual situation, and the difference between particular circumstances and criteria is roughly that between a person's particular situation (setting or circumstances) and his response to it. Although most interpreters explain the difference between particular circumstances and criteria in this way,⁵⁵ this explanation is not completely accurate; for Wittgenstein sometimes includes some of the person's responses as particular circumstances. He writes that whether we should say that someone pointed to the shape and not the color would depend on "the circumstances--that is, on what happened before and after the pointing" (P.I. #35), and that what happened before and after the pointing might include certain of the person's previous and subsequent responses. Moreover, in chapter II, we learned that Wittgenstein equates "criteria" with "characteristic features" and compares criteria for believing what you say to friendly facial features, insisting that we say these eyes make the face look friendly partly because when we notice the friendly expression of a face, our attention is drawn to a particular feature, such as the 'friendly eyes', and does not rest on other features although they, too, are responsible for the friendly expression (Br.B. p. 145). Applying these remarks to criteria for psychological states, we get something like this: we say that this piece of behavior is a criterion for the state in

⁵⁵See, for example, Hyde, "Wittgenstein and Criteria," p. 90.

question because our attention is drawn to it and does not rest on other aspects of the situation--including the person's other responses--although they too are responsible for our ascribing the state in question to that person. Thus, the particular circumstances include not only the particular physical and temporal setting, but also what people, including the person exhibiting the criterial response, say and do before and after the criterial response is exhibited.

Now that we have an idea what Wittgenstein counts as particular circumstances, we can investigate his view of their role in the criterial relationship. As we saw in chapter II, Wittgenstein thinks a craving for generality makes people ignore the circumstances of the particular case and look for something common to all the cases to which we apply a general term (Bl.B. pp. 17-20). As I argued in chapter I, he also thinks that this search for a common element has resulted in mentalism--the misleading view that what stands behind and gives importance to characteristic expressions of toothache, being able to go on, etc., are peculiar mental states, events, or processes. He shows how mentalism develops and why it is misleading when he imagines a game where A writes down a series of numbers while B watches him and tries to find a law for the series (Br.B. pp. 112-114 & P.I. #151-155). If B succeeds, he says, "Now I can go on." According to Wittgenstein, all sorts of things can happen here. For example, while A writes down the numbers, B might try different formulas to see if they fit the series. After A writes "19," B

tries the formula " $a_n = n^2 + n - 1$ " and the next number confirms his guess. Or perhaps B does not try different formulas, but watches A write down the series of numbers with a feeling of tension and with all sorts of vague ideas floating through his head, and then says to himself, "He's squaring and always adding one." Or B may simply look at the series, say "Of course I can go on," and continue it. Or he may say nothing and simply continue the series. In each case, B could continue the series, but in each case something different took place: in one, he tried different formulas until he found one that fit the series; in another, he did not try different formulas, but watched until he thought of the formula that fit; in others, he neither tried different formulas nor thought of the one that fit, but simply watched and then continued the series with or without saying "Of course I can go on" (Br.B. pp. 112-113 & P.I. #151).

Faced with these different cases, we are tempted to think (as the mentalist does) that although there does not appear to be any element common to them all, there must be one or we would not call them all cases of B's being able to go on. This temptation, Wittgenstein says, misleads us.

. . .we are inclined to say "to be able to. . ." must mean more than just uttering the formula--and in fact more than any one of the occurrences we have described. And this, we go on, shows that saying the formula was only a symptom of B's being able to go on, and that it was not the ability of going on itself. Now what is misleading in this is that we seem to intimate that there is one peculiar activity, process, or state called "being able to go on" which somehow is hidden from our eyes but manifests itself in those occurrences which we call symptoms (as an inflammation of the mucous membranes of the nose produces the symptom of sneezing). This is

the way talking of symptoms, in this case, misleads us. When we say "Surely there must be something else behind the mere uttering of the formula, as this alone we should not call 'being able to. . .'", the word "behind" here is certainly used metaphorically, and 'behind' the utterance of the formula may be the circumstances under which it is uttered. (Br.B. p. 113)

Since something different happens in each case, we are inclined to say that the different occurrences cannot be all there is to B's being able to continue the series. They must be the symptoms of some peculiar mental state called "being able to go on" that is hidden from us, but manifests itself in those occurrences we call symptoms. Thus, the different cases do contain a common element, viz., the mental state of being able to go on. Accordingly, when B utters the formula or says "Now I can go on," we say that he can continue the series because we think his saying such things is a symptom of the presence of the mental state of being able to go on. When a parrot utters the formula or says "Now I can go on," however, we do not say that he can continue the series because we do not think that the parrot's saying such things is a symptom of the presence of the mental state of being able to go on.

What has happened now, Wittgenstein tells us, is this: the essentialist assumption that there must be something common to all cases of B's being able to continue the series has led us to compare the different things that happen when B can continue to the symptoms of a disease. We have reasoned that just as an inflammation of the mucous membranes of the nose produces the symptom of sneezing, so a hidden mental state called "being able to go on" produces the occurrences we call symptoms of being able

to go on. But this comparison misleads us. We think that the presence of the mental state determines whether B can continue the series and that such occurrences as B's uttering the formula or saying "Now I can go on" are mere symptoms of that state, and this leads us to misunderstand the role of such occurrences in the language-game, to search for a mental state called "being able to go on" that cannot possibly be found, and to ignore the circumstances of the particular case.

Wittgenstein insists that so long as we assume the existence of a hidden mental state which determines whether we say that B can continue the series, we will be led to the mistaken view that such occurrences as B's uttering the formula or saying "Now I can go on" can function only as symptoms of that state. If we abandon the assumption that there is such a state, however, we will be free to examine such occurrences to see how they actually function. And when we examine them, we will find that they function not as symptoms, but as criteria, or characteristic features, for someone's being able to go on.

Wittgenstein thinks that comparing occurrences like B's uttering the formula or saying "Now I can go on" to disease symptoms not only leads us to misunderstand the role of such occurrences, but also leads us to look for a mental state called "being able to go on" that cannot possibly be found because it is a grammatical fiction: a fictitious entity that purports to explain the use of a word or phrase, but fails to do so. When we found nothing common to the various cases of B's being able to go on, we

insisted that there must be a common element and concluded that since we had not found it, it must be hidden. According to Wittgenstein, our insistence revealed a mistaken assumption about the use of the phrase "being able to go on," viz., that every case of someone's being able to go on has a common element that justifies our calling it a case of someone's being able to go on. And that mistaken assumption led us to look for a hidden mental state. Wittgenstein compares our error here to the error of someone who, when told that the word "chair" does not mean this particular chair, tries to look inside to find the real meaning of the word "chair." His search is misguided because it is based on the mistaken assumption that the word "chair" is a proper name. Analogously, our search for the hidden mental state called "being able to go on" is misguided because it is based on the mistaken assumption that the phrase "being able to go on" refers to a common element that is present in all cases of someone's being able to go on and justifies our calling them cases of being able to go on (Br.B. p. 113 & P.I. #153-155).

Wittgenstein thinks we should not search for the mental state called "being able to go on" not only because we would be searching for a grammatical fiction, but also because searching for it turns us away from the only examination that can help us to understand the use of the phrase "being able to go on," i.e., the examination of such things as B's uttering the formula or saying "Now I can go on" and of the particular circumstances in which those things occur (Bl.B. pp. 19-20).

We assumed the existence of a mental state called "being able to go on" because we thought such occurrences as B's uttering the formula could show us that B could continue the series only if they were symptoms of such a state. But Wittgenstein argues that such occurrences show us that B can continue the series without being symptoms of such a state, for what stands behind such occurrences and enables them to justify our saying B can continue the series is not some peculiar mental state, but the circumstances of the particular case. Thus, certain kinds of behavior do not show us something is so only when they are symptoms of peculiar mental states, events, or processes; they show us something is so only in certain particular circumstances (Br.B. pp. 113-114 & P.I. #154-155). B's uttering the formula, for example, does not show us that he can continue the series only when it is a symptom of a peculiar mental state; it shows us that he can continue it only in such particular circumstances as playing the game of continuing the series and only given such particular circumstances as that B has learned algebra and has used such formulas before (P.I. #179).

According to Wittgenstein, then, certain kinds of behavior function as criteria for a particular psychological state, event, or process only in certain particular circumstances. But in which particular circumstances? Malcolm attempts to answer this question in "Wittgenstein's Philosophical Investigations," where he argues that, for Wittgenstein, propositions describing the criterion of someone's being in pain do not logically entail the proposition "He is in pain" because "a criterion is satisfied

only in certain circumstances."⁵⁶ The expressions of pain are not a criterion of pain when someone is rehearsing for a play, acting under hypnotic suggestion, engaging in a hoax, and so on. Malcolm's explanation does not seem to fit Wittgenstein's remarks; however, for when Wittgenstein says that various types of behavior are criteria for a certain psychological state, event, or process only in certain circumstances, the circumstances he rules out are not those of pretending, rehearsing, acting under hypnosis, etc.; but those in which the behavior is a criterion either for some other psychological state, event, or process or for no psychological state, event, or process.

B is a criterion of P only in certain circumstances

Wittgenstein repeatedly says that various types of behavior are criteria "only in certain circumstances." He talks about our applying different criteria in different circumstances for a person's reading (P.I. #164) and about the many different criteria that distinguish, under different circumstances, someone's believing what he says from his not believing it (Br.B. p. 144). He even indicates that criteria for someone's believing what he says are like "friendly facial features" in that just as the same eyes that make a face look friendly do not look friendly, or even look unfriendly, when combined with certain wrinkles of the forehead, lines around the mouth, etc.; so the same feature that characterizes a case of believing what you say may not contribute to

⁵⁶Malcolm, "Wittgenstein's Philosophical Investigations," p. 85.

belief, or may even contribute to disbelief, in different surrounding circumstances (Br.B. pp. 144-146). In Zettel, he writes:

If someone behaves in such-and-such a way under such-and-such-circumstances, we say that he is sad.
(Z. #526)

Pain-behavior and the behavior of sorrow.--These can only be described along with their external occasions. (If a child's mother leaves it alone it may cry because it is sad; if it falls down, from pain.) Behavior and kind of occasion belong together. (Z. #492)

In these passages, the circumstances in which a certain type of behavior is not a criterion for a certain psychological state, event, or process are not circumstances in which someone is pretending or rehearsing for a play, but circumstances in which the behavior is a criterion for some other psychological state. For Wittgenstein, one and the same type of behavior may be an expression of one psychological state in one situation and an expression of another psychological state in a different situation. Crying, for example, is pain-behavior in a situation in which a child has fallen down and sadness-behavior in a situation in which a child's mother leaves it alone. In the former case, crying is an expression of pain and, therefore, a criterion of pain. In the latter case, crying is not a criterion of pain because it is not an expression of pain, but an expression of sadness, and, hence, a criterion of some other psychological state.

In other passages, the circumstances in which a certain type of behavior is not a criterion for a certain psychological state, event, or process are not circumstances in which someone is pretending or rehearsing for a play, but circumstances in which

the behavior is a criterion for no psychological state. According to Wittgenstein, we attribute psychological states to human beings and what are like them (P.I. #360). We do not attribute the ability to think to pieces of furniture, plants, or birds; and we hardly attribute it to dogs (Z. #129). Nor do we attribute the ability to continue a series or the ability to speak to oneself to parrots or gramophones (P.I. #344). We take certain utterances as criteria for certain psychological states only in certain particular circumstances. Uttering the formula, for example, is a criterion for the utterer's being able to continue the series only if the utterer is a human being who is playing the game of continuing the series or taking an oral examination or doing something similar. A parrot's uttering the formula is not a criterion for its being able to continue the series, not because the parrot is pretending or rehearsing for a play, but because a parrot is not a proper subject for such psychological states.

Thus, when Wittgenstein talks about various types of behavior being criteria only in certain particular circumstances, his point is that crying, for example, is not a criterion of pain when it is a criterion for some other psychological state, such as sadness, or when it is a criterion for no psychological state (e.g., when it is done by a doll). Malcolm fails to realize that, for Wittgenstein, in calling a piece of behavior "pain-behavior," or "an expression of pain," we must already have included the circumstances in which it occurred. Thus, Malcolm's remarks that "a criterion is satisfied only in certain circumstances," and that

"the expressions of pain are a criterion of pain" only in certain surroundings⁵⁷ do not explain why propositions describing the criterion of someone's being in pain fail to entail the proposition "He is in pain." For although it is true that Wittgenstein makes a certain type of behavior a criterion of pain only in certain circumstances, one must already have taken those circumstances into account to be able to describe the behavior as "an expression of pain" or "a criterion of pain." Thus, to paraphrase Cavell, Malcolm's remarks amount to this: behavior which under certain circumstances, is an expression of pain, and therefore, according to Wittgenstein, a criterion of pain, is under those very circumstances, not a criterion of pain.⁵⁸

Malcolm fails to realize that, for Wittgenstein, particular circumstances play various roles in the criterial relationship. First, they determine whether a given piece of behavior is functioning as an expression or criterion of a certain psychological state, event, or process. Accordingly, if while sitting in a dentist's office waiting to have a tooth pulled, a man kept holding his cheek and moaning, his behavior would be a criterion for his having a toothache. But if while sitting in a nightclub listening to a comedian, a man who had been laughing all evening momentarily held his cheek and moaned upon hearing a particularly bad joke, his behavior would not be a criterion for his having a toothache because, unlike the dental patient, he was not

⁵⁷Ibid.

⁵⁸Stanley Cavell, The Claim of Reason (Wittgenstein, Skepticism, Morality, and Tragedy) (New York: Oxford University Press, 1979), p. 43.

expressing his toothache, but reacting to a particularly bad joke. And his moaning and holding his cheek were, therefore, not criteria for his having a toothache, but criteria for other things, such as his having heard and understood the joke. Second, the circumstances of the particular case determine whether a given piece of behavior that is a criterion for a certain psychological state, event, or process shows us that the person exhibiting the behavior is actually in that state. Accordingly, if while sitting in a dentist's office waiting to have a tooth pulled, a man kept holding his cheek and moaning, his behavior would be a criterion for his having a toothache, and if the circumstances were normal, would show us that he had a toothache. But if after holding his cheek and moaning, the dental patient suddenly laughed and chided the other patients for being sympathetic, his moaning and holding his cheek would be criteria for his having a toothache, but would not show us that he had one.

In attempting to explain why propositions describing the criterion of someone's being in pain do not entail the proposition "He is in pain," Malcolm confuses these two roles of particular circumstances. His examples of cases in which someone's pain-behavior does not show us that he is in pain--pretending, rehearsing for a play, and acting under hypnotic suggestion--are like the case of the dissembling dental patient, but his explanation fits cases like that of the nightclub patron. Malcolm's confusing these two kinds of cases is understandable, for in both, someone's behavior fails to show us that he is in a certain state because of

the particular circumstances. But the dissembling dental patient's moaning and holding his cheek fail to show us that he has a toothache not, as Malcolm would say, because they are not criteria for, or do not satisfy the criterion for, his having a toothache. His moaning and holding his cheek are criteria for his having a toothache. This is supported by the fact that to explain what happened in this case, we must use the term "toothache" and say something like "the man was pretending to have a toothache" or he was "feigning toothache." The dissembling dental patient's moaning and holding his cheek fail to show us that he has a toothache because the surrounding circumstances reveal that he is only pretending to have a toothache. It is the nightclub patron's moaning and holding his cheek that fail to show us that he has a toothache because they are not criteria for, or do not satisfy the criterion for, his having a toothache.

Malcolm characterizes cases of pretending to be in pain as cases in which the expressions of pain are not criteria for pain, but there can be no such cases for Wittgenstein because he equates "expressions of pain" with "criteria of pain" (P.I. #244; N.f.L. p. 283), and because he characterizes cases of pretending to be in pain as cases in which criteria of pain (or expressions of pain, or pain-behavior) are present, but fail to show us that the person exhibiting them is in pain because of the surrounding circumstances.

pretence: criteria of P are present,

but fail to show us that P

In analyzing cases of pretence, Wittgenstein first tells us we are tempted to think that what distinguishes cases of actually being, having, or doing something from cases of pretence is the presence of some particular mental state, event or process. We are tempted to think, for example, that what distinguishes reading⁵⁹ from pretending to read is the presence of a special conscious mental activity. When we compare a skilled reader's actually reading the words to a beginner's pretending to read the words by saying them off by heart, we are tempted to think that the difference between the two is that the conscious activity of reading is present in the mind of the skilled reader, but absent from the mind of the beginner. But Wittgenstein insists that "the same thing may take place in the consciousness of the pupil who is 'pretending' to read, as in that of the practised reader who is 'reading'" (P.I. #156) so that what happens in consciousness does not distinguish reading from pretending to read. What distinguishes them is the particular situation. Wittgenstein holds that criteria for the person's reading are present in both cases, but the particular circumstances determine whether they show us that the person is actually reading or that he is only pretending to read. The criteria for someone's reading include

⁵⁹For purposes of his investigation, Wittgenstein is not counting the understanding of what is read as part of 'reading'. "Reading is here the activity of rendering out loud what is written or printed; and also of writing from dictation, writing out something printed, playing from a score, and so on" (P.I. #156).

his looking at the printed words and saying them out loud. Ordinarily, someone who looks at printed words and says them out loud is reading. If, for example, someone who has learned to read English picks up an English newspaper he has never seen before and while looking at it says the printed words out loud, he is reading. But if someone who has not learned to read Cyrillic script memorizes a Russian sentence and then says it out loud while looking at the printed words, he is just pretending to read (P.I. #159). In both cases, criteria for the person's reading are present, but only in the first case do they show us that the person is reading. In that case, the particular circumstances were that the man had been taught to read English and had never seen the newspaper before; and in those circumstances, his looking at the paper and saying the printed words out loud showed that he was reading. In the second case, the particular circumstances were that the man had not learned to read Cyrillic script, but had previously memorized the sentence; and in those circumstances, his looking at the printed sentence and saying it out loud did not show that he was reading. Thus, Wittgenstein's analysis of the difference between genuine cases and cases of pretence is that criteria are present in both, but show us that the thing is so only in the former; and what determines whether they show us that the thing is so is not the presence of some mental state, event, or process, but the circumstances of the particular case (R.P.P. I, #824).

Thus, for Wittgenstein, the circumstances of the particular case determine both whether a certain kind of behavior is a

criterion for a certain psychological state and whether behavior that is a criterion for a certain state shows us that the person exhibiting it is in that state. Malcolm failed to distinguish these roles of particular circumstances, and his failure led him to conflate the possibility of knowing in a particular case whether certain behavior is a criterion for a certain thing with the possibility of knowing in a particular case whether behavior that is a criterion for a certain thing shows us that the thing is so. This led him to the mistaken view that, for Wittgenstein, the satisfaction of the criterion for something establishes the existence of that thing beyond question.⁶⁰

Malcolm's view must be rejected because it is incompatible with Wittgenstein's general analysis of pretence. If, as Malcolm maintains, the satisfaction of a thing's criterion establishes the thing's existence beyond question, then there can be no cases of pretence as characterized by Wittgenstein. For he holds that in cases of pretence, a person exhibits criteria for something; but because of the particular circumstances, those criteria do not show us the thing is so. Malcolm's view leaves no room for this; on his view, if the criteria are satisfied, then the thing is so regardless of the circumstances.

acting under hypnosis and rehearsing for a play

On Wittgenstein's analysis, cases of pretending to be in pain are cases in which criteria for someone's being in pain are

⁶⁰Malcolm, "Wittgenstein's Philosophical Investigations," p. 84.

exhibited, but fail to show us that the person exhibiting them is in pain because of the surrounding circumstances. Malcolm and Cavell group pretending, acting under hypnosis, and rehearsing for a play.⁶¹ But would Wittgenstein characterize acting under hypnosis and rehearsing for a play as he characterizes pretending? Austin argues that it is misleading to characterize acting as pretending to be in pain, for in acting there is no question of there being a "reality-dissembled, about which the audience is to be hoodwinked."⁶² Cavell argues that pretending, acting under hypnosis, and rehearsing for a play are alike in that in describing each, we retain the concept of pain. Well then, would Wittgenstein characterize cases of acting under hypnosis and cases of acting in a play as cases in which someone's behavior is a criterion for his being in pain, but fails to show us that he is in pain because of the surrounding circumstances?

Wittgenstein does not discuss cases of acting under hypnosis, but I think he would say that in such cases although the person exhibited criteria for being in pain, the surrounding circumstances--viz. his being hypnotized and his post-hypnotic report that he does not recall being in pain--would show us that he was not really in pain. Thus, Wittgenstein's characterization of cases of pretence applies to cases of acting under hypnotic suggestion.

⁶¹Ibid. p. 85; Cavell, The Claim of Reason, p. 45.

⁶²J. L. Austin, "Pretending," in his Philosophical Papers (2nd ed.; New York: Oxford University Press, 1970), p. 260.

Does Wittgenstein's characterization of cases of pretence also apply to cases of rehearsing for or acting in a play? There is a passage on plays in the Investigations:

I describe a psychological experiment: the apparatus, the questions of the experimenter, the actions and replies of the subject--and then I say that it is a scene in a play.--Now everything is different. . . .

It is like the relation: physical object-sense-impressions. Here we have two different language-games and a complicated relation between them.--If you try to reduce their relations to a simple formula you go wrong. (P.I. p. 180)

In "Notes for the 'Philosophical Lecture'," Wittgenstein explains his view by supposing that someone asks, "Are people murdered in tragedies or aren't they?" One answer to this question is "In some tragedies people are murdered," another is "People aren't really murdered on the stage, they only pretend to murder and to die." But the latter answer is ambiguous, for "pretend" may be used in either of two senses. It may be used in the sense in which Edgar pretended to have led Gloucester to the cliff. But then the answer would be incorrect, for some characters really die in tragedies (e.g., Juliet at the end of the play, whereas earlier she only pretended to die). Or it may be used in the sense in which the dissembling dental patient pretended to have a toothache, i.e., in the ordinary sense. And then it would be correct to say, "People aren't really murdered on the stage, they only pretend to murder and to die." Thus, the words "really," "pretend," "die," etc., are used in a particular way in speaking of a play and differently in ordinary life. "The criteria for a man dying in a play aren't the same as those of his dying in reality"; indeed,

one may say that they "are utterly dissimilar though there is of course a connection" (N.f.P.L. pp. 52-54).

According to Wittgenstein, if we are using "pretend" in the ordinary sense, it is correct to say that on the stage, actors pretend to murder and die. Thus, like Malcolm and Cavell, Wittgenstein assimilates cases of acting in a play to cases of pretence and holds that in both, criteria for pain are exhibited, but fail to show us that the person exhibiting them is in pain because of the surrounding circumstances. Implicit in Wittgenstein's contrast between the language-game of talking about a play and our ordinary language-games, however, is a distinction between cases of acting in a play and cases of pretence overlooked by Malcolm and Cavell. When the dissembling dental patient moans and holds his cheek, his behavior is a criterion for his having a toothache; but when an actor in a play moans and holds his cheek, his behavior is a criterion not for his having a toothache, but for his character's having one. Thus, we might say that the circumstances of the particular case determine not only what psychological state a certain type of behavior is a criterion of, but also whose psychological state it is a criterion of. In ordinary life, a piece of behavior is typically a criterion for the psychological state of the person exhibiting it; but in a play, a piece of behavior is typically a criterion for the psychological state of the character portrayed.

Thus, Cavell is correct in his belief that Wittgenstein holds cases of acting in a play to be like cases of pretence in

that in both, criteria for pain are exhibited, but fail to show us that the person exhibiting them is in pain because of the circumstances. But Cavell is wrong in failing to realize that, for Wittgenstein, cases of acting in a play differ from cases of pretence in that whereas the pretender's behavior is a criterion for his psychological state, the actor's behavior is a criterion for his character's psychological state.

Like Malcolm, Canfield fails to recognize the various roles particular circumstances play in criterial relations. Canfield writes: "in general, in a criterial rule used to teach a language game or used in the practice of one, there will be no statement given of general facts of nature and normally existing circumstances that form the background against which the criterion is used."⁶³ But "normally existing circumstances" is ambiguous: it can mean (1) "circumstances in which criteria coincide," (which is itself ambiguous), or (2) "circumstances in which a certain psychological state, event, or process is normally to be expected," or (3) "circumstances in which one is not pretending, rehearsing, acting under hypnotic suggestion, etc." We have already seen that normally existing circumstances in the first sense do not form the background necessary for a certain type of behavior to be a criterion for a certain psychological state, event, or process; that background is formed by normally existing circumstances in the second sense. Normally existing circumstances in the third sense form the background against which a piece of behavior that is a

⁶³Canfield, "Criteria and Rules of Language," 79.

criterion for a certain psychological state shows us that the person exhibiting the behavior is in that state. Canfield gives examples illustrating both roles of particular circumstances.⁶⁴

Yet, Canfield would characterize both cases like that of the nightclub patron and cases like that of the dissembling dental patient as cases in which the linguistic rule that a criterion entails that for which it is a criterion does not apply. But this characterization ignores the important difference between the two types of cases. In the former, the linguistic rule does not apply because no criterion for the thing in question is present. In the latter, the rule does not apply because this case is an exception to it; in this case, the criterion is present, but that for which it is a criterion is not, so that in this case the criterion does not entail that for which it is a criterion. As presented, Canfield's view is inadequate, but it could be modified to accommodate the various roles particular circumstances play in criterial relations and would then read something like this: given certain general facts of nature, it is a rule of language that in certain particular circumstances, B (a certain type of behavior) is a criterion of P (a particular psychological state, event, or process) and in such circumstances someone's exhibiting B entails his being in P provided that the particular circumstances are normal. I will discuss whether this modified version of Canfield's view is an acceptable interpretation of Wittgenstein's criterial relationship after I have shown how the noninductive-

⁶⁴Ibid., 77.

evidence view acknowledges and characterizes, but sometimes confuses, the various roles particular circumstances play in criterial relations.

Unlike Malcolm and Canfield, noninductivists acknowledge the different roles particular circumstances play in criterial relations. Chihara and Fodor characterize their first role by saying that "X is a criterion of Y in situations of type S"; their second by saying that Y may be applied on the basis of X "in normal situations of type S." In explaining Wittgenstein's notion of a criterion, Chihara and Fodor consider the game of basketball in which "the ball going through the basket satisfies a criterion for scoring a field goal,"⁶⁵ and explain that the ball must be "in play" for it to be possible to score a field goal by tossing the ball through the basket. This explains the first role of particular circumstances. But no explanation is given of their second role.

Complementing Chihara and Fodor, Lycan barely mentions the first role of particular circumstances, but discusses their second role in detail. Although his initial introduction of terms -- "in the special case of behavioral criteria for mental states, I shall speak of someone's fulfilling or satisfying a criterion when his behavior-cum-circumstances constitutes that criterion's obtaining"⁶⁶--sounds like Malcolm's interpretation, Lycan distinguishes the two roles of particular circumstances,

⁶⁵Chihara and Fodor, "Operationalism," p. 391.

⁶⁶Lycan, "Noninductive Evidence," 109.

which Malcolm conflates. In this passage, Lycan characterizes the first role of particular circumstances, viz. that of determining whether certain behavior is a criterion for a given psychological state. But he never explains this role. His concern is with the second role of particular circumstances, which he discusses in detail in his three explanations of the noninductive-evidence view.

Using a context wherein he and a skeptic have observed that a criterion X for Y has been fulfilled and are arguing about whether Y obtains, Lycan asks us to suppose he is rolling on the ground, emitting agonized shrieks, etc., and that the skeptic nonetheless denies his being in pain. According to Lycan's first explanation of the noninductive-evidence view, the skeptic must justify his denial by showing that there is something extraordinary about the situation, e.g., Lycan is faking, or has a pronounced nervous tic, or usually acts that way when someone reads Hegel to him.⁶⁷

Although Lycan claims to be using a context in which the criterion of pain has been fulfilled, some of his examples are situations in which someone's rolling on the ground, emitting agonized shrieks, etc., are not criteria of pain. If Lycan acts that way because he has a pronounced nervous tic, then his behavior is not pain-behavior, but a tic, and thus does not fulfill a criterion of pain. Similarly, if he is behaving like that because Hegel is being read to him, then his behavior is not pain-behavior, and does not fulfill a criterion of pain. Although Lycan sometimes

⁶⁷Ibid., 111.

confuses the different roles of particular circumstances, unlike Malcolm and Canfield, he at least recognizes that there are different roles and attempts to characterize them. In fact, if we ignore his inappropriate examples and concentrate on his appropriate example of feigning pain, Lycan's presentation seems to explain adequately the second role of particular circumstances in the criterial relationship.

According to Lycan's second explanation, "If X is a criterion of Y, then it is a necessary truth that X is evidence for Y" also means that in an ordinary case in which I know that X obtains and in which there is no reason to think that Y does not, though it is not logically incoherent for me to suppose that Y does not obtain, it is logically incoherent for me to demand further justification that Y obtains. Lycan applies this thesis to the sceptic's demand for further justification:

I go through my justificatory procedure for the Sceptic's benefit: "The subject's just been run over by a cement-mixer; his leg now has a 90° bend at the shin; he's screaming and begging for morphine; his face is horribly contorted. . . ah, now he's passed out."⁶⁸

Lycan has given the best possible sort of justification, yet, after hearing all this, the skeptic still is not satisfied. He wants more; he wants a justification that insures the subject's being in pain. But no such justification is possible.⁶⁹

According to Lycan's third explanation, "If X is a criterion of Y, then it is a necessary truth that X is evidence for Y"

⁶⁸Ibid., 112.

⁶⁹This point will be discussed in chapter V.

means that if we understand the use of Y, we will see the impropriety of asking for further justification because criteria are the ultimate court of appeal in deciding questions to which they are relevant, even though they neither provide deductive certainty nor exhaust the meanings of the terms whose use they govern.⁷⁰

As initially formulated, the noninductive-evidence view read: if B (a certain kind of behavior) is a criterion of P (a particular psychological state, event, or process), then it is a necessary truth that B is evidence for P. Having seen how noninductivists acknowledge and characterize the different roles particular circumstances play in criterial relations, we can now state their view as follows: if B is a criterion of P in situations of type S, then it is a necessary truth that B shows us that P in normal situations of type S. The noninductive-evidence view is superior to Canfield's in that noninductivists acknowledge and characterize the different roles particular circumstances play in criterial relations. But is the noninductive-evidence view superior to my modified version of Canfield's view which includes the various roles of particular circumstances? Before answering that question, I must examine further Wittgenstein's views on the types of circumstances and their roles in criterial relations.

The Criterial Relationship

My previous examination of Wittgenstein's views on the types of circumstances and their roles in criterial relations made

⁷⁰Ibid., 112. Lycan's three explanations will be discussed more fully in chapters IV and V.

it clear that Wittgenstein thinks there are two types of circumstances--the general facts of nature and the circumstances of the particular case--that play different roles in criterial relations. Certain general facts of nature provide the necessary background for the significant functioning of criterially governed concepts while the circumstances of the particular case determine whether certain behavior is a criterion for someone's being in a certain psychological state and whether behavior that is a criterion for someone's being in a certain psychological state shows us that the person exhibiting it is in that state. The differences between these types of circumstances and their roles in criterial relations will become clearer if we contrast the status of the propositions stating them.

Propositions stating general circumstances have the same status as the propositions that Moore⁷¹ claims to know: both are part of the foundation of our language.

I want to say: propositions of the form of empirical propositions, and not only propositions of logic, form the foundation of all operating with thoughts (with language). (O.C. #401)

In the passage succeeding this one, Wittgenstein adds that the expression "propositions of the form of empirical propositions" is thoroughly bad and that "the statements in question are statements about material objects" (O.C. #402). The propositions he has in mind here are propositions, such as "the earth existed for many years past," of which Moore claims to have certain knowledge

⁷¹George Edward Moore, "A Defense of Common Sense" in his Philosophical Papers (New York: Collier Books, 1966), pp. 32-59.

(O.C. #411). But like the Moorean propositions, the propositions "People characteristically moan and hold their cheeks when they have toothaches" and "People's bodies change their appearance only gradually and comparatively little," are what Wittgenstein calls "propositions of the form of empirical propositions," for although they look like empirical propositions, they function like logical ones (O.C. #136). Ordinary empirical propositions are taught to children, serve as hypotheses to be tested, and are liable to doubt. These propositions, on the other hand, are not taught to children, do not serve as hypotheses to be tested, and are exempt from doubt.

Unlike ordinary empirical propositions, "propositions of the form of empirical propositions" are not taught to children. A child "learns to believe a host of things" (O.C. #144). He learns, for example, "that someone climbed this mountain many years ago" (O.C. #143). But he does not learn that this mountain existed many years ago; the question whether it did never arises. In learning that someone climbed the mountain many years ago, however, he also takes in the consequence that the mountain existed then. Similarly, a child learns to identify persons on the basis of their appearance, but he does not learn that human bodies change their appearance only gradually and comparatively little. In learning to identify persons, however, he also takes in the consequence that human bodies change gradually and comparatively little. Wittgenstein thinks this is how it is with such propositions: we do not explicitly learn them; we assimilate them along with what we explicitly learn (O.C. #142-143, 152).

When a child is learning various facts, questions about such things never arise not because children are not bright enough to think of them, but because such questions make no sense. Wittgenstein discusses what would happen if a child asked such questions in the following passage:

A pupil and a teacher. The pupil will not let anything be explained to him, for he continually interrupts with doubts, for instance as to the existence of things, the meaning of words, etc. The teacher says "Stop interrupting me and do as I tell you. So far your doubts don't make sense at all".

Or imagine that the boy questioned the truth of history (and everything that connects up with it)--and even whether the earth existed at all a hundred years before.

Here it strikes me as if this doubt were hollow.
(O.C. #310-312)

According to Wittgenstein, propositions of the form of empirical propositions are not questioned as ordinary empirical propositions are, for unlike ordinary empirical propositions, they do not function as hypotheses to be tested. We conduct investigations to determine the shape and age of the earth, but we do not conduct investigations to determine whether the earth has existed during the last hundred years (O.C. #138), which shows that the proposition "The earth has existed during the last hundred years" functions differently from propositions about the shape and age of the earth: they function as hypotheses to be investigated, but it does not.

Wittgenstein thinks we assume the proposition "The earth has existed during the last hundred years" and other such propositions not because we cannot investigate everything, and are, therefore, forced to assume them, but because all operating with

thoughts or language requires that they be exempt from doubt.

. . . all enquiry on our part is set so as to exempt certain propositions from doubt, if they are ever formulated. (O.C. #88)

That is to say the questions that we raise and our doubts depend on the fact that some propositions are exempt from doubt, are as it were like hinges on which those turn.

That is to say, it belongs to the logic of our scientific investigations that certain things are in deed not doubted. (O.C. #341-342)

Wittgenstein thinks our questions, doubts, and investigations require that certain propositions be exempt from doubt. When Lavoisier conducts experiments to determine what happens when substance A reacts with substance B, for example, he does not doubt that the same thing will happen again given the same circumstances nor does he doubt that the apparatus he is using is really there. His experiments presuppose these things (O.C. #167-168). Similarly, if an historian wants to check the accuracy of the story of Napoleon, he does not wonder whether all the reports about him are based on sense-deception, forgery, etc. His investigation presupposes that Napoleon actually existed (O.C. #163).

Wittgenstein holds that like scientific and historical investigations, our ordinary language-games require that certain propositions be exempt from doubt. Many of the language-games we play with the word "hand," for example, require that we not raise doubts about the existence of our hands. When someone says things like "My hands hurt," or "My right hand is weaker than my left," or "Last year I burned my hands," the existence of his hands is presupposed. If he tried to doubt their existence, he would no

longer be playing our ordinary language-games; and we would not understand him (O.C. #369-371, 446). Similarly, our use of someone's moaning, holding his cheek, and saying "I have a toothache" as criteria for his having a toothache requires that we not raise doubts about whether people characteristically express their toothaches by doing things like moaning, holding their cheeks, and saying, "I have a toothache." When I say of someone, "I know he has a toothache; he's moaning and holding his cheek," the role of moaning and cheek-holding as characteristic expressions of toothache is presupposed. If I tried to doubt that role, I would no longer be playing the ordinary language-game; and no one could be sure of understanding me. The assumption that people characteristically express their toothaches by doing things like moaning, holding their cheeks, and saying "I have a toothache" is essential to the significant functioning of such behavior as criteria for someone's having a toothache. The same is true of criteria for personal identity: the assumption that the characteristics that serve as our criteria for personal identity are relatively permanent is essential to the significant functioning of those criteria.

Thus, although they look like empirical propositions, propositions stating general circumstances do not have an empirical function. They are not explicitly learned, nor are they hypotheses to be tested, nor can they be doubted. Their function is logical: they are part of the foundation of our language and state general facts of nature which provide the necessary background for the significant functioning of our criterially governed concepts.

Having determined the status of propositions stating general circumstances, we must now determine the status of propositions stating particular ones. Like propositions stating general circumstances, propositions stating the various particular circumstances in which a certain kind of behavior functions as a criterion for a certain psychological state, event, or process and shows us that the person exhibiting that behavior is in that state generally are not explicitly learned. Wittgenstein writes that we learn the use of the word "thinking" under certain particular circumstances, but do not learn to describe those circumstances. Nonetheless, we can still teach a child to use the word, for a description of those circumstances is not needed for that. We simply teach the child the word under particular circumstances. We teach it to attribute thinking only to human beings. Although the child does not explicitly learn the proposition "Only human beings and creatures that behave like them think," it assimilates it in learning to use the word "thinking" (Z. #114-117). Thus, the particular circumstances in which a certain type of behavior functions as a criterion for a particular psychological state and shows us that the person exhibiting that behavior is in that state are similar to the relevant general facts of nature in that neither is explicitly learned.

Nonetheless, there are important differences between propositions stating general circumstances and propositions stating particular ones. One important difference is that while propositions stating general circumstances must be assumed, propositions stating particular circumstances may serve as hypotheses to be

tested. Wittgenstein writes that B's uttering the formula shows us he can continue the series only given such particular circumstances as that B has learned algebra and has used such formulas before (P.I. #179). We need not assume that B has learned algebra and used such formulas before; we can conduct investigations to determine whether these things are true. Similarly, we need not assume the truth of such propositions as "He has learned to read English" and "He has never seen this newspaper before," which state particular circumstances in which a person's looking at the printed words and saying them out loud would show us that he was reading; we can conduct tests to determine their truth.

Propositions stating particular circumstances differ from propositions stating general ones not only in that the former may be tested whereas the latter must be assumed, but also in that propositions stating particular circumstances can be doubted while propositions stating general ones cannot be. We can doubt whether someone has learned algebra or previously used algebraic formulas. We can also doubt whether someone has learned English or previously seen a certain newspaper.

It should now be clear that although they are like propositions stating general circumstances in not being explicitly learned, propositions stating particular circumstances have a different status from those stating general ones. Propositions stating general circumstances have a peculiar logical role: they are exempt from doubt and serve as rules for testing; propositions stating particular circumstances, on the other hand, have an

empirical role: they are not exempt from doubt and can serve as hypotheses to be tested. This difference in the roles of the propositions stating them indicates a difference in the roles general and particular circumstances play in criterial relations: general circumstances must be assumed because they are part of the foundation of our language, whereas particular circumstances need not be assumed because they are not part of the foundation of language.

We have seen that Wittgenstein thinks there are two types of circumstances--the general facts of nature and the circumstances of the particular case--that play different roles in criterial relations. Certain general facts of nature provide the foundation for the significant functioning of criterially governed concepts while the circumstances of the particular case determine both whether certain behavior is functioning as a criterion for a certain psychological state, and if so, whether it shows us that the person exhibiting the behavior is in that state.

The circumstances of the particular case are similar to general circumstances in that both are necessary for certain behavior to be a criterion for a specific psychological state. They differ in that while general circumstances are always assumed to be present, particular circumstances are not: we must observe the circumstances of the particular case to determine whether they are such that behavior can be a criterion for the state in question. Despite this difference, these particular circumstances in which behavior functions as a criterion for a certain psychological state are not stated in the criterial rule and, therefore, do not play

the role attributed to circumstances by the entailment view. Thus, if we let B stand for a certain type of behavior and P for a certain psychological state, event, or process, both the role of general circumstances and this role of particular circumstances can be characterized by saying that B functions as a criterion of P only in certain general and particular circumstances. In applying this characterization to criteria for toothache, we get something like this: someone's holding his cheek and moaning function as criteria for his having a toothache only in certain general circumstances, e.g., that people characteristically hold their cheeks and moan when they have toothaches, and only in the appropriate particular circumstances, i.e., circumstances which make it clear that the person's moaning and holding his cheek are functioning as criteria for his having a toothache rather than as criteria for some other psychological state.

Certain particular circumstances also determine whether behavior functioning as a criterion for a certain psychological state shows us that the person exhibiting the behavior is in that state. In this, their role is different from that of the relevant general facts of nature: they are not necessary for behavior to function as a criterion of the state in question. But since they are not stated in the criterial rule, they do not play the role attributed to circumstances by the entailment view. This role of particular circumstances can be characterized by saying: it is a rule of language that in normal particular circumstances, someone's exhibiting criteria of P shows us that he is in P.

We can now combine the preceding characterizations to obtain an interpretation of Wittgenstein's criterial relationship that includes the role of general circumstances and both roles of particular circumstances: in certain general circumstances, it is a rule of language that in certain particular circumstances, B is a criterion of P, and that in normal particular circumstances someone's exhibiting criteria of P shows us that he is in P. Applying this characterization to criteria for toothache, we get something like this: in certain general circumstances, e.g., that people characteristically hold their cheeks and moan when they have toothaches, it is a rule of language that in the appropriate particular circumstances, a person's holding his cheek and moaning function as criteria for his having a toothache, and that in normal particular circumstances, a person's exhibiting criteria of toothache shows us that he has a toothache.

Is such a complicated formulation really necessary? Couldn't we simply say that in normal circumstances, criteria of P show us that P, whereas in abnormal circumstances they don't? Wittgenstein himself writes: "If, however, one wanted to give something like a rule here, then it would contain the expression 'in normal circumstances'" (O.C. #27), and "we have here a normal case, and abnormal cases. It is only in normal cases that the use of a word is clearly prescribed; we know, are in no doubt, what to say in this or that case" (P.I. #141-142). We could say that in normal circumstances, criteria of P show us that P, but to do so would be to ignore the important differences between the various kinds of abnormal cases and what those differences reveal

about the types of circumstances and their roles in criterial relations. In each of the following four cases, we would not say that the person who moans and holds his cheek has a toothache. And in each case we would not say it because of the circumstances, but "because of the circumstances" has a different sense in each case:

(1) If someone living in a world where moaning and holding one's cheek were not natural expressions of toothache moaned and held his cheek, we would not say that he had a toothache because such a world's general facts of nature would make it impossible for someone's moaning and holding his cheek to function as criteria for his having a toothache.

(2) When the nightclub patron moaned and held his cheek, we did not say that he had a toothache because the circumstances of the particular case showed us that his moaning and holding his cheek were functioning not as criteria for his having a toothache, but as criteria for other things, such as his having heard and understood the joke.

(3) When the dissembling dental patient moaned and held his cheek, we did not say that he had a toothache because, although his moaning and holding his cheek were functioning as criteria for his having a toothache, the circumstances of the particular case showed us that he was only pretending to have a toothache.

(4) Finally, if an actor on the stage moaned and held his cheek, we would not say that he had a toothache because the circumstances of the particular case would show that his moaning and holding his cheek were criteria not for his having a toothache, but for his character's having one.

I have attempted to formulate an interpretation of Wittgenstein's criterial relationship that acknowledges the two types of circumstances and accurately characterizes their various roles in criterial relations. Many interpreters fail to do either. Garver confuses the two types of circumstances and is thereby led to the mistaken view that Wittgenstein allows no actual criterial conflicts. Canfield adequately characterizes the role of general circumstances, but fails to distinguish from it the various roles of particular circumstances. Malcolm confuses the different roles of particular circumstances and is thereby led to the mistaken view that in cases of pretending to be in pain, the criteria for pain are not satisfied. Only the proponents of the noninductive-evidence view distinguish different roles for particular circumstances, and even they sometimes confuse their different roles.

Thus far, the noninductive-evidence view--if B is a criterion of P in situations of type S, then it is a necessary truth that B shows us that P in normal situations of type S--and the modified version of Canfield's view--in certain general circumstances, it is a rule of language that in certain particular circumstances, B is a criterion of P, and in such circumstances,

someone's exhibiting B entails his being in P provided that those circumstances are normal--appear to come closest to being acceptable interpretations of Wittgenstein's criterial relationship. Both interpretations differ from mine--in certain general circumstances it is a rule of language that in certain particular circumstances, B is a criterion of P, and that in normal particular circumstances, someone's exhibiting criteria of P shows us that he is in P--in the following respects: whereas they state that in the right circumstances, the presence of a single criterion of P either entails or shows us that P; my interpretation states that in the right circumstances, the presence of criteria of P shows us that P. This difference is significant, for as I demonstrated in chapter II, Wittgenstein equates the criteria for a family-resemblance term with the various characteristic features that form the resemblances among the term's referents and holds that even in the right circumstances, the presence of a single such characteristic feature need not justify the application of the term. Accordingly, for a psychological family-resemblance term, someone's exhibiting a single criterion for the term in the right circumstances need not show us that the term applies to him. I purposely do not specify how many criteria are required in the right circumstances to show us that the thing is so because Wittgenstein holds that for some things, such as angina, one criterion may be sufficient to show us that the thing is so, whereas for others, such as games, several may be required.

Canfield's interpretation differs from both mine and the noninductivists' in that his makes criterial rules of language

complicated entailments or truth conditions, whereas the noninductivists' interpretation and my interpretation make criterial rules of language complicated justification conditions. The significance of this difference will be investigated in chapter IV. It now looks as if my interpretation is much closer to the noninductivists' than to Canfield's.

But the noninductive-evidence view differs from both my view and Canfield's view in failing to mention general circumstances. Indeed, Canfield argues that the noninductive-evidence view is an unacceptable account of Wittgenstein's criterial relationship because it ignores the role of general circumstances. At first blush, Canfield's criticism seems warranted. After pointing out that the view's talk of "necessary truth" is obscure and that some philosophers may have been led to object to the view by an illegitimate importation of the modal operator, which yields the view that "If X is a criterion of Y, then X is necessary evidence for Y,"⁷² Canfield keeps the modal operator outside the central position and interprets the view as follows: "where X is a criterion for Y, it is true in all possible worlds that X is evidence for Y."⁷³ Canfield then argues that although this interpretation of the noninductive-evidence view is more plausible, it is shown to be false by the following counterexample. Suppose that the criterion for being a grandmaster in chess is having a rating above 2,500. According to the noninductive-evidence view, a

⁷²Canfield, "Criteria and Rules of Language," 85.

⁷³Ibid.

person's having a rating above 2,500 is evidence for his being a grandmaster in all possible worlds. But we can imagine a possible world in which the moment a chess master achieves a rating of over 2,500 he loses all his acquired knowledge of chess strategy and reverts to the state of a novice and in which this phenomenon is well known. In this world, a person's having achieved a rating of over 2,500 would not be evidence that he was a grandmaster, but would be evidence that he was not a grandmaster. Thus, Canfield concludes, the noninductive-evidence view is incompatible with the fact that Wittgensteinian criteria operate in language against a background of certain circumstances. In these circumstances, we use X as a criterion of Y. These circumstances do not change, and we are not "incommoded by the mere possibility that they might." Yet this possibility exists, and because it exists, the noninductive-evidence view fails.⁷⁴

In chapter IV, I examine both Wittgenstein's notions of meaning, convention, possibility, and necessity and the connections between those notions and his notion of a criterion. I then argue that Canfield's criticism of the noninductive-evidence view fails because it ignores that both the proponents of that view and the later Wittgenstein embrace constructivist notions of necessity and possibility.

⁷⁴Ibid., 85-87.

CHAPTER IV

CRITERIA AND MEANING

According to Wittgenstein, a term's criteria play an explicit role in teaching and learning the term, and the particular circumstances in which those criteria function play an implicit role in those activities. In the Blue Book, Wittgenstein writes that when he learned to use the phrase "so-and-so has a toothache," the kinds of behavior (such as someone's moaning and holding his cheek) that serve as criteria for someone's having a toothache were pointed out to him (Bl.B. p. 24). And in the Investigations, he indicates that a process in the larynx or brain is not a criterion of my doing the same when I say the ABC to myself as someone else who silently repeats it to himself if someone could learn the meaning of "to say such-and-such to oneself" without someone's pointing to a process in the larynx or brain.

Wittgenstein thought a term's criteria play an explicit and essential role in the teaching and learning of the term. And according to Kenny and Richardson, their essential role in language learning gives criteria their special intermediate logical status.⁷⁵

⁷⁵Kenny, "Criterion," 259 and Richardson, The Grammar of Justification, p. 107.

But Williams and Putnam argue that those who say the criteria for X are necessarily evidence for X because they play an essential role in learning the use of "X" tend to ignore the fact that it is not a necessary truth that we ever learned language at all. We might have been born with the ability to speak a language, or we might have acquired that ability by being given electrical shocks or by taking a drug.⁷⁶ Although this objection seems to apply to Wittgenstein, it does not; for while it is true that Wittgenstein often talks about how various words are learned (e.g., P.I. #77, Z. #114-117, 267), he does not wish to argue that language must be learned. In the second volume of the Nachlass, he declares:

The meaning of a sentence lies in the nomenclature. The nomenclature is independent of the hypothesis that we learned this name in this use --in our youth perhaps. The historical (which is always hypothetical) cannot be of any importance here. (p. 68)

Wittgenstein talks about how various words are learned not because he thinks language is essentially something that must be learned, but because he thinks that we can learn a great deal about the meaning of a word by asking ourselves how we would teach its use to a child.⁷⁷ For Wittgenstein, the concept of teaching

⁷⁶Hilary Putnam, "Brains and Behavior," in R. J. Butler (ed.), Analytical Philosophy (Second Series) (Oxford: Basil Blackwell, 1965), pp. 1-19; B. A. O. Williams, "Knowledge and Meaning in the Philosophy of Mind," Philosophical Review, LXXVII (1968), 216-228.

⁷⁷Cf. D. A. T. Gasking and A. C. Jackson, "Wittgenstein as a Teacher," in K. T. Fann (ed.), Ludwig Wittgenstein: the Man and his Philosophy (New York: Dell Publishing Co., Inc., 1967), pp. 49-55. No doubt Wittgenstein came to this realization while teaching elementary school children, an experience that contributed to his later approach to philosophy. Cf. K. T. Fann, Wittgenstein's Conception of Philosophy (Los Angeles: University of California Press, 1971), p. 43).

and the concept of meaning are connected not in that teaching is essential to meaning, but in that teaching communicates meaning-- something that we all know, but tend to ignore when we are thinking about meanings. For Wittgenstein, what is essential to language is not that it is learned, but that it is conventional; and the point of asking ourselves how we would teach a child the use of a word is to discover the conventions governing that word's use.

Like criteria, the circumstances of the particular case play an important role in teaching and learning language. But unlike criteria, their role is implicit:

One learns the word "think", i.e. its use, under certain circumstances, which, however, one does not learn to describe.

But I can teach a person the use of the word! For a description of those circumstances is not needed for that.

I just teach him the word under particular circumstances. (Z.#114-116)

We have seen that, for Wittgenstein, a term's criteria play an explicit role, and the particular circumstances in which those criteria function play an implicit role in teaching and learning the term. What is essential to language, however, is not that it is learned, but that it is conventional. Talking about how criterially governed concepts are learned shows us the conventions for their use, and it is their conventionality rather than their role in teaching and learning language that gives criteria their special status. But what are these 'linguistic conventions', and how do they 'determine our criteria'?

In the first part of this chapter, I answer these questions. I also show how Wittgenstein's view that linguistic convention

determines what counts as a thing's criteria solves the problem of wide-open texture.

In chapter III, I discussed Canfield's argument that the noninductive-evidence view is inadequate because it fails to acknowledge that Wittgensteinian criteria operate against a background of normally existing general circumstances. In the second portion of this chapter, I investigate Wittgenstein's notions of necessity and possibility and argue that Canfield's criticism of the noninductive-evidence view misfires because it overlooks the constructivist nature of the view's notions of possibility and necessity.

In the third portion of this chapter, I argue that, for Wittgenstein, a change in criteria entails a change in meaning and concept. I then defend Wittgenstein's view of conceptual change against the criticisms of contemporary empirical realists.

Linguistic Convention

In reading the literature on Wittgenstein's notion of a criterion, one frequently encounters the assertion that Wittgenstein thinks criteria are conventional.⁷⁸ In chapter I, I asserted that he thinks linguistic convention determines what counts as a thing's criteria. The texts make it clear that Wittgenstein does think criteria are conventional. In the Investigations, he talks about criteria's being things that "we fix" (R.I. #322, pp. 212, 222) and says that the language of sense impressions, in which sensations

⁷⁸Garver, "Wittgenstein on Criteria," pp. 57-63; Kenny, "Criterion," 259; Cavell, The Claim of Reason, pp. 86-125; Richardson, The Grammar of Justification, pp. 18-22.

of wet and cold and certain visual impressions are criteria for rain, "is founded on convention" (P.I. #354-355). In the Blue Book he writes:

The man who says "only my pain is real", doesn't mean to say that he has found out by the common criteria--the criteria, i.e., which give our words their common meanings--that others who said they had pains were cheating. But what he rebels against is the use of this expression in connection with these criteria. That is, he objects to using this word in the particular way in which it is commonly used. On the other hand, he is not aware that he is objecting to a convention. (Bl.B. p. 57)

Wittgenstein clearly thinks criteria are conventional.

His view emphasizes what Garver calls "the human ancestry of criteria."⁷⁹ For Wittgenstein, criteria are things that we human beings fix: we decide to use "this expression in connection with these criteria" (Bl.B. p. 57). We decide, for example, to use the expression "So-and-so has a toothache" in connection with the criteria of moaning and holding one's cheek. According to Garver, when Wittgenstein talks about criteria's being things that "we fix," part of what he means is that each human being fixes his own criteria. Garver supports his interpretation with the following passage in which Wittgenstein allegedly gives an instance of his criterion for something's being different from someone else's. In considering what might be said if someone were to ask him whether he still knows what he was going to say when interrupted, Wittgenstein writes:

If I do know now, and say it--does that mean that I had already thought it before, only not said it? No. Unless you take the certainty with which I continue the interrupted sentence as a criterion of the thought's already having been completed at that time. (P.I. #633)

⁷⁹Garver, "Wittgenstein on Criteria," p. 62.

This passage only seems to support the view that Wittgenstein thinks each human being fixes his own criteria because Garver takes it out of context and misinterprets it. He omits the passage's final sentence--"But, of course, the situation and the thoughts which I had contained all sorts of things to help the continuation of the sentence" (P.I. #633)--and ignores succeeding passages that clearly indicate that if you take the certainty with which the interlocutor continues the interrupted sentence as a criterion of the thought's already having been completed at that time, then you are not using the 'common criteria', viz., the criteria that the speakers of the language have in common, which they learned to use when they learned the language and which give meaning to their words.

It should now be clear that when Wittgenstein talks about criteria's being things that "we fix," he means not that each person fixes his own criteria, but that the speakers of a language collectively determine an expression's criteria. But those of us who now speak English did not determine the criteria for our expressions. We were taught to use certain expressions with certain criteria. We did not, for example, decide to use the word "toothache" in connection with the criteria of moaning and holding one's cheek; we were taught to say that someone has a toothache when he moans and holds his cheek. Realizing that the current speakers of the English language did not decide which expressions would go with which criteria, Lycan suggests that when Wittgenstein talks about criteria's being things that we fix, he means that at some (perhaps fictional) point in history it

was stipulated that a certain expression be used in connection with certain criteria.⁸⁰ Lycan's interpretation seems plausible because Wittgenstein does use a sort of 'speculative anthropology', which he probably learned from the Italian economist Piero Sraffa. In his only published work, Production of Commodities by Means of Commodities,⁸¹ Sraffa utilizes what has been called "the method of speculative anthropology."⁸² He starts his investigation of the process of production by imagining a simple society that produces just enough to maintain itself and then builds up more complicated forms by gradually adding new features. This method is central to Sraffa's whole investigation, and Wittgenstein's method of imagining simple language-games and then building up more complicated ones by gradually adding new features seems to be an adaptation of Sraffa's method.⁸³ Although Wittgenstein's use of this technique seems to make Lycan's interpretation plausible, it should not lead us to accept a literal version of his interpretation, for when Wittgenstein imagines such primitive language-games, he is not making hypotheses about how our uses of language originated, but clarifying the nature of such uses (Rl.B. p. 17).

⁸⁰Lycan, "Noninductive Evidence," 117.

⁸¹Piero Sraffa, Production of Commodities by Means of Commodities (Prelude to a Critique of Economic Theory) (Cambridge University Press, 1960).

⁸²Wolfe Mays, "Recollections of Wittgenstein," in Fann (ed.), Wittgenstein, p. 83.

⁸³Fann, Wittgenstein's Conception, pp. 49-50.

Wittgenstein's view that criteria are things we fix is not a historical hypothesis about the origins of the use of criterially governed concepts, but a description of the nature of their use, which can be better understood when viewed as an alternative to what I shall call "classical realist semantics."

In the Tractatus, Wittgenstein argued that language must be a picture of the world, the propositions of which are either elementary or nonelementary--a nonelementary proposition being a truth-function of elementary propositions and an elementary proposition being a combination of names, or simple signs, picturing an atomic fact by sharing with it a common form or structure. The simple signs composing elementary propositions name objects, which are their meanings; and if their arrangement in an elementary proposition corresponds to an arrangement of objects in the world (a fact), the proposition is true; otherwise, it is false. The totality of true elementary propositions constitutes a complete world description. If objects are taken to be preexisting, we get what I shall call a classical realist semantics, according to which the world determines what language must be like; if objects are assigned to the method of representation, we get a nominalist semantics. For the purposes of this dissertation, I will interpret the Tractatus in a realist fashion. Whether or not this is the correct reading of the Tractatus, it is a view that Wittgenstein held later and which was also held by Russell and Frege. Moreover, Wittgenstein explicitly attacks Frege's realism in the Investigations, and Wittgenstein's later view of language

is proposed as an alternative to classical realist semantics and can be better understood when contrasted with it.⁸⁴

There are many varieties of "realism." Scholastic philosophers contrast realism with nominalism. In their earlier writings, Moore and Russell contrasted their realism with Bradley's idealism. I have been contrasting Wittgenstein's early realism with his later view of language. Before discussing his later view, however, I should clarify my own use of "realism." I follow Dummett, Baker, et al., in characterizing realism as the belief that (1) the meaning of the statements of a certain class (e.g., mathematical statements or statements about the physical world or the psychological states of others) is determined by their truth-conditions and (2) the truth of such statements is determined by a reality existing independently of us and our means of knowing it.⁸⁵

At first glance, disputes between realists and anti-realists appear to turn either on whether entities of a particular type exist or on whether they are among the ultimate constituents of reality. From the latter, it is apparent that anti-realism often takes the form of reductionism: entities of a particular type are not among the ultimate constituents of reality because they can be reduced to entities of another type. Opposition to mentalism, for example, often takes

⁸⁴Cf. Colin Phillips, "Constructivism and Epistemology," Philosophy, LIII (Jan. 1978), 53-54. For a list of nominalist interpretations, see Hacker, Insight and Illusion, p. 42 n. 4.

⁸⁵Michael Dummett, "Realism" in his Truth and Other Enigmas (Cambridge: Harvard University Press, 1978), pp. 145-165; Gordon Baker, "Criteria: A New Foundation for Semantics," Ratio, XVI (Dec. 1974), 156-189; Richardson, The Grammar of Justification, pp. 33-35; Phillips, "Constructivism and Epistemology," 52-53.

the form of behaviorism--the view that mental states, events, and processes can be reduced to behavior or neural processes. But anti-realism need not be reductionist. In mathematics, for example, anti-realism takes the form of constructivism. According to mathematical constructivism, "an explanation of the meaning of a mathematical statement . . . consists in . . . a stipulation of what is to count as a proof of it."⁸⁶ Constructivists do not attempt to reduce mathematical statements to such stipulations because a proof cannot be understood apart from the conclusion it proves.

Although disputes between realists and anti-realists appear to revolve around questions of existence, they actually turn on questions of truth and meaning. For realists, the meaning of a statement of a certain class is explained in terms of truth-conditions: for each statement there exists in reality something in virtue of which it is either true or false. A statement's meaning, therefore, is tied not to the kind of evidence we can have for it, but to states of affairs independent of our possession of evidence for them. An example of explaining the meaning of statements in terms of truth and falsity is the truth-table explanation of sentential connectives. For constructivists, on the other hand, the meaning of a statement of a certain class is explained in terms of justification conditions: for each statement there are conditions under which we are justified in asserting it.⁸⁷ A statement's meaning, therefore, is tied directly to what we count as evidence for it. An example of

⁸⁶Dummett, "Realism," p. 153.

⁸⁷Michael Dummett, "Wittgenstein's Philosophy of Mathematics," in Pitcher, Collection, p. 421, and his "Realism," p. 146.

explaining meaning in terms of justification-conditions can be taken from Heyting's Introduction to Intuitionism. There, the sense of "&" is given by stipulating that " $p \& q$ " can be asserted if and only if both " p " and " q " can be asserted, and the sense of " \vee " is given by stipulating that " $p \vee q$ " can be asserted if and only if at least one of " p " and " q " can be asserted.⁸⁸

Realists and constructivists disagree not only on the kind of meaning possessed by statements of a certain class, but also on the notion of truth appropriate to such statements. For realists, the truth of a statement consists in the existence of something in reality, whether or not we can have evidence for it. For constructivists, on the other hand, the truth of a statement consists only in the existence of adequate evidence for its assertion.

I call "realist" any view that (1) explains meaning in terms of truth-conditions and (2) makes truth independent of what humans can know to be true. I use "classical realist semantics" to designate the view of Frege and the early Wittgenstein, which includes not only the aforementioned realist theses, but also (3) the logical law of excluded middle (A or not A), (4) the semantic principle of bivalence (every statement is either true or false), and (5) the thesis that sense must be determinate. In this chapter, I argue that the later Wittgenstein held a constructivist view of language according to which we determine the meanings of words by fixing criteria for their correct (i.e., justified) application.

⁸⁸ A. Heyting, Intuitionism: An Introduction, third edition (Amsterdam: North-Holland, 1971), p. 98.

In asserting that "we fix criteria," Wittgenstein is attacking both the sophisticated classical realist semantics of the philosopher and the naive belief of the ordinary person that facts justify language. Like the philosopher, the ordinary person is tempted to think that grammar is a projection of reality. For when asked to justify grammar, he is driven to refer to putative facts about the world. When asked why we speak of four primary colors, for example, he responds, "Because there really are four primary colours" (Z. #331); he thinks our color concepts are justified because they reflect the way the world really is. Against this view that the world determines what language must be like, Wittgenstein asserts his constructivist view that we determine what language must be like by fixing criteria which justify a term's ascription.

The inspiration for the later Wittgenstein's constructivism came from the Dutch mathematician L. E. J. Brouwer.⁸⁹ On 10 March 1928, Brouwer, the main proponent of the intuitionist philosophy of mathematics, came to Vienna to give a lecture entitled "Mathematics, Science and Language." After extreme persuasion, Wittgenstein attended the lecture with Feigl and Waismann. Feigl reports that Wittgenstein left the lecture in a state of extreme excitement: "he became extremely voluble and began sketching ideas that were the beginnings of his later writings. That evening marked the return of Wittgenstein to strong

⁸⁹ Cf. Richardson, The Grammar of Justification, p. 18; Hacker, Insight and Illusion, p. 99, and Baker, "A New Foundation for Semantics," 172-173.

philosophical interests and activities."⁹⁰ Wittgenstein afterwards gave careful consideration to Brouwer's work on mathematics and allegedly held private discussions with him.⁹¹

In his lecture, Brouwer argued that mathematics, science, and language are the primary ways in which human beings impose order and intelligibility upon nature; they are the manifestations of our basic will to live. To express this will, impose it on others, and secure their cooperation, human beings develop systems of communication. In a primitive society, the transmission of will is effected by gestures and cries. In a developed society, it is effected by more complicated systems of communication involving complex grammatical rules. Brouwer emphasized the importance of understanding that organized language is the product of the free activity of human beings, that it is conventionally adopted as a social instrument for the communication of thoughts, has no absolute foundation, and may be modified or rejected at any time.⁹² It is no surprise that someone like Wittgenstein, who found inspiration and insight in Schopenhauer, would find Brouwer's emphasis on the primacy of the will appealing.

⁹⁰ H. Feigl as quoted in George Pitcher, The Philosophy of Wittgenstein (Englewood Cliffs, New Jersey: Prentice-Hall, 1964), p. 8n.

⁹¹ Baker, "A New Foundation for Semantics," 173.

⁹² L.E.J. Brouwer, "Mathematik, Wissenschaft und Sprache," Monatshefte für Mathematik und Physik, XXXVI (1929), 153-164. Summarized in Hacker, Insight and Illusion, pp. 100-102 and in Richardson, The Grammar of Justification, pp. 18-22.

Brouwer's view that mathematics and logic have no absolute foundation contradicted the fundamental doctrines of Wittgenstein's Tractatus, according to which mathematics and logic are reflections of the structure of reality. Convinced that Brouwer was on the right track, Wittgenstein gradually abandoned his earlier realist semantics for a constructivist theory of language. In his later writings, Wittgenstein uses a range of closely related concepts to convey his constructivism. In the Investigations, he writes that the task of philosophy is to eradicate various philosophical misconceptions (including those of the Tractatus) by giving us a "perspicuous representation" of our grammar (or way of looking at reality or "form of representation") (P.I. #122). He then insists that the concept of a perspicuous representation is of fundamental significance and adds that philosophy can describe language, but cannot give it a foundation (P.I. #122-124). In the Investigations, the notion of a method of representation is equated with that of a language-game (P.I. #50). And in On Certainty, the notion of a world-picture includes the idea of a form of representation, but encompasses more than just our concepts and their logical relations. Like Kant, the later Wittgenstein maintained that we constitute or construct the world. The form-imposing mechanism, however, is not the individual transcendental ego, but the social consciousness expressed in our common language. Concept formation is a part of this constitution; the formation of a concept guides our experience into particular channels, determining how we see things (R.F.M. p. 123) and constituting the limits of the empirical (R.F.M. p. 121). These limits

are neither unguaranteed assumptions, nor intuited truths, but our ways of acting (R.F.M. p. 176).

Moreover, it is not only our concepts that constitute our world-picture, guiding our experience into channels; it is also constituted by a wide range of unassailable and entrenched empirical propositions, which I referred to in chapter III as "propositions of the form of empirical propositions."

. . .the river-bed of thoughts may shift. But I distinguish between the movement of the waters on the river-bed and the shift of the bed itself . . . And the bank of the river consists partly of hard rock, subject to no alteration or only an imperceptible one, partly of sand which now in one place now in another gets washed away or deposited. (O.C. #97-99)

The waters of the river are our empirical propositions, some of which--e.g., Moorean propositions and propositions that state the general circumstances relevant to the use of criterially governed concepts--fall into a special category:

It might be imagined that some propositions of the form of empirical propositions, were hardened and functioned as channels for such empirical propositions as were not hardened but fluid; and that this relation altered with time, in that fluid propositions hardened and hardened ones became fluid. (O.C. #96).⁹³

The banks of the river are our form of representation. Here, too, there are variations. Some concepts remain stable, others change.

Wittgenstein sometimes expresses his constructivist account of propositional sense by speaking of criteria or grounds which "we fix." In the Blue Book, he explicitly states that

⁹³The implications of the existence of such propositions for logic and epistemology were never fully worked out by Wittgenstein. I will try to draw out some of these implications in succeeding sections.

"words have those meanings that we have given them" (Bl.B. p. 27); and in the Investigations, he asks what criterion of identity we fix for the occurrence of certain psychological experiences (P.I. #322). We can understand Wittgenstein's view that criteria are things that we fix by comparing it with Brouwer's view that the existence of a language depends upon some amount of agreement among the members of a community with regard to the conventions that constitute the language (P.I. #240-241). Like Brouwer, the later Wittgenstein held that the possibility of a language-game requires agreement in certain fundamental judgements (P.I. #242). If someone is to play the language-game with the word "red," for example, the possibility of this will depend upon his own and other people's reactions: "they must call the same things 'red'" (N.f.L. p. 287).

Thus, in talking about criteria's being things that we fix, Wittgenstein is asserting that our use of criterially governed concepts is based upon a consensus in judgements. This idea of a consensus is an essential part of the idea of a technique of use; one human being could not employ a technique just once in his life (R.F.M. II, #66-67 & P.I. #199). Understanding these connections between Wittgenstein's uses of "criterion," "consensus," and "technique" can help us to understand both Wittgenstein's notion of a criterion of correct use and the private-language argument in which Wittgenstein uses that notion. As I stated in chapter I, Wittgenstein argues that a logically private language is impossible. Associating "S" with my sensation and intending to call it "S" in the future establishes no criterion

for the correct use of "S" because such an intention presupposes the existence of a technique for using a sign like "S" as the name of a private object. There can be no such technique, however, for it would require a consensus, and no consensus is possible here. If my private object is as private as it is supposed to be, then even I cannot tell when it is present again. According to Wittgenstein, the technique of use of a term depends on the term's user or users generally agreeing in their judgements about whether the term applies in various cases. And the technique of a term's use is the criterion for its correct use; what counts as a correct use of a term is determined by established techniques, or ways of doing things (P.I. #199). A person uses a term correctly if he uses it in the established way. But if that is so, then there can be no logically private language; for in such a language, the established techniques that determine correct use would necessarily be lacking because there neither is nor can be a technique for applying a term to a logically private object.

According to Wittgenstein, then, the criterion for the correct use of a term is the established way of using it. And the established way of applying psychological terms to others is on the basis of behavioral criteria. Wittgenstein's view that these behavioral criteria are conventional is the view that our use of psychological terms is founded on our agreeing in taking certain types of behavior to be characteristic expressions of certain psychological states, processes, events, etc. Wittgenstein thinks that our use of a word like "toothache" requires us to agree

in taking certain types of behavior, such as moaning and holding one's cheek, to be characteristic expressions of toothache. He also thinks that our agreeing in taking certain types of behavior to be characteristic expressions of certain psychological states depends upon the existence of certain very general facts of nature. Thus, our agreeing in taking bodily appearance, voice, characteristic habits, etc., as criteria for personal identity is based on the fact that a person's bodily appearance, voice, characteristic habits, etc., change only slowly and within a narrow range. And our agreeing in taking moaning and holding one's cheek as criteria for having a toothache is based on the fact that people generally moan and hold their cheeks when they have toothaches. Thus, for Wittgenstein, certain empirical regularities lie behind our criterial rules. Criterial rules do not assert that these regularities obtain. There are no criterial rules of the form "B (a certain type of behavior) generally accompanies P (a particular psychological state, event, or process)," and we do not treat criterial rules as factual assertions. It is true, however, that criterial rules have useful applications only because such regularities obtain.

Wittgenstein's view of the relationship between relevant general facts and criterial rules is notoriously obscure, but may be clarified by comparison with his remarks on the relation between various facts and calculating. In Remarks on the Foundations of Mathematics, Wittgenstein writes that the possibility of calculating depends on various facts. For example, our memories are generally good enough for us not to take numbers twice or

leave any out in counting up to 12 (R.F.M. V, 26); in correlating two groups of 5 strokes, we practically always can do so without remainder (R.F.M. I, 64); someone who has learned to calculate never continues to get different results, in a given multiplication, from what is in the arithmetic books (R.F.M. I, 112). These are examples of what Wittgenstein calls the "physical," "psychological," and "physiological" facts that make activities such as calculating possible. We might have lacked these and other simple abilities; and if so, there would have been no such thing as calculating (R.F.M. V,I, 15).

But now it sounds as if Wittgenstein is saying that the world determines our criteria, and that is realism. The later Wittgenstein is no realist; he holds that while certain general facts of nature enable a society to make a certain choice of concepts and techniques, they do not justify that choice. Although the fact that people generally moan and hold their cheeks when they have toothaches enables us to use moaning and holding the cheek as criteria for someone's having a toothache, it does not justify that use.

According to Wittgenstein, nothing justifies our use of certain expressions in connection with certain criteria. Brouwer insisted that language is conventionally adopted as a social instrument and has no absolute foundation,⁹⁴ and Wittgenstein

⁹⁴Brouwer, "Mathematik, Wissenschaft und Sprache" and "Consciousness, Philosophy, and Mathematics," Proceedings of the Tenth International Congress of Philosophy (Amsterdam, 1940), 1235-1249.

adopted this view. He held that criteria are conventional not only in that they are based on a consensus in judgements, but also in that they cannot be justified. For Wittenstein, criteria represent the limit of justification: they justify, but cannot themselves be justified. If you were asked how you knew that someone had a toothache, for example, you might answer that you knew that he had a toothache because he was holding his cheek; but if you were then asked how you know that someone has a toothache when he holds his cheek, you might answer, "I say, he has a toothache when he holds his cheek because I hold my cheek when I have toothache" (Bl.B. p. 24). But what if you were then asked, "And why do you suppose that toothache corresponds to his holding his cheek just because your toothache corresponds to your holding your cheek?" (Bl.B. p. 24) According to Wittgenstein, you would be at a loss to answer this question because when you said you knew that he had a toothache because he was holding his cheek, you struck rock bottom, that is, you came down to conventions (Bl.B. p. 24). For Wittgenstein, criteria are the ultimate court of appeal in deciding the questions to which they are relevant; when we appeal to criteria, we have reached the limits of justification, or as Wittgenstein puts it, we have reached bedrock and our spade is turned. And we will be inclined to say: "This is simply what we do" (P.I. #217).⁹⁵

⁹⁵The groundlessness of criteria will be discussed more fully in chapter V.

According to Wittgenstein, then, criteria are conventional in that our use of criterially governed concepts is based on a consensus in judgements. We agree in taking certain types of behavior as characteristic expressions of certain psychological states, events, and processes. Criteria are also conventional in that they have no absolute foundation.

Quine argues that language cannot be conventional because we cannot conceive of human beings who have no language convening to agree on the conventions of language.⁹⁶ But it seems to me that Wittgenstein's contention that our consensus in judgements develops from and is similar to primitive, prelinguistic behavior obviates Quine's objection to conventional theories of language.

When Wittgenstein speaks of "agreeing in judgements," he is referring not to our agreeing that certain propositions are true, but to the agreement in our actions and reactions.

"So you are saying that human agreement decides what is true and what is false?"--It is what human beings say that is true and false; and they agree in the language they use. That is not agreement in opinions but in form of life. (P.I. #241)

Wittgenstein holds that human beings naturally behave in certain ways when they are in certain states. A person who has a toothache, for example, naturally moans and holds his cheek. He also quite naturally wants to have his pain alleviated and to be comforted until it is alleviated. Others naturally respond by trying to alleviate his toothache and by comforting him until it is alleviated. In calling such behavior "natural" and

⁹⁶W. V. O. Quine, "Forward," David Lewis, Convention: A Philosophical Study (Cambridge: Harvard University Press, 1969), p. xi.

"primitive," Wittgenstein emphasizes that it is instinctive, unlearned, and prelinguistic. In a primitive society, toothache would be expressed and responded to with groans and gestures; in our society, it is expressed and responded to with groans, gestures, and language. For Wittgenstein, our sophisticated language-game with the word "toothache" "is but an auxiliary to and extension of" primitive groans and gestures (R.P.P. I, #151; N.f.L. pp. 293-301; Z. #540-545; P.I. #244).

Indeed, Wittgenstein holds that in our society, very young children who have learned neither to suppress nor to feign feelings instinctively express their toothaches by moaning and holding their cheeks. When they do those things, adults teach them to replace their primitive behavior with the words "I have a toothache." In learning this linguistic expression, the child learns "new pain-behavior" (P.I. #244). According to Wittgenstein, this learned verbal expression of pain is no more due to thinking or reasoning than is the primitive behavior of moaning and holding the cheek. Wittgenstein's view that certain linguistic expressions replace primitive behavior applies not only to the sentences we use to talk about our own psychological states, but also to some of the sentences we use to talk about the psychological states of others. Not only "I have a toothache," but also "He has a toothache" replace instinctive behavior. In Zettel, Wittgenstein remarks that "it is a primitive reaction to tend to treat the part that hurts when someone else is in pain" (Z. #540). He then goes on to say:

Being sure that someone is in pain, doubting whether he is, and so on, are so many natural

instinctive, kinds of relationship towards other human beings, and our language is merely an auxiliary to, and further extension of, this behavior. Our language-game is an extension of primitive behavior. (For our language-game is behavior.) (Instinct.) (Z. #545)

This view is also stated in more general terms in Culture and Value:

The origin and the primitive form of the language game is a reaction; only from this can more complicated forms develop.

Language--I want to say-- is a refinement, 'in the beginning was the deed'. (C.&V. p. 31)

Wittgenstein says, in these passages, that language not only replaces prelinguistic behavior, but serves as an extension or refinement of it. Saying "I have a toothache" can simply take the place of moaning and holding one's cheek. But saying "I still have a toothache, but it does not hurt as much as it did this morning," or "I have a slight toothache, but I am not in enough pain to go to the dentist" provide finer descriptions than could be conveyed by primitive behavior.

Thus, Wittgenstein holds that our natural behavior lies at the foundation of the language-game in the sense that our language-game with the word "toothache," for example, is based on both the primitive actions of moaning and holding the cheek, and our primitive reactions to such behavior. But, for Wittgenstein, there is another more striking sense in which our natural behavior lies at the bottom of the language-game--our whole complex employment of language embodies something resembling instinct. The most obvious example of this instinctive element in our use of language is the way in which, when given a few examples of

a word's correct use, people spontaneously continue to use the word in the same way. This agreement in reactions cannot be given any rational foundation, which is why it is called "instinctive." It lies beyond being justified or unjustified; it is, as it were, something animal (O.C. #358-359). It is instinctive behavior like a squirrel's gathering nuts or a dog's chasing a squirrel. "The squirrel does not infer by induction that it is going to need stores next winter as well" (O.C. #287), and we do not say that someone who moans and holds his cheek has a toothache because by analogy with our own case, we believe that he, too, is experiencing pain" (Z. #542). Thus, for Wittgenstein, no convening is required to establish the conventions of our language because they are based not on reason, but on instinct. They are not the product of a reasoned decision, but an extension and refinement of our natural actions and reactions.

If we combine Wittgenstein's view that criteria are things that we fix with his identification of criteria with the characteristic features of a family resemblance term's referents, we can solve the problem of wide-open texture, according to which Wittgenstein's doctrine of family resemblances cannot serve as an alternative to essentialism unless a way can be found to determine which resemblances are family resemblances. Inasmuch as the rules of grammar are determined by human convention, family resemblances are simply those characteristic features conventionally taken to justify a concept's ascription. Thus, to find out which resemblances are family resemblances, we need only look to see which features are actually used. It is not the world, but we who

determine which similarities are important to us; we do not construct a concept wherever we see a similarity (Z. #380). We can imagine people not drawing distinctions where we do, not having the concepts of modesty and swaggering, e.g., even though there are modest persons and swaggerers. Something must hang on a difference to make it worth picking out (Z. #378). There are at least as many similarities between street-fighting and boxing as there are between boxing and chess. But while we think the similarities between boxing and chess are important enough to warrant classifying both as games, we think the differences between street-fighting and boxing are important enough to warrant not classifying street-fighting as a game. Family resemblances are the features deemed important enough to be fixed as the criteria that justify the ascription of our concepts.

Although family-resemblance concepts do not have a wide-open texture, they do have "blurred edges" (P.I. #71). Interpreters who try to present formulations of family-resemblance concepts that completely determine whether each object falls under the concept fail because Wittgenstein holds that family-resemblance concepts are vague: they have no strict boundary because human convention has not drawn such a boundary (Bl.B. p. 19; P.I. #68-69, 120). This view is a criticism of the classical realist thesis that sense is determinate, i.e., "the sense of a sentence must be sharp, with the consequence that it is definitely true or definitely false in any possible world."⁹⁷ The determinacy

⁹⁷Baker, "A New Foundation for Semantics," 165.

thesis is embodied in Frege's principle of the completeness of definition, according to which the definition of a concept "must be complete," i.e. it must unambiguously determine whether each object falls under the concept. In a famous simile, Frege compares the extension of a concept to the demarcation of an area on a plane by a closed curve, implying that just as an area must have a sharp boundary, for an area without a sharp boundary-line is not an area at all, so a concept must have a complete definition, for without a complete definition it is not a concept at all.⁹⁸

Wittgenstein held the determinacy thesis in the Tractatus, but rejected it in the Investigations, where he cites Frege explicitly and criticizes several versions of the principle (P.I. #71, 76-77, 88, 99-100). Wittgenstein denies that an area with vague boundaries is no area, saying that a gesture in a certain direction may convey the point even if it does not demarcate a strictly circumscribed area. In some circumstances, inexactitude may be what is required (P.I. #71). Frege's principle is like "saying that the light of my reading lamp is no real light because it has no sharp boundary" (Bl.B. p. 27). Wittgenstein also argues that if we refrain from imposing a crystalline purity upon ordinary language and look at the actual use of a word like "game," we will see that "the extension of the concept is not . . . everywhere circumscribed by rules" (P.I. #68). Since the ordinary use of a family-resemblance term may have no

⁹⁸ Gottlob Frege, Grundgesetze der Arithmetik, Vol. II, #56 in Translations from the Philosophical Writings of Gottlob Frege, edited by Peter Geach and Max Black, second edition (Oxford: Basil Blackwell, 1960), p. 159.

sharp boundary, any definition we give such a term will be somewhat arbitrary. We may draw a sharp boundary for a particular purpose, but such a boundary is entirely relative to the purpose and says nothing essential about the concept it surrounds (P.I. #68-69, 76, 82, 499).

Solving the problem of wide-open texture completes my interpretation of Wittgenstein's notion of family resemblances. But my interpretation of his criterial relationship has yet to be completed, for I have yet to determine whether Canfield's criticism of the noninductive-evidence view is warranted. I shall now investigate both Wittgenstein's and the noninductivists' notions of necessity and possibility and then argue that Canfield's criticism fails because he misinterprets the notions of possibility and necessity held by proponents of the noninductive-evidence view.

Necessity and Possibility

In the Tractatus, Wittgenstein asserted that all necessity is logical necessity and explained logical necessity in terms of the notion of a tautology, i.e. a proposition that is true for all truth-values of its constituent propositions and true under all truth conditions as revealed by truth tables. On his early view, although any language must, when properly analyzed, show every essential feature of the form of the world, logical necessity is neither conventional nor relative to a particular language. Logical necessity and possibility are explained in terms of objects, facts, and possible worlds and the semantics of logically proper names, elementary propositions, and truth-

functional composition. Language can represent possible states of affairs because it shares a common structure with the world. The concatenation of names in a proposition depicts a possible combination of objects in a state of affairs; a set of maximal consistent states of affairs is a possible world, and the set of all possible combinations of objects fixes the limits of all possible worlds. Thus, the early Wittgenstein's criterion for necessary truths was roughly equivalent to one of Leibniz's criteria for truths of reason--that they are true in all possible worlds. His notion of logical possibility was equivalent to freedom from contradiction.

When Wittgenstein rejected the classical realist semantics of the Tractatus, he also rejected his former absolutist notion of necessity, replacing it with a conventionalist notion according to which necessity is simply a matter of the linguistic rules the community chooses to lay down. In Remarks on the Foundations of Mathematics, he writes that the logical must "corresponds to a track" that we "lay down in language" and indicates our inability or refusal to depart from a concept (R.F.M. p. 121). In the Investigations: "The only correlate in language to an intrinsic necessity is an arbitrary rule. It is the only thing which one can milk out of this intrinsic necessity into a proposition" (P.I. #372). The inexorability of the laws of logic is, therefore, our inexorability in applying them (R.F.M. p. 36). Thus, for the later Wittgenstein, essences are merely reflections of our grammar or form of representation;

they are made rather than found (Z.#55; P.I. #371-373). All talk of essences, therefore, is actually talk of linguistic conventions, and what seems to be the depth of essences is actually the depth of our need for such conventions (R.F.M. p. 23).

Whereas the early Wittgenstein held a notion of absolutely necessary truth, according to which necessary connections exist in the nature of things and must be reflected in every language, the later Wittgenstein and his constructivist interpreters hold a notion of relatively necessary truth, according to which necessary truths derive their necessity from the fact that their truth is necessary for our words and concepts to function as they do. On their notion, necessity is merely a function of conceptual connections and is, therefore, relative to the system of concepts in operation and dependent upon that system's existence. This constructivist notion of necessity can be clarified by appealing to the notion of constitutive rules.

For constructivists, grammar is like a game in that it is a rule-governed activity the end of which is intelligible only by reference to the rules, which are, in this sense, constitutive. The goal of chess--i.e., checkmating your opponent--is intelligible only by reference to the rules of chess. The relativity of this kind of rule-governed activity can be contrasted with rule-governed activities the ends of which are not determined by their rules. In cooking, for example, the end is something not determined by the instructions in the cook book, viz. good tasting food. Wittgenstein writes in Zettel that he does not call cookery rules arbitrary because "cookery" is defined by its end. Speaking, however, is not defined by its end; "the use of language is in

a certain sense autonomous" (Z. #320). The rules of grammar are not like the rules of cooking, but like the rules of chess:

You cook badly if you are guided in your cooking by rules other than the right ones; but if you follow other rules than those of chess you are playing another game; and if you follow grammatical rules other than such-and-such ones, that does not mean you say something wrong, no, you are speaking of something else. (Z. #320)

Whereas the early Wittgenstein held the rules of language to be like the rules of cooking in that if someone does not follow them, he says something wrong because his speech fails to reflect the structure of reality; the later Wittgenstein holds the rules of language to be like the rules of chess in that if someone does not follow them, he does not say something wrong--he is simply playing a different language-game.

For the later Wittgenstein, necessity and possibility are relative to grammar in two ways. First, they are relative to a particular grammar as opposed to other grammars. Both what is necessary for us and what is possible for us are determined by our particular grammar. In a different form of representation, what is necessary in our grammar might not be necessary, and what is possible in our grammar might not be possible. Second, necessity and possibility are determined by grammar not by reality. At no point does grammar come into conflict with reality.

. . . as long as one remains within the domain of the True-False-Game a change in grammar can only take us from one such game to another, but never from something true to something false. On the other hand, if we step outside the domain of these games, then we no longer call it 'language' and 'grammar', and so again we come into no contradiction with reality. (P.G. #68)

The relativity of the later Wittgenstein's constructivist notions of necessity and possibility is illuminated by his discussion of different methods of measurement:

How should we get into conflict with truth, if our footrules were made of very soft rubber instead of wood and steel?--"Well, we shouldn't get to know the correct measurement of the table."--You mean: we should not get, or could not be sure of getting, that measurement which we get with our rigid rulers. So if you had measured the table with the elastic rulers and said it measured five feet by our usual way of measuring, you would be wrong; but if you say that it measured five feet by your way of measuring, that is correct.--"But surely that isn't measuring at all!--It is similar to our measuring and capable, in certain circumstances, of fulfilling 'practical purposes'. (A shopkeeper might use it to treat different customers differently.) (R.F.M. I, 5)

The two different methods of measurement in this example are analogous to two different grammars. Just as there is no one absolutely correct method of measurement for all purposes, but different methods for different practical purposes, so there is no one absolutely correct grammar for all imaginable environments or interests, but different grammars for different environments or interests. Moreover, just as different methods of measurement use different types of rulers, so different grammars use different criteria. And as you would fail if you tried to prove the new method of measurement incorrect by using one of the elastic rulers and reporting your results in terms of the old method of measurement, so Canfield fails when he tries to disprove the constructivists' formulation of our criterial rules by appealing to an imaginary world with different general facts of nature.

Canfield attempts to refute the noninductive-evidence view by imagining a world in which it would be false that someone's earning a rating of over 2,500 is evidence for his being a grandmaster:

. . . a possible world that is like ours in all respects concerning chess, including the existence of a numerical rating system of exactly our kind, but where a strange physical law holds. The law is that the moment a chess master achieves a rating of above 2,500 he loses all his acquired knowledge of the chess opening, of basic middle game strategies and tactics, and of the principles governing end game play. He also loses all the benefits in experience of his years of chess competition. He reverts, in fact, to the state of a novice. . . Here it is known that to achieve a rating of over 2,500 inevitably causes one to be a mere novice. . . That one has achieved this rating is not evidence that one is a grandmaster; on the contrary, it is conclusive evidence that one is not a master chess player at all.⁹⁹

On absolutist notions of necessity and possibility, Canfield's criticism might work.¹⁰⁰ But several proponents of the non-inductive-evidence view (including Hacker, whom Canfield cites) explicitly state that their interpretation is constructivist, so we must see how Canfield's criticism fares on constructivist interpretations of necessity and possibility.¹⁰¹ Canfield tries

⁹⁹Canfield, "Criteria and Rules of Language," 85-86.

¹⁰⁰Except, perhaps, for the remark that in this possible world attaining a rating of 2,500 is "conclusive evidence that one is not a master chess player at all." I think Wittgenstein would say that attaining a rating of 2,500 would be a symptom that one was not a master chess player; how one actually played after achieving this rating would be the criterion or conclusive evidence that one was not a master chess player.

¹⁰¹Hacker, Baker, Richardson, and Phillips explicitly state that their interpretations are constructivist; Kenny, Lycan, Chihara and Fodor do not.

to show that it cannot be necessarily true that "A rating of over 2,500 is evidence for being a grandmaster" by imagining a possible world in which that statement is false. But his attempt fails because it ignores that for constructivists, necessity is determined by convention and relative to a particular grammar. If for us it is a necessary truth that someone who attains a rating of over 2,500 is a grandmaster, that necessary truth is a convention that we have laid down. As such, it rests upon certain general facts of nature and can function only in a world in which those facts obtain. In the world Canfield imagines, those facts do not obtain, and our grammatical rules cannot function significantly. For although constructivists do not hold that the relevant general facts of nature justify our concepts, they do hold that the relevant general facts of nature are related to our concepts in an important way: they are the necessary background for their significant functioning.

In other words, Canfield's criticism fails because his imaginary world would not be considered a "possible world" by constructivists. For them, "it is logically possible that P" expresses in the material mode the fact that "P" can be asserted with justification and, therefore, makes sense in a given language. Moreover, what makes sense in a given language depends upon the conventions of that language, and those conventions presuppose the existence of certain general facts of nature. Thus, when asked to imagine a possible world in which certain things are true (or false), constructivists must imagine worlds in which the general facts of nature on which our grammar is based hold.

This seems absurd since constructivists can imagine the world Canfield describes, but it is not absurd because

their ability to imagine such a world does not make it "a possible world in which it makes sense to speak of someone's earning a rating of over 2,500 being evidence for his being a grandmaster" any more than our ability to have certain images when we hear the words "It is five o'clock on the sun" or "The stove is in pain" makes those expressions meaningful (P.I. #350-355). As Wittgenstein puts it, "there is a lack of clarity about the role of imaginability in our investigations. Namely, about the extent to which it ensures that a proposition makes sense" (P.I. #395). Canfield wrongly assumes that since he can imagine a certain world, such a world is possible. But, constructivists like Wittgenstein and proponents of the noninductive-evidence view would say that in the world Canfield imagines, the proposition "A rating of over 2,500 is evidence for being a grandmaster" makes no sense and, therefore, cannot be false.

There seems to be something wrong here. We have seen that the later Wittgenstein himself imagines worlds in which the general facts of nature that serve as the foundation for our grammar do not hold, so it would seem that Canfield could criticize constructivism by appealing to the possibility of the world he describes. He cannot do so, however, because when Wittgenstein imagines such a world, he is not describing a "possible world in which certain things are true (or false)."

He is imagining different general facts of nature to make a different grammar intelligible to us, and a different grammar would have different conventions and, hence, different possibilities and different necessities.

Thus, although Canfield has done a better job of characterizing the relationship between criteria and general facts of nature than most of the proponents of the noninductive-evidence view,¹⁰² his criticism of that view fails because it misinterprets the notions of necessity and possibility espoused by the view's proponents.¹⁰³

Although noninductivists do not explicitly include the general circumstances in their formulations of the criterial relationship, the role of such circumstances is embodied in their notion of necessity. Indeed, Hacker (whom Canfield explicitly mentions) discusses the role of general circumstances in the criterial relationship. When restated to include the role of general circumstances, the noninductive-evidence view

¹⁰²Kenny and Lycan never mention the relationship between criteria and general facts of nature. Hacker's discussion of the relationship is the best.

¹⁰³It is surprising that Canfield misinterprets the notions of necessity and possibility espoused by proponents of the noninductive-evidence view, for in "Anthropological Science Fiction and Logical Necessity" [*Canadian Journal of Philosophy*, IV (March 1975), 467-479], Canfield himself attributes constructivism to the later Wittgenstein. Before reading "Anthropological Science Fiction and Logical Necessity," I thought that Wittgenstein's discussion of imaginary cases might have contributed to Canfield's confusion in that Canfield might have wrongly assumed that in discussing such cases Wittgenstein was imagining "possible worlds" in which certain things were true, when he is actually imagining 'worlds' in which certain general facts of nature are different to make us realize the possibility of different grammars. Upon reading "Anthropological Science Fiction and Logical Necessity," however, I discovered that Canfield was not confused in this way. Indeed, he emphasizes the fact that Wittgenstein often does a kind of "anthropological science fiction" in which he invents tribes with new ways of behaving, new customs, and new uses of language against the background of a changed environment (469).

reads: given certain general circumstances, if B is a criterion of P in situations of type S, then it is a necessary truth that B shows us that P in normal situations of type S. When this modified version of the noninductive-evidence view is compared to the modified version of Canfield's view--in certain general circumstances, it is a rule of language that in certain particular circumstances, B is a criterion of P, and in such circumstances, someone's exhibiting B entails his being in P provided that those circumstances are normal--the only differences between them that can be seen is that between a "rule of language" and a "necessary truth" and that between "B's entailing P" and "B's showing us that P." Since both Canfield and the constructivist proponents of the noninductive-evidence view hold that rules of language are necessary truths,¹⁰⁴ there is no significant difference between Canfield's characterizing criterial relations as linguistic rules and noninductivists' characterizing them as necessary truths. Thus, the only significant difference between the modified version of Canfield's view and the noninductive-evidence view is that between "B's entailing P" and "B's showing us that P."

The difference between "B's entailing P" and "B's showing us that P" appears to embody the important distinction between truth-conditions and justification-conditions and, hence, the extremely significant difference between a realist interpretation of the criterial relationship and a constructivist interpretation of it. But one natural reading of "B shows us that P" is

¹⁰⁴Canfield, Language and World, p. 5.

"B entails P," and on this reading, the two views appear to merge. Indeed, in his new book, Canfield himself points out that on the most plausible interpretation of the noninductive-evidence view, there is no distinction between it and his own view.¹⁰⁵ But how can this be when Canfield interprets the criterial relation as a truth-condition, whereas noninductivists interpret it as a justification-condition? Although this assimilation of the noninductive-evidence view to the modified version of Canfield's view seems to obliterate the distinction between realism and constructivism, it does not do so. For although the distinction between realism and constructivism can be characterized in terms of the difference between explaining meaning in terms of truth-conditions and explaining meaning in terms of justification-conditions, it can also be characterized in terms of different views of truth. For realists, a statement's truth is determined by a reality existing independently of us and our means of knowing it. For constructivists, on the other hand, a statement's truth consists in the existence of adequate evidence for its assertion and depends upon our capacity for knowledge. Consequently, both realists and constructivists might explain a statement's meaning by giving its 'truth-conditions'. But since their notions of truth are different, their 'truth-conditions' will be different kinds of things.

Although Canfield formulates Wittgenstein's criterial relationship as a complicated truth-condition, his view is every

¹⁰⁵Ibid., pp. 85-90.

bit as constructivist as the noninductive-evidence view; for he holds a constructivist view of truth.¹⁰⁶ But if the notion of truth is so central to the realist-constructivist distinction, it certainly seems that I should have examined Wittgenstein's remarks on truth earlier in this chapter. I did not do so because those remarks shed little light on Wittgenstein's constructivism.

Wittgenstein himself never displayed any interest in the question "What makes statements of such-and-such a kind true?" His usual reaction to such a question was to dismiss it by appealing to the redundancy theory of truth, according to which "It is true that Jones has a toothache" says no more than "Jones has a toothache," and what makes "Jones has a toothache" true is Jones's having a toothache (Bl.B. pp. 30-38; P.I. #134-136, 444).¹⁰⁷ Wittgenstein does not hold that third-person psychological statements like "Jones has a toothache" have no truth-conditions. He holds that they have no independent truth-conditions that can be stated in a non-trivial way. And he denies that understanding the meaning of such a statement consists in recognizing the conditions for such a statement to be true independently of our means of knowing it. For him, understanding the meaning of such statements consists in recognizing the conditions under which we are justified in making such statements. We may call those conditions truth-conditions, but if we do, then we must explain truth in terms of justified assertibility. Such an explanation indicates the close

¹⁰⁶Ibid., p. 41 and his "Anthropological Science Fiction."

¹⁰⁷This position was first sketched by F. P. Ramsey in "Facts and Propositions," (1927), included in R. B. Braithwaite, editor, The Foundations of Mathematics (London: 1931), pp. 142-143.

connection between constructivist semantics and constructivist epistemology, which I shall investigate in chapter V. Before conducting that investigation, however, I wish to show how a constructivist interpretation of Wittgenstein's criterial relationship clarifies his position on the connections between criterial change and conceptual change.

Conceptual Change

It is clear from Wittgenstein's repeated discussions of the fluctuation between criteria and symptoms that Wittgenstein recognizes that language changes. Yet some interpreters talk as if they think he denies this:

The Wittgenstein Thesis can't explain why all criteria and concepts of the system are not fixed absolutely by conventions; it doesn't take into account the fact that some adjustments must occasionally occur in the system in order for its elements to play their explanatory role.¹⁰⁸

As Wennerberg, Hacker, and others point out, Wittgenstein clearly recognized the dynamic nature of language. In the Investigations, he writes:

But how many kinds of sentence are there? Say assertion, question, and command?--There are countless kinds: countless different kinds of use of what we call "symbols," "words," "sentences". And this multiplicity is not something fixed, given once for all; but new types of language, new language-games, as we may say, come into existence, and others become obsolete and get forgotten. (We can get a rough picture of this from the changes in mathematics.) (P.I. #23)

¹⁰⁸ Janna L. Thompson, "About Criteria," Ratio, XIII (1971), 42.

In Zettel, he writes: "it is a fact of experience that human beings alter their concepts, exchange them for others when they learn new facts; when in this way what was formerly important to them becomes unimportant, and vice versa (Z. #352). And in On Certainty, he compares our grammar to a river bank consisting partly of hard rock, which is subject only to an imperceptible alteration, and partly of sand, which is washed from one place to another (O.C. #99).

It is clear that Wittgenstein recognized the dynamic nature of our language, but unclear how he characterized its changes. For him, when a term's criteria change (by addition, subtraction or replacement), does the term's meaning change? Has a new concept been created? Wennerberg's answer is that according to Wittgenstein, when a family-resemblance term's criteria change (by addition, subtraction, or replacement), the term's meaning does not change, and no new concept has been created.¹⁰⁹ Malcolm's answer is that for Wittgenstein, every change in criteria (whether by addition, subtraction, or replacement) is a change in meaning and creates a new concept. Kenny's and Garver's answer is that, for Wittgenstein, the term's meaning remains the same as long as its old criteria are retained. If an old criterion is subtracted, then--regardless of whether a new criterion replaces it--the term's meaning changes and a

¹⁰⁹In "The Concept of Family Resemblance," Wennerberg attributes to Wittgenstein a notion of dynamical vagueness, according to which a given family-resemblance concept's characteristic features, or criteria, are not fixed for all time, but can change over time (by addition, subtraction, or replacement).

new concept has been created. But as long as the old criteria are retained, the concept remains unchanged even if new criteria are added.

Kenny argues that his interpretation is preferable to Malcolm's because it is immune to Putnam's criticisms. To understand this controversy, then, we must examine Malcolm's interpretation, Putnam's criticisms, and Kenny's compromise.

In Dreaming, Malcolm uses what he believes to be Wittgenstein's notion of a criterion to argue that if psychologists begin using rapid eye movements (REM) as the criterion of the occurrence of dreams, then a new concept will have been created that only remotely resembles our ordinary concept of dreaming, the sole criterion of which is the subjective report of the dreamer. In the fifties, psychological tests, such as the one conducted by Dement and Kleitman, established that there is a high correlation between the subjective reports of the dreamer and REM. Since REM is a phenomenon that has been found through experience to correspond to the phenomenon that is our criterion for dreaming, it is what Wittgenstein would call a symptom of dreaming. Now suppose that a psychologist awakens one of his subjects during a REM period and asks her whether she was dreaming, and she replies that she was not. But, the psychologist reasons that since REM was present, the subject must have been dreaming and simply forgot the dream when questioned. This psychologist is using not the subject's report but REM as the criterion of dreaming. And in doing so, he has abandoned the ordinary criterion of dreaming and has made what was a mere symptom of dreaming into

its criterion. According to Malcolm, this psychologist has created a new concept of dreaming that only remotely resembles our ordinary concept of dreaming and that does not even deserve to be called by the same name. He has allowed his desire to know more about dreaming to lead him to so transform the concept of dreaming that his subsequent discoveries are not even discoveries about dreaming.¹¹⁰

In "Dreaming and 'Depth Grammar'," Hilary Putnam attacks Malcolm's view of the nature of criterial change, arguing that in science, many criterial changes are unaccompanied by conceptual changes. Putnam appeals to the historical development of the term "acid." In the eighteenth century, the criteria for a substance's being an acid were being soluble in water, having a sour taste when in a water solution, and turning litmus paper red. Today, chemists theoretically define an acid in terms of the notion of a "proton-donor." Now, on Malcolm's view, since the criteria for something's being an acid have changed, the meaning of the term "acid" has changed; and when contemporary chemists talk about acids, they are not talking about the same chemical substances that eighteenth-century chemists were talking about when they talked about acids. Putnam, however, insists that any contemporary chemist would say that he is talking about the same chemical substances that eighteenth-century chemists were. Indeed, according to Putnam, it was only in a very restricted sense

¹¹⁰ Norman Malcolm, Dreaming (London: Routledge and Kegan Paul, 1957), pp. 70-82.

that the meaning of the term "acid" changed when the new theoretical definition replaced the eighteenth-century chemists' crude criteria. It changed in that the theoretical definition changed, but it remained the same in that both the new theoretical definition and the old criteria were supposed to pick out the same 'natural kind' of chemical, namely, acids. Putnam admits that we could learn to say, with Malcolm, that the concept changes when the criteria change. But he thinks this way of characterizing criterial change is misleading because it obscures just what ought to be stressed, viz., that changes in the criteria for something reflect the fact that we are gaining more and more knowledge about that thing.¹¹¹ Thus, while Malcolm holds that all criterial changes necessarily result in both conceptual changes and referential changes, Putnam contends that although criterial changes may result in minor conceptual modifications, they do not result in referential changes; and that is what is important.

Kenny argues that Shoemaker's notion of a criterion enables us to make a distinction that can be used to interpret Wittgenstein's notion of a criterion in a way that resolves the Malcolm-Putnam controversy.¹¹² For on Shoemaker's notion, although it

¹¹¹Hilary Putnam, "Dreaming and 'Depth Grammar'," in Analytic Philosophy (Second Series), edited by R. J. Butler (Oxford: Basil Blackwell, 1965), pp. 218-221.

¹¹²Kenny, "Criterion," 260-261. Cf. Newton Garver, Grammar and Criteria (Ph. D. dissertation. Cornell University, 1965), p. 250.

is impossible to subtract one of the criteria for a concept without changing the concept, it is possible to add criteria without doing so. Taking Malcolm's example, if new criteria were added to the concept of dreaming so that the dreamer's waking reports ceased to be evidence for his dreaming or not dreaming, then the concept of dreaming clearly would have changed. But if new criteria were added in such a way that the dreamer's waking reports continued to be noninductive evidence for his dreaming or not dreaming, then the concept of dreaming would not have changed.¹¹³

Does Wittgenstein think that a concept's criteria are fixed for all time so that the concept automatically changes when a new criterion is added or an old one subtracted, or does he think that criteria can be added to or perhaps subtracted from a concept without that concept's changing? The passages that seem most relevant here are those in which Wittgenstein talks about the fluctuation between criteria and symptoms. When introducing the distinction between criteria and symptoms in the Blue Book, Wittgenstein writes that in most cases if someone asked us which phenomenon was the defining criterion and which was the symptom, we would be unable to answer except by making an arbitrary ad hoc decision. For although it may be practical to define a word by making one phenomenon its defining criterion, we could easily be persuaded to define the word by making another phenomenon

¹¹³Kenny, "Criterion," 260-261.

that was a symptom according to our first use the defining criterion. Indeed, doctors 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 unclarity. For we generally were not taught to, and do not, "use language according to strict rules" (Bl.B. p. 25). In discussing the criterion-symptom distinction in the Investigations, Wittgenstein writes that "the fluctuation in grammar between criteria and symptoms makes it look as if there were nothing at all but symptoms" (P.I. #354). Earlier in that same work he remarks that scientific definitions fluctuate so that what counts as "an observed concomitant" or symptom of a phenomenon today will be used to define it tomorrow (P.I. #79). The most significant discussion of the fluctuation between criteria and symptoms occurs in Zettel:

Nothing is commoner than for the meaning of an expression to oscillate, for a phenomenon to be regarded sometimes as a symptom, sometimes as a criterion, of a state of affairs. And mostly in such a case the shift of meaning is not noted. In science it is usual to make phenomena that allow of exact measurement into defining criteria for an expression; and then one is inclined to think that now the proper meaning has been found. Innumerable confusions have arisen in this way.

There are for example degrees of pleasure, but it is stupid to speak of a measurement of pleasure. It is true that in certain cases a measurable phenomenon occupies the place previously occupied by a nonmeasurable one. Then the word designating this place changes its meaning, and its old meaning has become more or less obsolete. (Z. #438; emphasis mine)

In this passage, Wittgenstein attacks a realist account of the development of scientific techniques, terms, and theories and

indicates that the fluctuation between criteria and symptoms in our use of scientific terms involves a continual "shift of meaning." He states that in science it is common to make phenomena that can be precisely measured into the defining criteria for an expression. And when this is done, we think that the proper meaning of the expression has been discovered. But our thinking is confused. A measurable quantity may have been discovered, e.g., temperature; and a new technique of measurement invented, e.g., thermometric readings. But, no absolutely correct meaning has been discovered.

Wittgenstein clearly held that replacing one criterion with another constitutes a change in meaning and creates a new concept. He writes that if a measurable phenomenon replaces a non-measurable one as a criterion for the application of the relevant term, the term in question changes its meaning (Z. #428). In the Investigations, he writes that when a concept presents serious philosophical puzzles, as does the concept of the dawning of an aspect, this cannot be resolved by introducing a new, e.g. physiological, criterion for seeing because replacing the old psychological concept with a new physiological one screens the old problem from view rather than solving it (P.I. p. 212).

He also thought that merely adding or subtracting a criterion constitutes a change in meaning and creates a new concept. He writes that when a phenomenon is regarded "sometimes as a symptom" and "sometimes as a criterion," this is a "shift of meaning" (Z. #438), and that any change of rules for the use of a term constitutes a change of meaning (P.I. p. 147 n.).

On the issue of the relationship between criterial change and conceptual change, Wittgenstein clearly adopts the constructivist position that any change in criteria constitutes a change in meaning. Although several proponents of the non-inductive-evidence view¹¹⁴ interpret Wittgenstein's position on this issue as I have, Kenny, an early proponent of the noninductive-evidence view, argues that new criteria can be added without a change in concept once we adopt Shoemaker's test for criterionhood, according to which we can determine whether something is a criterion for the truth of certain judgements by asking whether it is conceivable that we could "discover empirically that it is not, or has ceased to be, evidence in favor of the truth of such judgements."¹¹⁵ I shall argue that Shoemaker's test for criterionhood is compatible with Wittgenstein's position on the conceivability of empirically discovering a criterial breakdown, but should not be taken to mean that new criteria can be added without a conceptual change.

In opposition to Shoemaker, B. A. O. Williams argues that we might discover empirically that something has ceased to be a criterion. He bases his argument on the premises: (1) criteria do not logically entail what they are criteria of and (2) criteria

¹¹⁴Hacker, Insight and Illusion, pp. 294-295;
Baker, "A New Foundation for Semantics," 182-183.

¹¹⁵Shoemaker, Self-Knowledge and Self-Identity,
p. 4.

rest on certain general facts.¹¹⁶ Wittgenstein held (1) and (2), so it is tempting to think that he, too, held that criteriological breakdowns can be empirically discovered.

Earlier in this chapter, I mentioned Wittgenstein's imagining worlds in which the inhabitants' criteria are different from ours. But in such cases, the difference in criteria is not something discovered, it is something stipulated in describing the imaginary world.¹¹⁷ All the same, Wittgenstein's characterizations of these imaginary worlds give us clues to his position on the conceivability of empirically discovering a criterial breakdown. In the Investigations, he writes that one way to make intelligible the formation of concepts very different from ours is by imagining certain very general facts of nature to be different from what we are used to, for then the formation of concepts different from the usual ones becomes intelligible to us (P.I. p. 230). In Zettel, he writes that a very different education might be "the foundation for quite different concepts." We might imagine, for example, that the children of a certain tribe were brought up "to give no expression of feeling of any kind." Such a tribe's life would be very different from ours; they would not be interested in what interests us. We can

¹¹⁶Williams, "Knowledge and Meaning in the Philosophy of Mind," 224-225, 227.

¹¹⁷Compare Kripke's argument that a possible world is not something very remote observed with difficulty through a telescope, but rather something that we create or stipulate by formulating a description of it. Saul A. Kripke, "Naming and Necessity," in Semantics of Natural Language, eds. Donald Davidson and Gilbert Harman (New York: Humanities Press, 1972), p. 267.

imagine such a tribe having concepts very different from ours. "In fact, this is the only way in which essentially different concepts are imaginable" (Z. #383-388; emphasis mine). These remarks in Zettel seem incompatible with Wittgenstein's earlier remark that imagining different general facts of nature is a way of making different concepts intelligible to us. But, despite appearances to the contrary, the two sets of remarks are compatible; for the general facts of nature place limits on what education, interests, and forms of life are possible: very different general facts of nature would make our education, interests, and forms of life impossible. If our natural pain-behavior were quite different, for example, we would have a different form of life; our interests would be different, and we could not be educated about pain as we now are.

The converse, however, does not hold. Given the same general facts of nature, we might be educated differently and have different forms of life and different interests. Wittgenstein imagines this sort of situation in describing a tribe of people with our natural pain behavior who teach their children to give no expression of feeling, who do not speak of pain, and who ridicule or punish anyone who complains (Z. #383). For Wittgenstein, imagining a different education, different interests, and different forms of life is the only way in which essentially different concepts are imaginable both because as children we are trained to use concepts, and essentially different concepts would require a different training, and because our interests determine our concepts.

We do not construct a concept whenever we see a similarity; rather, we construct a concept when a similarity is important to us. A tribe might, for example, have two concepts akin to our concept of pain, one being applied where there is visible damage and the other for things like stomachache. This conceptual difference could be explained by noting that in this particular tribe, the distinction between external damage, which arouses pity, and internal pain, where anyone who complains is mocked, is important (Z. #376-380). Or we could imagine a game similar to chess in which players who lose their pawns lose the game, and our lack of interest in such a game could be explained by noting that we find it "uninteresting or stupid or too complicated or something of the kind" (P.I. #136). Thus, Wittgenstein clearly thinks that our particular system of concepts depends on (1) certain general facts of nature, (2) a particular training, (3) our interests, and (4) our forms of life.¹¹⁸

In Zettel, Wittgenstein writes that "it is easy to imagine and work out in full detail events which, if they actually came about, would throw us out in all our judgements" (Z. #393). One would think that since Wittgenstein holds that we can easily imagine such momentous events, he certainly ought to hold that we can conceive of empirically discovering a single criterial breakdown. Can't we empirically discover that someone's holding his cheek is no longer a criterion for his having a toothache by

¹¹⁸Edwin Harris discusses requirements similar to these in "The Problem of Induction in the Later Wittgenstein," South-western Journal of Philosophy, III (Spring 1972), 135-146. He calls them "logically necessary conditions for a 'good' language game."

noticing that whenever people moan and say "I have a toothache," they do not hold their cheeks? We can discover empirically that holding the cheek has ceased to accompany moaning and saying, "I have a toothache," but it would be misleading to say that in doing so, we have empirically discovered that someone's holding his cheek has ceased to be a criterion for his having a toothache. Speaking strictly, what we have empirically discovered is that one of the general facts of human nature on which our use of the term "toothache" is based has changed. This factual change, however, does not automatically abolish the criterial rule connecting someone's holding his cheek with his having a toothache, for we could retain the criterial rule despite the change in facts. As Wittgenstein puts it, we could stay in the saddle no matter how much the facts bucked (O.C. #615-620). Of course, if there was no horse beneath the saddle, we would not go far. And if people never held their cheeks when they had toothaches, the criterial rule connecting a person's holding his cheek with his having a toothache would have no use. Nonetheless, the choice is ours. Consequently, we cannot empirically discover that something has ceased to be a criterion because the facts do not determine what will count as our criteria, we do. We do not discover that something has ceased to be a criterion, we decide, on the basis of our interests and experiences, that something will no longer count as a criterion for us.¹¹⁹

¹¹⁹Someone may discover that at a certain time a group of language users decided that something would no longer count as a criterion. But this clearly is not what is meant by "empirically discovering a criterial breakdown."

Do I want to say, then, that certain facts are favorable to the formation of certain concepts; or again unfavorable? And does experience teach us this? It is a fact of experience that human beings alter their concepts, exchange them for others when they learn new facts; when in this way what was formerly important to them becomes unimportant, and vice versa. (Z. #352).

For Wittgenstein, the empirical discovery of a criterial breakdown is inconceivable if by this we mean the discovery of facts that force us to stop using a certain criterion. No factual discovery can force us to stop using a criterion. But this is not to say that there is no connection between our factual experiences and our criteria; for although factual discoveries never force us to change our criteria, it is a fact of experience that in the light of factual discoveries, we often decide that our interests would be better served by different concepts and so abandon our old criteria for new ones.

Thus, Shoemaker's test for criterionhood, according to which B is not a criterion of P if it is conceivable that we could empirically discover that B has ceased to be evidence for P, is compatible with Wittgenstein's remarks. Moreover, although Shoemaker's test allows criteria to be added without changing a concept, it does not require that they be, and it is quite compatible with a constructivist interpretation which makes every change in criteria a change in concept.

I have argued that Malcolm's principle--"to add a criterion to a concept is inso facto to change that concept (to change the meaning of the relevant expression), and/or to

introduce a new concept in its stead"¹²⁰--accurately represents Wittgenstein's view of the relationship between criteria change and conceptual change. Lycan argues that Malcolm's principle makes much of standard scientific procedure illegitimate and should, therefore, be rejected.¹²¹ I find Lycan's criticism unwarranted, for Wittgensteinian constructivism is not a criticism of standard scientific procedure. Like realism, it is an account, explanation, or description of what scientists are doing when they follow standard scientific procedure. Just as the later Wittgenstein seeks not to reform ordinary language or mathematics, but to describe them in such a way that certain confusions will be eliminated (P.I. #90, 109-124), so he seeks not to reform scientific procedure, but to describe it so as to remove certain philosophical confusions that have arisen from our misunderstanding it.

Malcolm's attack on Dement and Kleitman's research, on the other hand, is quite un-Wittgensteinian. Malcolm implies that their research was completely worthless, but I do not think Wittgenstein would have found it so. I think he would have said that Dement and Kleitman had discovered interesting and significant facts about the common accompaniments of dreaming, but had solved

¹²⁰ Norman Malcolm, "Knowledge of Other Minds," in his Knowledge and Certainty (Englewood Cliffs, New Jersey: Prentice-Hall, 1963), pp. 131-132 as summarized in Lycan, "Noninductive Evidence," 120.

¹²¹ Lycan, "Noninductive Evidence," 120.

none of the philosophical puzzles about dreaming--which is as it should be, for Wittgenstein holds that it is not the scientists' job to solve philosophical puzzles.

Malcolm charges Dement and Kleitman with unwittingly creating a completely new concept of dreaming and investigating it while believing and claiming that they are investigating "dreaming," in the ordinary sense of the word. But, Malcolm exaggerates the extent of Dement and Kleitman's deviation from the ordinary concept of dreaming. R.E.M. is what Wittgenstein would call a symptom of dreaming, for it has been found through experience to correspond with the criterion of dreaming, viz. the dreamer's subjective report. Wittgenstein holds that symptoms, like criteria, can be used to justify knowledge claims. And Dement and Kleitman used R.E.M. to justify their claims that their subjects were dreaming. So what is Malcolm objecting to? He is objecting to Dement and Kleitman's allowing R.E.M. to take precedence over subjective dream reports. But this might very well be one of those situations in which, as Wittgenstein puts it, in the light of new factual discoveries, scientists decide that it would be in their interest to replace an ordinary, imprecise concept with a more rigorous, quantitative one (Z. #438 & 352). Indeed, one could plausibly contend that rather than ignoring the criterial status of subjective dream reports, Dement and Kleitman acknowledge it in establishing that R.E.M. is evidence for dreaming by a series of experiments in which the subjects are awakened during R.E.M. and asked whether they have been dreaming. Dement and Kleitman use R.E.M. as evidence for dreaming only after

establishing the existence of a correlation between R.E.M. and subjective dream reports, and such a procedure presupposes that dream reports are reliable evidence for dreaming.¹²² Malcolm is apparently critical of Dement and Kleitman's allowing their empirical discoveries to lead them to change the concept of dreaming. But I think Wittgenstein would say that given their scientific interest in formulating a physiological theory, it is only natural and perfectly appropriate for them to introduce such a conceptual change. Indeed, according to constructivism, science progresses not by collecting more and more information about the true nature of reality, but by replacing old conceptual schemes with new ones.¹²³

Thus, although Malcolm is correct in maintaining that a change in Wittgensteinian criteria is ipso facto a change in meaning and concept, his use of this principle in Dreaming is often un-Wittgensteinian. Thus, many of the criticisms of that work do not apply to Wittgenstein's notion of a criterion.

The bulk of Putnam's criticisms, however, do apply to Wittgenstein's notion, so I shall state them and sketch a possible Wittgensteinian response to them. Ziff, Putnam, Chihara, and Fodor advocate an empirical realist analysis of psychological concepts

¹²²Cf. E. M. Curley, "Dreaming and Conceptual Revision," Australasian Journal of Philosophy, LIII (Aug. 1975), 138; Thompson, "About Criteria," 37.

¹²³Cf. Thomas S. Kuhn, The Structure of Scientific Revolutions, 2nd ed. (Chicago: The University of Chicago Press, 1982).

according to which there are no crieterial connections between psychological states and behavior; rather, the belief that other people experience mental states, events, and processes is the best explanation of their behavior. On this analysis, in learning what psychological terms such as "pain" and "dream" mean, we do not learn "crieterial connections which map these terms severally into characteristic patterns of behavior." Rather, we form "complex conceptual connections which interrelate a wide variety of mental states." And we appeal to such a "conceptual system" when we try to explain someone's behavior by reference to his motives, intentions, beliefs, and so on.¹²⁴ These contemporary empirical realists regard our ordinary explanations of someone's behavior in terms of anger, lust, sadness, etc., as a kind of "psychological theory."¹²⁵ For them, the 'inference' to the mental states of others is an inference from the premise that a certain hypothesis would provide the best explanation for the evidence to the conclusion that that hypothesis is true.¹²⁶

At first glance, the contemporary empirical realists' analysis of psychological concepts might appear to be compatible with Wittgenstein's: a Wittgensteinian might say that inferences

¹²⁴Chihara and Fodor, "Operationalism and Ordinary Language," 413.

¹²⁵Hilary Putnam, "Other Minds," in Logic and Art: Essays in Honor of Nelson Goodman, edited by R. Rudner and I. Scheffler (New York: Bobbs-Merrill Company, Inc., 1972), pp. 82-88. Putnam clarifies a position presented by Paul Ziff in "The Simplicity of Other Minds," Journal of Philosophy, LXII (1965), 575-584.

¹²⁶Gilbert Harman, "The Inference to the Best Explanation," Philosophical Review, LXXXIV (1965), 38-39.

based on criterial rules are inferences to the best explanation. But any appearance of compatibility vanishes when we realize that contemporary empirical realists are using "explanation" in a theoretical sense. For them, saying "On the basis of this, he must have a toothache," is like saying "On the basis of this, there must be subatomic particles. Moreover, on their view, a theoretical inference that someone has a toothache is to be understood not as an analogical inference based on an inductively established correlation between my own behavior and toothache, but as a theoretical inference to the best explanation. What makes "He has a toothache," the best explanation of a man's moaning and holding his cheek is its role in an entire conceptual system that provides the best explanation of psychological phenomena. But if that system is just our ordinary system of psychological concepts, then contemporary empirical realists may seem to differ from Wittgenstein only in their refusal to use the word "criterion." The difference, however, is much greater than this, for realists hold that our ordinary system of psychological concepts is in many ways like a scientific theory: it supposedly "fits the facts" best and may be overthrown by future experience. As we know, Wittgenstein thinks it is wrong to believe that we have the conceptual system we do because it "fits the facts" best or that our conceptual system may be overthrown by future experience.

Hyde criticizes the contemporary empirical realists' analysis of psychological concepts, arguing that if the entire framework of mental predicates and their various relations to behavior were theoretical, there would have to be alternatives to it which

have been rejected as inferior.¹²⁷ Putnam seems willing to admit that there are no alternatives now:

To put it crudely, the "inference" to the mental states of others is what has been called an "inference to the best explanation"--or it would be, except that it isn't an inference! (It isn't an inference because, to repeat, no alternative is or ever has been in the field.)¹²⁸

But, someday there might be an alternative theory in which mental states are replaced by neurological events, and on that day wouldn't we be forced to choose between the new theory and our ordinary psychological concepts? And doesn't the possibility of such an alternative theory support empirical realism? Some argue that once the requisite discoveries are made and the theory formulated, all of our ordinary psychological terms will have to be replaced by neurological terms.¹²⁹ Then, instead of using behavior as evidence for what others think and feel, we will rely on something like brain-state readings. Such a position is attractive to empirical realists who compare our ordinary system of psychological concepts to a scientific theory.

¹²⁷Hyde, Wittgenstein and Criteria, pp. 97-106 and his "Empirical Realism and Other Minds," Philosophical Investigations, II (Spring 1979), 13-21.

¹²⁸Putnam, "Other Minds," p. 86. Putnam writes that Plantinga's alternative that there is a demon who has created all beings other than me without minds, and who causes them to act exactly as if they had minds to fool me is "too silly to consider" (p. 98).

¹²⁹Keith Campbell gave such an argument in "Abstract Particulars," a paper presented at the University of Pittsburgh Philosophy Department Colloquium on 6 November 1981.

I think Wittgenstein would argue that contemporary empirical realism is mistaken in thinking that our ordinary system of psychological concepts gets its strength from empirical confirmation. He holds that we do not have our system of psychological concepts because it fits the facts best nor would we abandon it because we had discovered another that fit them better. Our ordinary system of psychological concepts gets its strength from its central role in our lives. It is built upon our primitive actions and reactions and used constantly in our social interactions. We cannot choose to disbelieve it the way certain fundamentalists choose not to believe in evolution. And that is not because there is no alternative, like creationism, in the field. Empirical realists are correct in claiming that our ordinary language-game with psychological concepts is, in a manner of speaking, the only game in town. But while someone might choose not to play the only game in town, we cannot choose not to play the ordinary language-games with our psychological concepts as someone with a free evening might choose not to play solitaire even though he knew the game and had a deck of cards. We play our ordinary psychological language-games almost constantly whether we like them or not. To stop playing them, one would have to commit suicide, have his speech center removed, be brainwashed, undergo something akin to a religious conversion, or do something equally drastic. Our ordinary system of psychological concepts is not a theory formulated by scientists to account for certain phenomena. It is less a construction of human reason than an extension of human passion and instinct. It is grounded not in

thought, but in action. It is, as it were, something animal (P.I. #415; O.C. #402; Z. #545). Consequently, any philosophical theory that compares our ordinary system of psychological concepts to a scientific theory is highly suspect.

CHAPTER V

CRITERIA AND CERTAINTY

We have seen that Wittgenstein's view of the relationship between a criterion and what it is a criterion of is problematic, for although it is clear that Wittgenstein thinks a criterion provides evidence for what it is a criterion of, it is unclear what sort of evidence he thinks it provides. A Wittgensteinian criterion does not logically entail that for which it is a criterion, nor does it provide the simple sort of inductive evidence provided by symptoms. Moreover, although Wittgenstein introduces his distinction between a criterion and a symptom with an example from medical diagnosis, his distinction is significantly different from that used in actual medical diagnoses.

Examining Wittgenstein's notions of a criterion and a symptom left his view of the criterial relationship obscure, so I subsequently examined the connections between his notion of a criterion and his views on family resemblances, circumstances, and meaning. Finding that criteria are connected to family resemblances in that the criteria for a family-resemblance term are identical to the characteristic features that form the family resemblances among the term's referents, I concluded that, for Wittgenstein, a general term may have several criteria which need be neither necessary nor

sufficient conditions for its application and which may be mutually exclusive and overlap and criss-cross.

According to Wittgenstein, the criteria for a family-resemblance term are insufficient conditions for its application because the circumstances in which they obtain also affect the term's application. Thus, the criterial relationship is actually a three-term relation involving not only criteria and what they are criteria of, but also the circumstances in which criteria obtain. These circumstances are of two kinds: the relevant general facts of nature, which provide the necessary background for the significant functioning of our criteria, and the circumstances of the particular case, which determine both whether behavior functions as a criterion for someone's being in a certain psychological state and whether behavior that is so functioning shows us that the person exhibiting it is in the state in question. Thus, if we let B stand for a particular type of behavior and P for a certain psychological state, event, or process, Wittgenstein's criterial relationship states: in certain general circumstances, it is a rule of language that in certain particular circumstances, B is a criterion of P and that in normal particular circumstances, someone's exhibiting criteria of P shows us that he is in P.

Wittgenstein's criterial rules of language are conventional in that they are based on a consensus in judgements. We agree in taking certain natural types of behavior as criteria for certain psychological states, events, and processes. Our agreement developed from and depends upon primitive reactions. Like them, it can be given no absolute rational foundation.

Our criterial rules of language are necessary, but their necessity is relative to our particular grammar. Indeed, both what is logically necessary for us and what is logically possible for us are determined by our particular grammar and presuppose the existence of certain general facts. Moreover, Wittgenstein holds the constructivist view that the meaning of a term is given by stating its justification conditions or criteria and that every change in criteria constitutes a change in meaning or concept.

I shall conclude my investigation of Wittgenstein's criterial relationship by showing how my constructivist interpretation clarifies and is clarified by Wittgenstein's views on certain fundamental issues in epistemology and the philosophy of mind.

We have seen that my interpretation makes Wittgenstein's criterial relationship inconsistent with realist semantics, according to which the meaning of sentences about physical objects, the psychological states of others, the past, etc., can be established by stating conditions for their truth which are independent of what counts as evidence for them or of whether they can be known to be true. Also a doctrine of traditional, post-Cartesian, foundationalist epistemology, this thesis enables the skeptic to argue, "I know what sentences about the psychological states of others mean; what I want to know is what evidence, if any, we have that they are true." Traditional epistemology attempts to respond to such skeptical challenges. Wittgenstein's criterial relationship, on the other hand, links semantics and epistemology, thus undermining the skeptic's assumption that meaning and truth are independent of knowledge. To understand fully Wittgenstein's response to the skeptic, we must examine his notions of knowledge and certainty.

Knowledge

In On Certainty, Wittgenstein argues that our ordinary use of the word "know"--and, therefore, our ordinary concept of knowledge--has the following features: (1) knowledge claims are justifiable; (2) whatever can be known can be doubted, and (3) knowledge claims can be mistaken. I shall discuss these features in turn.

(1) Ordinarily, if someone knows something, he can say how he knows it (O.C. #550). If someone says he knows that Mont Blanc is 4000 meters high, for example, and we ask how he knows, he can answer by saying that he looked up the height of Mont Blanc on a map. Under normal circumstances, we would then grant that he knew the height of Mont Blanc (O.C. #170). Similarly, if I say I know that Jones has a toothache, then, as I mentioned in chapter I, if asked how I know, I can respond either by appealing to symptoms--"He has a red patch on his cheek"--or by appealing to criteria--"He is moaning and holding his cheek" (Bl.B. pp. 24-25). Consequently, instead of stating Wittgenstein's criterial relationship in terms of criteria of P showing us that P, I could state it in terms of criteria of P justifying our assertion, or claim to know, that P. So modified, my interpretation states Wittgenstein's view of the criterial relationship as follows: in certain general circumstances, it is a rule of language that in certain particular circumstances someone's exhibiting B is a criterion for his being in P and that in normal particular circumstances, someone's exhibiting criteria of P justifies our assertion, or claim to know, that he is in P. This formulation reveals the intimate connection between criteria, justification, and knowledge inherent in the criterial relationship.

Wittgenstein supports his view that knowledge claims are justifiable by discussing particular cases in which we accompany our knowledge claims with an explanation of how we know:

Someone with bad sight asks me: "do you believe that the thing we can see there is a tree?" I reply "I know it is; I can see it clearly and am familiar with it".-
 -A: "Is N. N. at home?"--I: "Yesterday he was--I know he was; I spoke to him."--A: "Do you know or only believe that this part of the house is built on later than the rest?"--
 -I: "I know it is; I asked so and so about it." (O.C. #483)

In all of these cases someone says "I know" and mentions how he knows, or at least can do so (O.C. #484). If, on the other hand, someone says "I know" and does not mention how he knows, he leaves himself open to the question "How do you know?" If he cannot answer it, he does not know what he claims to know. Moreover, if he wants to demonstrate his knowledge, he cannot simply make a knowledge claim; he must justify it. If someone wants to assure me that he knows what is going on at a certain place, for example, he will have to give me grounds which show that he is in a position to know what is going on there. If he cannot give any grounds, then I may reply that he does not know what is going on there at all. I may insist that if he cannot justify his knowledge claim, then he should not make it (O.C. #438).

To further emphasize the intimate connection between knowledge claims and justification, Wittgenstein points out that in many cases the expression "I know" is simply a shorthand way of assuring someone that I have done the proper checking--that I have the proper grounds for my statement (O.C. #18). To illustrate this use of "I know," Wittgenstein invents the following primitive language game:

A language game: bringing building stones, reporting the number of available stones. The number is sometimes estimated, sometimes established by counting. Then the question arises "Do you believe there are as many stones as that?", and the answer "I know there are--I've just counted them." But here the "I know" could be dropped. If, however, there are several ways of finding something out for sure, like counting, weighing, measuring the stack, then the statement "I know" can take the place of mentioning how I know. (O.C. #564)

Wittgenstein insists that like the speakers of this primitive language, we use "I know" as shorthand for mentioning how we know. We make a knowledge claim only when we are ready to justify it. If someone cannot justify his knowledge claim, then he should not have made it. Furthermore, if someone makes a knowledge claim that cannot be justified, what he claims to know is not the sort of thing that can be known, and he cannot know it (O.C. #18, 91, 243, 432, 550, 564).

Wittgenstein uses his notion of a criterion to distinguish the knowable from the unknowable. Since Jones's moaning and holding his cheek serve as criteria by which I can justify my claim to know that Jones has a toothache, I can know that Jones has a toothache. But there is nothing that could serve as a criterion by which I could justify my claim to know that I have a toothache. Indeed, it makes no sense to speak of my coming to know or finding out that I have a toothache. Consequently, I cannot sensibly claim to know that I have a toothache. This does not mean I cannot rightfully say that I have a toothache; it means that there is nothing to which I could appeal to justify my assertion. I cannot appeal to some private mental state because, as the private-language argument demonstrates, such a state cannot justify an assertion. Consequently, since I cannot say how I know that I have a toothache, I should not say that I know that I have one.

(2) Ordinarily, if "I know that X" makes sense, then "I do not know whether X" and "I doubt that X" make sense, too.

Wittgenstein writes that if anatomy were under discussion, it would be perfectly correct for him to say, "I know that twelve pairs of nerves lead from the brain" (O.C. #621). For although he has never seen the twelve pairs of nerves, he has gotten his information from a reliable source (such as an anatomy textbook), and he has no reason to doubt it. Nonetheless, a man engaged in discussion with him might remark, "I doubt that twelve pairs of nerves lead from the brain; I believe I read that there are only ten pairs of nerves leading from the brain." And if another man were then asked for his opinion on the matter, he might reply, "I don't know whether twelve pairs of nerves lead from the brain; I know very little about anatomy." In this situation, the statements "I know that twelve pairs of nerves lead from the brain," "I don't know whether twelve pairs of nerves lead from the brain" and "I doubt that twelve pairs of nerves lead from the brain" all make sense. That twelve pairs of nerves lead from the brain can be either known, or not known, or doubted. It makes sense to say either that one knows it, or that one does not know it, or that one doubts it. Wittgenstein insists that this is true of most, if not all, of the things that we ordinarily claim to know. I can either know, not know, or doubt that someone else has a toothache. I can neither know, nor not know, nor doubt that I have one (except perhaps as a joke) (P.I. #246).

Of course, it is tempting to think that whatever is really known cannot be doubted. We want to say, "If I really know, then I cannot be wrong." "For 'I know' seems to describe a state of affairs which guarantees what is known, guarantees it as a fact" (O.C. #12). Wittgenstein thinks there is some truth in this: I cannot say, "I know that X, but I doubt it." If I have any reason to doubt that X,

then I should not claim to know it. Skeptics insist that since I might always turn out to be wrong about physical objects, the psychological states of others, the past, etc., I can never really know about such things and should never make knowledge claims about them. Wittgenstein, on the other hand, insists that the inherent fallibility of human beings about such things is no reason for my doubting that I know a particular thing. The fact that human beings have been wrong about such things in the past and will be wrong about them in the future is no more a ground for my assuming that I am wrong now than the fact that machines have broken down in the past and will break down in the future is a reason for my assuming that the typewriter I am now using is breaking down. Doubting something simply because humans are inherently fallible about it is as senseless as taking a typewriter to be repaired simply because machines are inherently liable to break down. Thus, when Wittgenstein asserts that whatever can be known can be doubted, he is saying neither that we can never really know anything because knowledge claims are always open to doubt, nor that it makes sense for someone to say, "I know that X, but I doubt it," but that the statement "I know that X" makes sense, or has a use, only if the statement "I doubt that X" makes sense, or has a use, too (O. C. #58, 121). Accordingly, "I know that Jones has a toothache" and "I doubt that Jones has a toothache" both make sense, whereas "I doubt that I have a toothache" and "I know that I have a toothache" are nonsense; they have no role in our language.

(3) Knowledge claims can be mistaken. Wittgenstein claims to know that twelve pairs of nerves lead from the brain because he has gotten his information from a reliable source and has no reason to

doubt it. But suppose the man who thought ten pairs of nerves led from the brain returned to his home and found, in the most recent edition of a neurological journal, an article stating that only ten pairs of nerves lead from the brain. Were Wittgenstein to read this article, he might say, "I thought I knew that twelve pairs of nerves led from the brain, but I was wrong." According to Wittgenstein, like "I know that twelve pairs of nerves lead from the brain," our other ordinary knowledge claims can be mistaken. I can claim to know that Jones has a toothache, but I may be mistaken because he might be skillfully feigning having a toothache.

Of course, we are tempted to think that if we really know something, then we cannot be mistaken about it. If, for example, I really knew that Jones had a toothache because I could feel his toothache as I feel mine, then I could not be mistaken about his having a toothache, and I would really know it. According to Wittgenstein, there is some truth in this: I cannot say, "I know that Jones has a toothache, but I may be mistaken." If I have any reason to think that I may be mistaken, then I should not say I know. But human fallibility is no more a reason to think that my particular knowledge claim may be mistaken than the inherent liability of machines to break down is a reason to think that my typewriter may break down. A claim to know something is not a claim to be infallible about it. We sometimes say "I thought I knew, but I was wrong." Thus, "I know that X" has a use only if "I thought I knew that X, but I was mistaken" has one (O.C. #12). I can know that someone else has a toothache, and I can be mistaken about another's having a toothache. But since I cannot be mistaken about my having a toothache, I cannot know that I have one either.

Having discussed Wittgenstein's view of knowledge, I shall now examine his notion of certainty and clarify his view of the relationship between certainty and knowledge.

Certainty

In On Certainty, Wittgenstein presents a view of the relationship between certainty and knowledge that appears to be inconsistent. He apparently assimilates knowledge and certainty in some passages and contrasts them in others. In section 272, he equates "I know" with "I am familiar with it as a certainty." But in section 308, he asserts that "'knowledge' and 'certainty' belong to different categories." These passages and others make Wittgenstein's view of the relationship between certainty and knowledge look inconsistent.¹³⁰ I will show that despite appearances to the contrary, Wittgenstein's view of the relationship between certainty and knowledge is consistent.

One could argue that Wittgenstein's view of the relationship between certainty and knowledge is consistent because Wittgenstein is talking about one kind of certainty when he assimilates knowledge and certainty and another when he contrasts them. Indeed, the text supports the view that Wittgenstein is talking about subjective certainty when he contrasts knowledge and certainty and objective certainty when he assimilates them (O.C. #245, 270-273, 563). This interpretation is partly correct: Wittgenstein does contrast subjective certainty with knowledge and does make objective certainty a property of knowledge. But he not only makes objective certainty a

¹³⁰Alan R. White argues that Wittgenstein's view of the relationship between certainty and knowledge is inconsistent in his "Review of On Certainty," Philosophical Books, XI (1970), 30.

property of knowledge, he also contrasts it with knowledge. Thus, his view of the nature of objective certainty appears to be inconsistent and seems to render his view of the relationship between certainty and knowledge inconsistent.

Nonetheless, I will argue that Wittgenstein's remarks on subjective and objective certainty make his view of the relationship between certainty and knowledge consistent, for those remarks yield the view that there are three types of certainty: (1) subjective certainty, which is contrasted with knowledge; (2) epistemic objective certainty, which is a property of knowledge; and (3) non-epistemic objective certainty, which is a property of various propositions including the propositions that Moore claims to know, propositions stating relevant general facts of nature, and first-person psychological statements like "I have a toothache."

Subjective Certainty

With the word "certain" we express complete conviction, the total absence of doubt, and thereby we seek to convince other people. That is subjective certainty. (O.C. #194)

For Wittgenstein, something is subjectively certain when we are completely convinced of it, when we do not doubt it. But we do not doubt what we know, so it is tempting to think that there is no important difference between the concept of knowledge and that of subjective certainty (O.C. #8, 10).¹³¹ Wittgenstein, however, does not equate subjective certainty with knowledge; in fact, he warns against equating the two. He argues that although we may be subjectively certain of what we know, there are important differences between

¹³¹Henry Le Roy Finch maintains that Wittgenstein equates subjective certainty with certain knowledge in "Wittgenstein's Last Word: Ordinary Certainty," International Philosophical Quarterly, XV (Dec. 1975), 387.

subjective certainty and knowledge: subjective certainty does not require grounds, knowledge does; expressions of subjective certainty cannot be mistaken, knowledge claims can be. Because of these important differences, Wittgenstein assigns knowledge and subjective certainty to different categories (O.C. #308).

According to Wittgenstein, when someone says "I am sure . . . , " he expresses his attitude of subjective certainty; he tells others that for his part, he is certain (O.C. #179-180, 563). When someone says "I know . . . , " however, he does not merely express an attitude; he does not simply tell others that for his part, he knows because knowledge is not subjective (O.C. #245). When someone says "I know . . . , " he tells others "That's how it is--rely on it." He gives them his word that he has done the proper checking and has the proper grounds for his claim (O.C. #175-176).

Knowledge claims require such grounds; expressions of subjective certainty do not. If someone is sure of something, the question "Why are you sure?" need not be answerable. But if someone knows something, the question "How do you know?" must be answerable (O.C. #550). To answer that question is to give grounds for one's knowledge claim. Such grounds make knowledge objective (O.C. #16, 18, 91, 166, 170-180, 243, 270, 432, 504-505, 555, 564).

Because knowledge requires grounds, knowledge claims can be mistaken; expressions of subjective certainty, however, require no grounds and cannot be mistaken. If you show that I do not have the proper grounds for my knowledge claim, you show that I am mistaken, that I do not know what I claim to know. If you show that I have no good reasons for my subjective certainty, however, you do not show that

I am mistaken or that I am not sure. Rather, you show that I should not be sure. My claim to know something does not prove to you that I know it because my knowledge claim can be mistaken. My expression of subjective certainty, on the other hand, does prove to you that I am subjectively certain because it cannot be mistaken (O.C. #12, 21, 42, 520, 580).

Because knowledge requires grounds and subjective certainty does not, and because knowledge claims can be mistaken whereas expressions of subjective certainty cannot be, Wittgenstein assigns subjective certainty and knowledge to different categories.

Objective Certainty

I have tried to show that Wittgenstein contrasts subjective certainty with knowledge. But to explain adequately his view of the relationship between certainty and knowledge, I must also clarify his remarks on objective certainty, and that will be especially difficult, for those remarks are extremely obscure. In some passages, Wittgenstein seems to make objective certainty a property of knowledge, but in others he seems to contrast it with knowledge. In section 272, he equates "I know" with "I am familiar with it as a [an objective] certainty" and seems to say that what someone claims to know is objectively certain if there are compelling grounds for it, thus making objective certainty a property of knowledge. But in section 194, he writes that something is objectively certain "when a mistake is not possible." And since Wittgenstein holds that knowledge claims can be mistaken, the "objective certainty" mentioned in this passage cannot be a property of knowledge. How is this apparent inconsistency to be explained? Wittgenstein writes: "The explanation suggests itself

that the certainty is of a different kind" (P.I. p. 224). Following this suggestion, I resolve the apparent contradiction between Wittgenstein's indicating both that objective certainty is a property of knowledge and that it is not a property of knowledge by showing that Wittgenstein discusses not one kind of objective certainty, but two kinds of objective certainty: (a) epistemic objective certainty, which is a property of knowledge, and (b) non-epistemic objective certainty, which is not a property of knowledge.

Epistemic objective certainty. I have shown that on Wittgenstein's view, knowledge requires grounds. These grounds make knowledge objectively certain:

"I have compelling grounds for my certitude." These grounds make the certitude objective.

What is a telling ground for something is not anything I decide.

I know = I am familiar with it as a certainty.

But when does one say of something that it is certain?

For there can be dispute whether something is certain;

I mean when something is objectively certain. (O.C. #270-273)

In this passage, Wittgenstein makes objective certainty a property of knowledge so that something is objectively certain when there are compelling grounds for it, grounds to which we must appeal to establish that we know it. Thus, for someone to show that he knows what he claims to know, he must objectively establish his knowledge claim by offering compelling grounds for it. Such grounds make disagreement possible. There can be a dispute about whether something is objectively certain because we can disagree about whether the grounds offered in support of a knowledge claim are sufficient to establish that claim. When the grounds someone offers are not sufficient, we conclude that he does not know what he claims to know because epistemic objective certainty

has not been established. When the grounds are sufficient, we conclude that he does know because it has been established.

Non-epistemic objective certainty. When Wittgenstein says that knowledge is objectively certain, he is asserting that knowledge claims must be objectively established. But that is not how Wittgenstein is using the phrase "objectively certain" in this passage:

But when is something objectively certain? When a mistake is not possible. But what kind of possibility is that? Mustn't mistake be logically excluded? (O.C. #194)

Here, Wittgenstein indicates that something is objectively certain when a mistake is logically impossible. And since Wittgenstein holds that knowledge claims can be mistaken, this type of objective certainty cannot be a property of knowledge--hence, the label "non-epistemic objective certainty." Wittgenstein attributes non-epistemic objective certainty to several types of propositions which logically exclude the possibility of mistake. As we saw in chapter III, he attributes it to both the propositions that Moore claims to know and the propositions which state the general facts of nature on which our use of criterially governed concepts is based. He also attributes it to first-person psychological statements such as "I have a toothache" and "I thought that it certainly is hot today" (cf. P.I. pp. 221-222).

In discussing this type of certainty, Wittgenstein asks us to assume there is a man who always guesses right what I say to myself in my thoughts. This man says, "Just then you thought 'It certainly is hot today'," and I truthfully confess that that was exactly what I thought. In this case, it would certainly be improper for the man to ask, "But are you sure that I guessed right? Are you certain that what I said was what you thought?" For Wittgenstein, these questions are

nonsense. If I truthfully confess that the man guessed right, then he guessed right. There is no room for a mistake here. It makes no sense to say, "Well, I thought that you guessed what I was thinking, but I guess you did not"; that expression has no place in the language-game. My truthful confession that I thought such-and-such is the criterion for the man's having guessed right. Moreover, the criteria for the truth of my confession that I thought such-and-such are not the criteria for the true description of a process. My truthful confession that I thought such-and-such is not a description of what went on in my mind when I thought, so it makes no sense to question its accuracy. In certain situations, It would make sense to ask whether my confession that I thought such-and-such was a truthful one. If, for example, the man guesses that I thought "It certainly is hot today," and I say, "Yes, that is what I thought," but my voice sounds strained and I appear uneasy, then he might sensibly ask if I was lying. But he could not sensibly ask whether I was sure that I was not mistaken about what went on in my mind when I thought because there is no room for that sort of mistake. My truthful confession that I thought such-and-such logically excludes any doubt about whether I have accurately described my thoughts. Thus, although the exclusion of the possibility of mistake from first-person psychological statements may appear to be a purely empirical matter--we in fact cannot doubt our own thoughts, feelings, etc.,--Wittgenstein holds that like Moorean propositions and propositions stating relevant general facts, first-person psychological statements logically exclude the possibility of mistake.

When combined with my interpretation of Wittgenstein's criterial relationship, Wittgenstein's remarks on knowledge and certainty clarify his position on the problem of knowledge of other minds.

The Problem of Knowledge of Other Minds

The problem of my knowledge of others' mental states appears to be a problem relating to a form of realism: Cartesian dualism. I think the meaning of "Jones has a toothache" is given by its truth-conditions, and I know what condition must be met for it to be true: Jones must have the same kind of thing that I have when I have a toothache. Thus, at any given time, the statement "Jones has a toothache" is determinately either true or false; for at any given time, Jones either has or does not have the same kind of thing that I have when I have a toothache. Moreover, the statement "Jones has a toothache" may be true even though I cannot know that it is true either because Jones is paralysed or because he is hiding the fact that he has a toothache; or it may be false although it seems to be true because Jones is skillfully feigning having a toothache. On this realist analysis, the meaning of "Jones has a toothache" is not given in terms of the evidence I can have for its truth or falsity. Such evidence is said to be indirect and inconclusive. My understanding of the meaning of the statement is explained in terms of truth-conditions which are independent of my knowledge of such evidence.

Not Behaviorism

This realist analysis of the problem of my knowledge of others' psychological states assumes that I can fix criteria of identity for private objects, an assumption undermined by Wittgenstein's private-language argument. Since Wittgenstein clearly rejects this analysis, we are tempted to think he must hold that the only admissible notion of truth for a statement like "Jones has a toothache" is one

equating its being true with Jones's displaying the behavior that we ordinarily count as grounds for it. Radical behaviorists equate "Jones has a toothache" with things like "Jones is moaning and holding his cheek." Wittgenstein makes no such equation. He acknowledges that Jones can have a toothache without moaning and holding his cheek and that he can moan and hold his cheek without having a toothache. Moreover, Wittgenstein explicitly denies that he is a behaviorist:

"Are you not really a behaviorist in disguise? Aren't you at bottom really saying that everything except human behavior is a fiction?"--If I do speak of a fiction, then it is of a grammatical fiction. (P.I. #307)

Wittgenstein does not deny the existence of mental states, events, and processes; he denies that the picture of inner states and processes gives us the correct idea of the use of psychological terms. As I explained in previous chapters, he calls the mental states and processes that words and expressions like "having a toothache," "believing what you say," "reading," and "continuing the series" are supposed to name "grammatical fictions" to indicate that they are fictitious entities that purport to explain the meanings of such words and expressions, but fail to do so.

Although Wittgenstein's remarks clearly indicate that he did not consider himself a behaviorist, since he explicitly rejects dualism, it seems that he must be some sort of behaviorist. Indeed, my interpretation of his criterial relationship--in certain general circumstances, it is a rule of language that in certain particular circumstances someone's exhibiting B is a criterion for his being in P and that in normal particular circumstances, someone's exhibiting criteria of P justifies our assertion or claim to know that he is in P--seems to make Wittgenstein a sophisticated logical behaviorist who

holds that there are logical relations between statements about publicly observable behavior and circumstances and statements about private mental states, events, and processes.¹³²

The feeling that a philosopher who rejects dualism must be a behaviorist is prompted by a particular way of posing the problem of knowledge of other minds, namely, as a dispute over what makes statements like "Jones has a toothache" true. For the dualist, what makes "Jones has a toothache" true is its being with Jones as it is with me when I have a toothache. For the behaviorist, on the other hand, what makes the statement true is Jones's behavior. When we ask "What makes my statements about the psychological states of others true?", we cannot easily see a third alternative. And since Wittgenstein rejects the dualist's answer, we think he must be some sort of behaviorist; for we cannot see what could make "Jones has a toothache" true other than either Jones's mental state or his behavior.

Wittgenstein is not a behaviorist of any sort. He rejects both the distinction between the inner and the outer and the realist theory of meaning implicit in the traditional formulation of the problem of knowledge of other minds. He neither accepts the picture of the private object or state, nor does he want to replace that picture with a behavioristic one. He rejects the inner-outer distinction from which both Cartesian dualism and behaviorism begin. In "Notes for Lectures on 'Private Experience' and 'Sense Data'," he characterizes this distinction as one between behavior, which is on the surface, and mental states, which are below the surface, and then

¹³²Chihara and Fodor call the later Wittgenstein a "logical behaviorist" in "Operationalism," p. 387.

insists that "it is just as misleading to say that there is just the surface and nothing beneath it, as that there is something below the surface and that there isn't just the surface" (N.f.L. p. 304). He thus insists that when we start from the Cartesian distinction between mind and body, we say something misleading whether we affirm the distinction or deny the mental state, but affirm the physical behavior.

Because Wittgenstein attacks the picture of the private, inner state, it looks as if he might be arguing that there is nothing but bodies and their behavior. But in rejecting the mentalist view that completely private, inner states justify first-person psychological statements, Wittgenstein is not espousing some form of behaviorism, for he also rejects the behaviorist view that the motions of a senseless, physical body justify third-person psychological statements. When Wittgenstein writes that our criterion for someone's saying something to himself is what he says and the rest of his behavior, he is talking not about the colorless movements of a senseless, physical body, but about the speech and actions of a living human being:

Our criterion for someone's saying something to himself is what he tells us and the rest of his behavior; and we only say that someone speaks to himself if, in the ordinary sense of the words, he can speak. And we do not say it of a parrot; nor of a gramophone. (P.I. #344)

This passage makes it clear that Wittgenstein does not mean by what someone tells us "sounds emanating from a senseless body." If that were all "what he tells us" meant, we would have to say that parrots and gramophones think, too, for they produce sounds like those produced by human beings. Wittgenstein does not mean by "the behavior (verbal or otherwise) that serves as our criteria for the psychological states of others" the colorless movements of a senseless human body; he

means the speech and actions of a living human being.¹³³ His criterial relation is not a bridge between the inner and the outer, nor between what is below the surface and what is on the surface. He rejects that Cartesian distinction as a misleading picture.

From Wittgenstein's standpoint, what is misleading about the traditional formulation of the problem of my knowledge of other minds is not only the distinction between the inner and the outer, but also the concentration upon what makes a statement like "Jones has a toothache" true. We think that to understand such a statement we must know what would make it true and that only actually having the toothache would constitute direct and conclusive evidence that it is true. Thus, we fall prey to the mentalist view that the meaning of the word "toothache" is my private, inner experience and ignore everything we know about applying words like "toothache" to others. We think that the central use of the word "toothache," for example, is to name a private mental state and that all other uses of the word either flow from that central use (e.g., by an argument from analogy) or are only contingently connected to it and, therefore, according to the skeptic, are unjustifiable. But we have seen that from Wittgenstein's standpoint, the supposedly contingent connections between psychological states like toothache and human behavior like moaning, holding the cheek, and saying "I have a toothache" and the circumstances in which such behavior occurs are actually necessary to the use of the word "toothache." And now it looks as if Wittgenstein is a sophisticated

¹³³Cf. John Cook, "Human Beings," Studies in the Philosophy of Wittgenstein, edited by Peter Winch (New York: Humanities Press, 1969), p. 132.

logical behaviorist, but he is not. For although the dualist and the behaviorist disagree on what makes a statement like "Jones has a toothache" true (the dualist saying it is Jones's having the same kind of thing that he has when he has a toothache, and the behaviorist saying it is, e.g., Jones's moaning and holding his cheek), they both believe in private ostensive definitions. In his heart of hearts, the behaviorist thinks there is no problem about what makes "I have a toothache" true. But this is what Wittgenstein challenges. As we have seen in previous chapters, he explains the meaning or use of "I have a toothache" not in terms of a report or description of a private mental state, but in terms of a substitute for the primitive behavior of moaning and holding one's cheek. Furthermore, Wittgenstein neither equates Jones's moaning and holding his cheek in the appropriate circumstances with his having a toothache, nor denies that statements like "Jones has a toothache" have truth-conditions. What he denies is that the meaning of such statements can be given by truth-conditions which are independent of our means of knowing them. He thinks the realist account of meanings in terms of independent truth-conditions must be replaced by a constructivist account of meanings in terms of the conditions under which we are justified in making such statements. These conditions may be called truth-conditions if the notion of truth is restricted to that for which we can have evidence. But such a characterization is misleading, for we generally think of truth-conditions on the realist model (which may have been one of the reasons Wittgenstein preferred to hold the redundancy theory of truth and to make these conditions justification-conditions).

Similar considerations apply to the question whether Wittgenstein held that knowledge is justified true belief. He

certainly held that knowledge requires justification, but whether we say he held that it requires truth will depend upon our characterization of truth. Wittgenstein did not hold that knowledge requires truth, in the realist sense; but we can say that he did hold that knowledge requires truth in the constructivist sense, for on a constructivist characterization, truth is explained in terms of the availability of conclusive evidence.

Having shown that Wittgenstein does not offer a behaviorist solution to the problem of knowledge of other minds, I must now give a positive characterization of Wittgenstein's response to the skeptic's demand for proof of our knowledge of the existence of other minds.

Response to Skepticism

For traditional, post-Cartesian epistemology, certainty is the logical impossibility of doubt. What is certain is whatever cannot be doubted, whatever leaves no room for the possibility of doubt. Thus, there is no distinction between certainty and absolute necessity. The later Wittgenstein distinguishes the notions of necessity and certainty. In chapter IV, I characterized his constructivist notion of necessity as the notion of what is required for the significant functioning of our conceptual system. In this chapter, I characterized his two notions of objective certainty as the notions of (a) epistemic objective certainty, which characterizes knowledge claims for which we have compelling grounds, and (b) non-epistemic objective certainty, which characterizes statements about which the possibility of mistake is logically excluded. From Wittgenstein's point of view, when the skeptic demands proof that I can know with absolute certainty that

Jones has a toothache, and the traditional, post-Cartesian epistemologist attempts to meet his demand, both are confused. The skeptic's demand cannot be met because it is incoherent. The skeptic wants to be given grounds for a knowledge claim that will logically exclude the possibility of the claim's being mistaken. He thinks he cannot be mistaken about whether he has a toothache because he feels his toothache and that if he could only feel Jones's toothache as he feels his own toothache, he could not be mistaken about Jones's having a toothache either. But since he cannot feel Jones's toothache, he can never really know whether Jones has a toothache (P.I. #303).

We have seen that Wittgenstein agrees with the skeptic that I cannot be mistaken about my having a toothache, but that Wittgenstein disagrees with the skeptic on why this is so. According to the skeptic, I cannot be mistaken because I have direct experience of my own private mental states, which provides me with compelling grounds for my claim that I have a toothache, grounds that exclude the possibility of mistake. According to Wittgenstein, I cannot be mistaken because the language-game logically excludes the possibility of such mistakes. On my analysis of Wittgenstein's view, he thinks the skeptic assimilates the non-epistemic objective certainty of first-person sensation statements to epistemic objective certainty, reasoning that since first-person sensation statements cannot be mistaken, there must be compelling grounds for them which exclude the possibility of their being mistaken. Thinking he has such grounds in his own case, the skeptic demands such grounds for ascribing toothache to others. When they are not forthcoming, he concludes that we can never really know whether someone else has a toothache.

According to my analysis of Wittgenstein's view, the skeptic fails to realize that epistemic objective certainty and non-epistemic objective certainty are incompatible. The grounds for a knowledge claim determine whether it is objectively certain. But with the possibility of providing compelling grounds comes the possibility of providing inadequate evidence, and, thus, the possibility of mistake. Thus, where our language-game logically excludes mistakes, it logically excludes knowledge as well. For statements that cannot be mistaken are such because there are no grounds for them. "I have a toothache," for example, cannot be mistaken because it is based on no grounds. Knowledge claims, on the other hand, are based on grounds and can be mistaken because the grounds for them may be inadequate.

The incoherence of the skeptic's demand becomes even clearer when we state it like this: "I understand what it means to say that Jones has a toothache, what I want is proof that I can know that he has one, for it seems to me that I can never really know for certain that Jones has a toothache." According to Waismann, Wittgenstein emphasized the connection between semantics and epistemology by saying, "If you want to discover what a sentence means, ask yourself 'How could I know it?', for its meaning will be determined by the answer to this question."¹³⁴ On Wittgenstein's view, the skeptic understands what it means to say that Jones has a toothache only if he knows under what conditions he would be justified in asserting that Jones has a toothache. But the conditions for the justified assertion of "Jones has a toothache" are given in the linguistic rules governing

¹³⁴F. Waismann, Introduction to Mathematical Thinking (New York: Ungar, 1951), pp. 96-97.

that expressions use, and those rules state the criteria that justify a claim to know that "Jones has a toothache." Thus, if the skeptic understands what it means to say that Jones has a toothache, then he knows that Jones's exhibiting criteria for toothache in the appropriate circumstances would count as compelling grounds for Jones's having a toothache.

The skeptic wants proof that our ordinary criterial justifications provide compelling grounds for our claims to know the psychological states of others, but from Wittgenstein's point of view, no such proof can be given because our ordinary criteria cannot be justified. As I explained in chapter IV, to appeal to Wittgensteinian criteria is to give an ultimate justification. Once we appeal to them, we have reached bedrock and can go no farther (P.I. #217). Criteria represent the limits of justification; upon reaching them, we have come down to conventions, and there is no rational justification for our conventions being as they are. They cannot be justified by appealing to facts; they must simply be accepted as part of our form of life (P.I. p. 226). "Giving grounds, however, justifying the evidence comes to an end;--but the end isn't certain propositions striking us immediately as true, i.e. it is not a kind of seeing on our part, it is our acting which lies at the bottom of the language-game" (O.C. #204). Thus, against the skeptic's assumption that justification must end in seeing that propositions such as "Jones has a toothache" and "I have a toothache" are true, Wittgenstein argues that justification ends with criteria which are based on our primitive actions and reactions.

When Wittgenstein wrote: "Our mistake is to look for an explanation where we ought to look at what happens as a 'proto-phenomenon'.

That is, where we ought to have said: this language-game is played" (P.I. #654), he was chastising realist philosophers, like the author of the Tractatus, who try to meet the skeptic's demand that they justify our ordinary language-games by appealing to the facts. I do not think Wittgenstein would object to an evolutionary justification of our ordinary language-games such as that given in J. L. Austin's "Plea for Excuses." Austin argues that ordinary language embodies all the distinctions and connections that human beings have found important and that these "have stood up to the long test of the survival of the fittest" and are more subtle than any an armchair philosopher is likely to think up on a lazy afternoon.¹³⁵ Austin's argument seems to fit Wittgenstein's view that our ordinary language-games depend upon our environment, interests, and forms of life. Thus, although Wittgenstein insists that our ordinary language-games cannot be justified by appealing to the facts, my interpretation of his view allows our ordinary language games to be justified by their adaptivity: we have the ones we do because they serve our interests, suit our environment, and fit our forms of life.

The skeptic, however, will not be satisfied with such a justification; he wants proof that our ordinary criteria give us truth, in the realist sense. According to my interpretation, Wittgenstein's criterial relationship states: in certain general circumstances, it is a rule of language that in certain particular circumstances, B is a criterion of P and that in normal particular circumstances, someone's exhibiting criteria of P justifies our assertion or claim to know that

¹³⁵J. L. Austin, "A Plea for Excuses," Philosophical Papers, p. 182.

he is in P. The skeptic insists that my claim that Jones has a toothache, for example, is fully justified only if I can (1) prove that I can know for certain that the relevant general facts of nature obtain, and (2) prove that I can know for certain that these are the sorts of particular circumstances in which B functions as a criterion of P and in which Jones's exhibiting criteria of P shows us that he is in P.

(1) Wittgenstein acknowledges that we assume that the relevant general facts of nature obtain and argues that this assumption is necessary for the significant functioning of our criterially governed concepts. On Wittgenstein's analysis, when the skeptic talks about Jones's having a toothache, he is implicitly assuming that the relevant general facts of nature obtain. Accordingly, the skeptic cannot both say that "Jones has a toothache" is meaningful and question the existence of the general facts of nature required for that statement to be meaningful. From Wittgenstein's viewpoint, the skeptic cannot coherently question the existence of the relevant general facts of nature.

(2) Wittgenstein does not think we can prove to the skeptic that we can know for certain that a particular situation is one in which B functions as a criterion of P and in which someone's exhibiting criteria of P shows us that he is in P. On his analysis, although certain particular circumstances must be present for B to function as a criterion and for someone's exhibiting criteria of P to show us that he is in P, we cannot make an exhaustive list of these particular circumstances, for there is no complete set of conditions that makes something so:

. . . we must beware of thinking that there is in the nature of the case something we might call the complete set of conditions, e.g., for his walking; so that the patient, as it were, can't help walking, must walk, if all these conditions are fulfilled. (Br.B. p. 114; cp. P.I. #183)

The most we can do is recognize particular circumstances in which the kinds of behavior that function as criteria for P do not show us that someone is in P and say how those circumstances differ from the usual ones (Z. #118). We cannot, for example, give an exhaustive list of the circumstances in which someone's moaning and holding his cheek will show us that he has a toothache; the most we can do is recognize particular circumstances in which such behavior does not show us that someone has a toothache.

Furthermore, if the skeptic claims that although Jones is moaning and holding his cheek, he does not have a toothache, the burden of proof is on him. He must show either that Jones's moaning and holding his cheek are functioning not as criteria for toothache, but as criteria for some other psychological state or that although Jones's moaning and holding his cheek are functioning as criteria for toothache, they do not show us that he has a toothache (or justify our claim to know that he has a toothache) because this situation is abnormal in some conventionally recognizable way.

Terry Forrest uses Austin's analysis of the word "real" to elucidate this aspect of criterial relations, arguing that just as an ascription of "reality" makes sense only when there is some conventionally recognizable form of unreality, so the claim "Criteria of P are present, but do not justify our claim that P" makes sense only when there is some conventionally recognizable abnormality. The concept of toothache, for example, is such that "really having a toothache" is, in Austin's

sense, a trouser-expression: it has sense only insofar as it is contrasted with "pretending to have a toothache," "having something wrong with one's pain neurons," etc.--all possibilities that are publicly checkable. Thus, if the skeptic claims that although Jones is sitting in his chair, rocking, holding his cheek, moaning, and saying "I have a toothache," he does not have a toothache, he cannot say that Jones's behaving as if he has a toothache simply does not logically entail his having a toothache; he must show that Jones is faking or that some other conventionally recognizable abnormality is present.¹³⁶

But this appeal to Austin's notion of a trouser-word will not satisfy the skeptic, for he will insist that since criterial relations allow that in some cases others can display criteria for toothache without actually having a toothache, they leave open the possibility that this might happen in every case so that people might always be pretending to have toothaches. "So it is quite easy to imagine this: one need only make the easy transition from some to all" (P.I. #344). Wittgenstein argues that the skeptic cannot make this transition from some to all. For although it makes sense to say that someone made a false move in some game, it makes no sense to say that "it might be possible for everybody to make nothing but false moves in every game," for then the games in which they were false moves would have been abrogated (P.I. #345, p. 227). In other words, "if all moves were always false, it would make no sense to speak of a 'false move'" (Z. #133). Similarly, although we sometimes moan and hold our cheeks without having a toothache (because we are, e.g., pretending to have a toothache), we cannot infer from that that whenever people moan and hold their cheeks they may be pretending to have toothaches.

¹³⁶Terry Forrest, "P-Predicates," in A. Stroll (ed.), *Epistemology* (New York: Harper and Row, 1967), pp. 82-83.

The skeptic's inference from some to all is the result of philosophical savagery. The skeptic looks at the use of the word "toothache" from far away, falsely interprets it to be the name of a private mental state and wrongly concludes that since moaning and holding the cheek sometimes occur without toothache, they might always do so. According to Wittgenstein, the truth is: it makes sense to say that people sometimes pretend to have toothaches by moaning and holding their cheeks, but it makes no sense to say that all such behavior might be pretence. In Sense and Sensibilia, Austin writes: "talk about deception only makes sense against a background of general non-deception. . . . It must be possible to recognize a case of deception by checking the odd case against more normal ones."¹³⁷ There is a similar passage in Zettel:

Couldn't you imagine a further surrounding in which this could be interpreted as pretence? Must not any behavior allow of such an interpretation?

But what does it mean to say that all behavior might always be pretence? Has experience taught us this? How else can we be instructed about pretence? No, it is a remark about the concept 'pretence'. But then this concept would have no criteria in behavior. (Z. #571)

Like Austin, Wittgenstein holds that talk of pretence makes sense only against a background of general non-pretence. It must be possible to recognize a case of pretence by checking the odd case against more normal ones, which we can do because pretending has behavioral criteria. Thus, according to Wittgenstein, the skeptic's general claim that others might always be pretending to have toothaches is incoherent. Moreover, if the skeptic claims that in a particular situation although Jones is exhibiting criteria for toothache, he might not have a toothache, the skeptic must show that the situation is abnormal in some conventionally recognizable way.

¹³⁷J. L. Austin, Sense and Sensibilia (New York: Oxford University Press, 1969), p. 11.

Thus, Wittgenstein responds to the skeptic not by meeting his demand with a criterial relationship that logically connects senseless behavior with private mental states, but by giving him what a needs: an alternative theory of meaning which shows him that his demands are incoherent and inappropriate and why.

Conclusion

In conclusion, I shall briefly address three possible criticisms of my interpretation not discussed previously.

(1) Some may criticize me for failing to distinguish the notion of a criterion espoused in the Blue Book from the notion espoused in the Philosophical Investigations and subsequent works. Although Albritton and most of his successors¹³⁸ have argued that the notion of a criterion espoused in the Blue Book is essentially different from that in the Philosophical Investigations and subsequent works, I agree with John T. E. Richardson that there is no essential change in Wittgenstein's notion of a criterion from the Blue Book onwards.¹³⁹ In both the Blue Book and the Investigations, criteria are contrasted with symptoms or empirical evidence; and in both works, the connection between criteria and what they are criteria of is based on linguistic convention. There seem to be two different notions because in the Blue Book (pp. 24-25), Wittgenstein is discussing a technical term which has been given a strict use by designating the presence of a

¹³⁸Albritton, "On Wittgenstein's Use of 'Criterion'." Kenny, "Criterion." Lycan, "Noninductive Evidence". Hacker, Insight and Illusion, pp. 188-289.

¹³⁹Richardson, The Grammar of Justification, pp. 113-116, 129.

certain bacillus in the blood as its defining criterion, whereas in the Philosophical Investigations and subsequent works, Wittgenstein discusses ordinary psychological terms which have no strict use because rather than having one defining criterion that functions in all circumstances, they have many different criteria that function in different circumstances. In both cases criteria are conventional grounds for what they are criteria of, but in the case of our ordinary psychological terms, the relationship between criteria and what they are criteria of is much more complicated than it is in the case of technical scientific terms.

(2) Some may criticize me for making Wittgenstein's criterial relationship similar to the principle of verification. But such a comparison is unwarranted, for whereas my interpretation of Wittgenstein's criterial relationship is thoroughly constructivist, logical positivism was the result of an ill-fated union between a constructivist principle, viz. the principle of verification, and classical realist semantics. Like Frege, the early Wittgenstein, Russell, et al., logical positivists accepted a truth-conditions account of the meaning of statements and a realist doctrine of truth. And although they restricted the explanation of sense in terms of truth-conditions by stipulating that the truth-conditions be observable or verifiable, verifiability was generally demanded only in principle. Moreover, this qualification was generally taken to license treating physical object statements as infinite conjunctions of statements about actual and possible sense-data. Ayer even used this qualification to resurrect the argument from analogy on the ground that one person can in principle have another person's mental states. He also invoked it

to block skepticism about the past on the ground that one can now in principle observe what happened in the past.¹⁴⁰ Consequently, according to later versions of logical positivism, the truth of statements about the physical world, the psychological states of others, and the past is independent of the human possibility of knowing them to be true. Indeed, orthodox logical positivism is a version of classical realist semantics with a realist doctrine of truth and a restrictive notion of what counts as a truth-condition.¹⁴¹

(3) Some will certainly criticize me for attributing semantic and epistemological positions to the later Wittgenstein. But it is my hope that this dissertation has shown that to insist, as many interpreters have,¹⁴² that Wittgenstein had no views in semantics and epistemology is to fail to understand the full significance of his later work. Over ten years ago, Andrew Oldenquist wrote: "Indeed, before too long with the benefit of hindsight and when exegetical and interpretative ideas have had longer to marinate, philosophers will dare (although I do not dare) to speak without absurdity of the later Wittgenstein's philosophical system."¹⁴³ Oldenquist's prediction has been realized in recent constructivist interpretations of Wittgenstein's later philosophy. With the submission of this dissertation, I add my name to the list of those who have dared to "speak without absurdity of the later Wittgenstein's philosophical system." My predecessors

¹⁴⁰A. J. Ayer, The Problem of Knowledge, Pelican Books (Baltimore, Maryland: Penguin Books, 1956), pp. 158-161, 216-218.

¹⁴¹Cf. Baker, "A New Foundation for Semantics," 166-167.

¹⁴²O. K. Bouwsma, "The Blue Book," Philosophical Essays (Lincoln: University of Nebraska Press, 1965), pp. 175-201; Morris Lazerowitz, "Wittgenstein on the Nature of Philosophy," in Fann (ed.), Wittgenstein; G. H. von Wright, "A Biographical Sketch," Ludwig Wittgenstein: A Memoir, Norman Malcolm (New York: Oxford University Press, 1967).

¹⁴³Andrew Oldenquist, "Wittgenstein on Phenomenalism, Skepticism, and Criteria," in Essays on Wittgenstein, edited by E. D. Klemke (Urbana: University of Illinois Press, 1971), p. 395.

have shown how interpreting Wittgenstein's philosophy of language on a constructivist model clarifies his views on meaning or use and his criterial relationship. I have attempted to further illuminate Wittgenstein's later philosophical views by tracing the connections between his notions of a criterion and his views on family resemblances, circumstances, meaning, knowledge, and certainty and by presenting a precise formulation of Wittgenstein's criterial relationship. Since the notion of a criterion is not used in On Certainty and since most constructivist interpreters have concentrated on presenting a constructivist interpretation of Wittgenstein's semantics, while making little attempt to formulate a constructivist interpretation of his epistemological views, I have ended my constructivist interpretation of Wittgenstein's criterial relationship with a clarification of Wittgenstein's views on knowledge and certainty and a discussion of how Wittgenstein would respond to the skeptic who demands proof that one can have certain knowledge of others' mental states.

While this dissertation takes another small step toward developing a constructivist interpretation of Wittgenstein's later philosophy, much remains to be done. Future investigations should be directed toward determining what constructivist account of truth fits Wittgenstein's semantic and epistemic views, whether a system of logical principles appropriate to Wittgenstein's constructivist semantics can be formulated, whether a constructivist account of non-assertive uses of language can be given, what account of Wittgenstein's notion of a criterion of identity (crucial to the private-language argument) can be given. Other topics that require further investigation are Wittgenstein's views on self-knowledge and knowledge of the physical world. These investigations should keep those of us who enjoy clarifying Wittgenstein's remarks busy for some years to come.

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