

## WITTGENSTEIN AND PEIRCE ON MEANING

### The Evolution from Absolutism to Fallibilism

PETER G. BOGHOSSIAN and ERIK DREWNIAK

If one approaches the meaning problematic from a hermeneutic perspective, there are certain requirements that a theory of meaning must satisfy. An adequate account of the nature and function of signs, however, has traditionally not been considered among these requirements, even though both hermeneutics and semiotics/semiology are both specifically concerned with interpretation theory.<sup>1</sup> Perhaps this is because focusing on signs in one's hermeneutic investigations seems to constitute (for certain thinkers) a turning away from the depth of experience, towards meaning's medium, which appears to be quite shallow *in itself*. The semiotician might respond that a descriptively adequate treatment of meaning must see language and other kinds of sign use as constituting a whole, such that even if one concentrates exclusively on the meaning part or the sign part, neither can be seen as able to exist without the other. Yet, the textual hermeneuticist is perhaps nevertheless suspicious of any inquiries which speak in terms of a science of signs, even if mediation is given a leading role in this "science."

We contend that there is a depth to Peirce's semiotic theory that often goes unrecognized.<sup>2</sup> Perhaps this is because any appeals which are naturalistic or scientific suggest at least a residue of mathematicism, covering up an essentially logical and mathematical approach to experience with a

---

<sup>1</sup> Of course, Ricoeur is an important exception to this characterization of hermeneuticists as thinkers who are not concerned with sign theory (in his particular case, structuralism).

<sup>2</sup> We realize that this position on the thought of Peirce has been set forth by a number of contemporary thinkers and exegetes (for example, Kristeva and Apel), but this paper will take a direction somewhat different from the directions of their texts.

facade which espouses a commitment to mediation and the community. Indeed, this charge takes on a different form, while remaining the same in substance, when Habermas is accused of being overly formalist in his account of communication. We realize that these remarks are somewhat speculative, but we are attempting to show how Peirce must *not* be interpreted, despite textual evidence which suggests the contrary.<sup>3</sup>

Wherein lies the depth to which we alluded above? We have chosen as our method of fleshing it out of Peirce's theories a comparison of his thought with that of Wittgenstein, both early and later. Wittgenstein's *Tractatus* serves as an excellent contrast to Peirce's theory of meaning, while the *Philosophical Investigations* contains many ideas which not only are very similar to Peirce, but can be used to elucidate some difficult concepts in Peirce (i.e., those of interpretant and ground).<sup>4</sup>

This paper's thesis is that the *Tractatus* is the best existing expression of a theory of meaning which posits an immediate relation between the sign and the object, completely eliminating the idea of a context which gives the proposition its meaning. Conversely, Wittgenstein's later thought, especially that of the *Investigations*, introduces concepts like language-game, form of life, and family resemblance which restore to language-use its proper grounding in natural life-world contexts, rather than in some kind of formalist referential construction which, descriptively speaking, sacrifices virtually everything in order to preserve absolutist notions of truth, reference, and method.<sup>5</sup> We will treat the *Tractatus* first, as it will provide a framework in which the later Wittgenstein's and then Peirce's theories of meaning can be presented as correcting the *Tractatus'* naive conclusions.

---

<sup>3</sup> Here some Peirceans might be tempted to interject, "No, this is only apparent because you interpret his texts incorrectly," but we feel that this (misguided) criticism deserves to be mentioned: give the other his/her chance to speak!

<sup>4</sup> Although John K. Sheriff, in his book *The Fate of Meaning* (Princeton: Princeton University Press, 1989), is concerned mainly with Peirce and structuralism, we feel that the topic of inquiry which the title demarcates could just as easily and effectively be pursued by looking at the texts of Wittgenstein and Peirce side by side.

<sup>5</sup> We will be using the C. K. Ogden translation of the *Tractatus Logico-Philosophicus* (London: Routledge and Kegan Paul, 1955), and the standard (G. E. M. Anscombe) translation of the *Philosophical Investigations* (New York: Macmillan, 1953), which will be referred to as TLP and PI, respectively.

When one looks at the early Wittgenstein's theory of meaning, one could not ask for a better example of a positing of immediacy in the sign-object relation. If we consider the concept of a relation or connection in literal terms, and define immediacy in this relation as meaning a lack of anything standing between the sign and the object, Wittgenstein accommodates us with several "imagistic" passages: "Thus the picture is *linked* with reality; it *reaches right up to it*" (TLP 2.1511); and "These coordinations are as it were the *feelers* of its elements with which the picture *touches* reality." (our emphases, TLP 2.1515)

For the early Wittgenstein, the name-object relation is direct and non-mediated in the literal sense of these words: nothing exists in between the name and the object, precluding exact one-to-one correspondence. The name's exactly referring to the object(s), with nothing else (for example, context, speaker's state of mind, etc.) entering into the referring relationship, constitutes the meaning of the name.<sup>6</sup> *That* this name is now referring to this object(s) is the only correct way of interpreting the name, so that there is fixity of reference. The language must not lead one to any other contexts or groups of objects, for only these objects are being referred to in this proposition, restricting the meaning to this set of objects alone; if one infers beyond this range, one will be violating the principle of the logical independence of every state of affairs (and thus of every elementary signifying proposition) (TLP 5.134).

The absolute nature of meaning is derived from the absolutely simple nature of the sign and the object. The concept of absolute simplicity is one which needs to be further examined in order for us to understand just where Wittgenstein's conception of being (and thus, for him, conception of meaning also) goes wrong. For our purposes, the one objection (out of many possible ones) that gets to the heart of the matter best is the non-fallibilistic nature of his positing the existence of simplicity (his "non-fallibilisticity"—admittedly an awful term). This flaw is of particular

---

<sup>6</sup> Here, the extreme nature of Wittgenstein's view can be seen by looking at the many factors that other thinkers have seen as having a decisive effect on the interpretive act and comparing this to the fact that Wittgenstein sees *nothing* else besides the sign-object relation as a determining element concerning the *real* meaning of a proposition, with any other factors adding nothing at best, and perhaps even steering one away from the one correct interpretation. All these "other" factors, then, are extraneous to the real meaning, whereas many thinkers (e.g., Foucault with his notion of power) see them as playing a definitive part in constituting the nature of the meaning itself.

importance to this paper, for if one only concentrates on simplicity's stopping interpretation, i.e., being responsible for the possibility of true propositions, this *in itself* does not make Wittgenstein's notion incompatible with Peirce's idea of the interpretive ideal, which is the hypothetical end of inquiry.

In making this last statement, we have in mind the possibility that if one wanted to stretch and adapt terminology according to one's needs, one could find a place for simplicity in the description of Peirce's final interpretant (although one would have to take out the absolutist conception of substance inherent in Wittgenstein's simplicity). Our criticism centers on the fact that Wittgenstein describes the world as simple and atomistic in nature *right from the start*, without allowing for a development of inquiry (which is by definition a fallibilistic enterprise, with every stage's conclusions always subject to revision). One may perhaps want to say that simplicity is a *possible* result of one's scientific investigations, one that must be worked up to (as theoretical physicists, in their use of mathematical models to describe the world as they see it at any given stage of scientific progress, keep stripping away layers of "parts" to being and try to work toward an ultimate particle which will, for the moment, stop scientific interpretation of the universe). This is quite different, though, from saying that simplicity does exist without having any justification for it at all.

Wittgenstein does not just say that simplicity does exist; he says it *must* exist (see TLP 2.021-2.0212). The reason why it must exist is that absolutely true interpretations of the world are possible (quite an assumption), and therefore what language refers to must have a nature such that this kind of interpretation can exist. He is obviously trying to accommodate his assumption by giving it a theoretical grounding, but there is still great ingenuity and profundity to what he is doing.

Peirce realizes that one must speak only in general terms about this ideal state of inquiry, for we do not have it yet, while Wittgenstein assumes it to be necessarily possible, *and* he says what the necessary conditions for this possibility are -- namely, simple objects. In doing this not only does Wittgenstein adopt an objectionable methodology (which objection we will return to momentarily), but he does not look to the world at all to justify his assumptions.

In making these assumptions about the nature of the sign and the object, he has committed himself (willingly, we believe) to a model of meaning and language-use which we claim simply does not describe ad-

equately how we in fact use language, and how meaning in fact is. As an alternative to undertaking an argument against the postulation of simplicity, we methodologically prefer showing all the things it as a concept cannot do (i.e., descriptively speaking).

Description of how we actually think, mean, and use language must be our utmost concern and responsibility. If there is any room for simplicity as Wittgenstein conceives it (which is certainly not the case for his later thought), it will only be in a *hypothetical* description of the final interpretant (and even there it will have to be seriously modified, as we have stated above); for, as we will see in our discussion of the later Wittgenstein and Peirce, loyalty to *experience as it really is* is our first and main guiding principle.

Much has been written on how the later Wittgenstein did a virtual 180 degree turn in contrast with his earlier positions. His critiques of simplicity, analysis, and the model of language which sees it as only being referential in nature go right to the core of the issue; and we must admit that we are in complete agreement with the general form of the theory of meaning with which he replaces them. A curious feature of the later work, however, is that many of its major concepts, particularly those of form of life and language-game, are sufficiently broad as to allow many (sometimes not totally compatible) contemporary philosophical schools to see in it a worldview with which they empathize.<sup>7</sup>

## 2

We now intend to summarize Wittgenstein's correction of his previous views, keeping in mind how his later conceptions of meaning and context will allow us to present Peirce's own thought in such a way that any formalism in it (and we personally see none) is suppressed and its depth is brought out, making it thus appear to be a kind of hermeneutics with a naturalistic teleology added. We realize that there is an inherent problem in this, which has its roots in Wittgenstein's sometimes oppressive use of the saying/showing distinction.

---

<sup>7</sup> For example, Wittgenstein's later thought has been shown to be akin to such diverse philosophical schools as ordinary language philosophy, hermeneutics, deconstruction, and pragmatism, all of which share a certain "family resemblance," but whose differences are without doubt as important as their similarities.

Specifically, we are referring to the difficulty of finding in Wittgenstein's later texts literal statements about intentionality, purpose, and agency. These concepts play a very important part in his theory of meaning and communication, we believe, but one never sees him step back and talk about the nature of intentionality or human subjectivity. Additionally, Wittgenstein tends to play down any naturalistic themes (which it is obvious must play a prominent role if one is to speak about forms of *life*), the reason for which, we believe, is his aversion to description which uses language that takes on a form of an "ism" of any sort, feeling perhaps that he would then be reifying a particular descriptive framework, allowing it to become entrenched and established, and thus putatively universal as an interpretive strategy.

Wittgenstein's own position stands outside of actual interpretation, being meta-linguistic in method, so that to take on a naturalism or other "ism" would be to go against his own anti-universalistic theory of language's meaningfulness. This is where Wittgenstein goes against depth, opting instead to privilege an "interpretation" of language-games which stresses their multiplicity and diversity over any common elements which might be found to exist. These commonalities ("essences" understood in an enlightened, post-Tractarian sense) are what, one *could* argue, must be shown in human experience, rather than said.<sup>8</sup>

---

<sup>8</sup> We believe that Wittgenstein does employ the saying/showing distinction here, apparently feeling that deep similarities among practices and language-games must be shown rather than treated explicitly in philosophical texts. For, the argument goes, philosophy should have a therapeutic role, and texts should concentrate on curing us of our metaphysical tendencies. The kind of similarity which is to be treated, then, is the absolute similarity posited in essentialist theories, for example that of the *Tractatus*: all objects are irreducibly and exactly similar. Sophisticated notions of similarity are givens for him, and they are what ground his notion of family resemblance. Many practices *are* very similar, and perhaps he would admit that there are some "qualities" which all human language-games and forms of life share—perhaps he would not. In either case, it seems he does not want to speak on such a level of generality, because any language used to talk about this similarity will be being stretched too far to accomplish anything important, while a great risk of lapsing into metaphysics will invariably be incurred.

Gadamer seems to have just about the opposite attitude towards talking about similarities in detail, and we feel that Wittgenstein should perhaps encourage, if not himself embrace, philosophical explorations of the more common and universal aspects of most (if not all) human language-games. For, it seems that his conception of "language-game" and "practice" is too narrow to describe adequately and accurately these aspects, and the attempt to do this does not necessarily bring language into foreign, and therefore forbidden, territory; but instead can have the effect of bringing to view (*unconcealing*) ways of thinking about human experience and existence which have always lain just

We will turn now to a discussion of the concepts of family resemblance, language-game, and form of life, concentrating on their relationship to the problem of interpretation using the concept of a form of life as a bridge to our treatment of Peirce. What Wittgenstein means by "family resemblances" can be explained by a use of the concept of similarity. A group of things which we speak about with the same word do not all have to have one or several properties in common, so that the possession of these constitutes each one's being an instance of the kind of thing the word indicates. E.g., for all the things that people use the word "road" to speak about, there are only characteristics that some share, while others do not; the commonalities are spread out among the group such that two of them may have nothing *significant* in common, yet they share characteristics with two other things which *do* share qualities.

Wittgenstein's analogy of a concept as a rope which consists of intertwining threads which overlap but do not make up one single thread is excellent (PI 67). Meaning does not consist of essences, but of resemblances which extend over many different things; but these, however, cannot be reduced to one or several properties which constitute the nature of the meaning: the nature *is* the system of resemblances and nothing else, no Form, objective standard, nor universal.

Our real interest in this theory lies in its implications for interpretation theory. The problem of how to interpret a text, which is a subset of the problem of the nature of the meaning of a text (e.g., textual meaning as indefinite rather than structurally determinate), is directly related to the debate between essentialists and those who take what we will broadly call a non-essentialist stance on meaning (but not nominalist, for there are ways in which Peirce was definitely a realist). If, with Wittgenstein, we come down against essentialism, we must then ask if we also espouse a total relativism (an-archism, literally) of interpretation.

We do not want to endorse such a view for two reasons: 1). We feel that interpretive relativism does not logically follow from a non-essential-

---

beneath the surface of our current level of understanding: a navigation of depths which requires our conceptually breaking through the boundaries of the contexts of "ordinary language." We feel very strongly that it is possible to expand our experience of certain fundamental (and also general and universal) concepts by following them to places which are not sub-divisions of any group of language-games, but which constitute a massive non-metaphysical language-game of their own, a thought-site which is nearly everywhere at once but nowhere in particular.

istic position, mainly because this type of position need not imply an extreme nominalism, which (in our opinion) states that all the things a word is used to refer to do not necessarily have to resemble each other in any way, *and* that there is no philosophical significance to these resemblances (the “and” is very important). If one includes this last qualification, there is nothing for interpretation to grab onto, no logic (*logos*) to guide it. Every interpretation would be equally correct, with there being no criteria by which one is better or worse than another. In addition, 2). We do not subscribe to interpretive anarchism because it simply does not seem, from our experience of the world, to be descriptively adequate. The world does not conform to such a picture, according to which no interpretation of a situation in experience or of a text is better than any other possible interpretations. However, we realize that this common-sensical estimation does not suffice philosophically; it may be that we feel that interpretive relativism is incorrect, but we must provide either an argument *or* a comprehensive theory of meaning to support our instinctual view of the world.

The former strategy is too narrow to deal with such a huge problem, so that we propose to appropriate (in our own way) the Peircean theory of meaning so as to combat this species of relativism and to justify the continuation of the philosophy of science after the search for absolute meaning has been abandoned. We will carry out these goals with an appropriation of Peirce which makes use of the later Wittgensteinian concepts of language-game and form of life. In this way sufficient depth can be restored to naturalistic conceptions of meaning.

In PI 23, Wittgenstein writes that, “...the *speaking* of language is part of an activity, or of a form of life.” He then goes on to give several examples of language-games, stressing the multiplicity of language-games (we will ignore in this paper his emphasis on speaking, not caring to venture into the complexities of Derrida’s texts). There is an implied depth here which we plan to take advantage of in our segue into the Peirce section of this paper, but first we must look at one more Wittgenstein passage. In PI 241, he writes,

“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 forms of life.

Here he is saying that the truth or falsity of a statement or other kind of assertion is grounded in a “form of life,” a term which his text suggests



can mean anything from the human way of life, very broadly conceived, to the customs and practices of a particular tribe or culture. This concept plays a central role in his rejection of any kind of *extreme* relativism such as we described above (for example, extreme nominalism or interpretive anarchism); truth *is* relative, but to the language-game and its form(s) of life, not to the will of the person speaking or writing.<sup>9</sup> When one combines this insight with the anti-essentialist family resemblances “doctrine,” one arrives at Wittgenstein’s conception of meaning, which steers a common-sensically profound path between essentialism (and all its descriptively faulty absolutisms) and naive relativism.

This middle-ground position will also enable us to salvage interpretation theory from the magnetic claws of anarchism (which word has its etymological origin in the Greek words approximately meaning “without source or origin”), for the interpretation of a given text can be based on how its words are actually *used* in the language-game(s) it occupies. As language-games often change, flow into each other, and even become extinct, with their boundaries being more or less vaguely (but never absolutely) defined, interpretation will not be exact. That is alright, of course, and much of what we have written so far has a sub-text asserting the fact that inexactness does not mean that extreme relativism is our only alternative as textual interpreters.<sup>10</sup>

We contend, however, that Wittgenstein’s account of meaning and language is significantly lacking. In grounding truth and meaning in forms of life, he has made the first step towards a complete liberation of the text from those who want to say that, because its meaning is by nature indeterminate by absolutist standards, there can be no such thing as a truly correct interpretation of it. However, his definition (or, we should say, characterization) of “form of life” makes a serious omission: our embeddedness in the world, which includes, of course, the world of nature. It is well-known that Wittgenstein once said that his later thought differed

---

<sup>9</sup> Incidentally, subjectivism is destroyed here once and for all by Wittgenstein’s making explicit what most people intuitively see as the nature of truth and language-use: it is the *context* which grounds truth, and we do not completely control or create it (the context, that is). More often than not, we *come to it* and conform to its strictures, and even when we do have original input it is always done in the context’s terms or in reference to them. I.e., we do not create meaning from the bottom up, although we can initiate and carry out major innovations (for example, the work of pioneers and geniuses whose *limited* individuality cannot be denied or underestimated).

<sup>10</sup> Peirce himself was a major champion of the idea that vagueness is not only alright, but also inherent in the nature of our existence as users and interpreters of signs.

from the earlier in that the former no longer saw language as having to have a connection to reality. There is nothing in the *Investigations* which *precludes* language's being connected with the world (and thus our forms of life also), but he certainly does not stress this aspect of language (and, again, thus of our forms of life).

In a sense, then, our intention here is to do some cleaning up work for Wittgenstein, but our ideas on Peirce must not be seen as only having this function. For, if one asks what "form of life" means, there are a number of answers which will preserve the depth we require, and which also will preserve the conception of meaning which we have outlined above. We think it is fair to say that Peirce's answer is naturalistic/scientific in nature, and it certainly performs these two preserving functions.<sup>11</sup> However, a question that inevitably comes up when writing about Peirce and interpretation is the status of his conception of the final interpretant.

### 3

We will devote the remainder of this paper to several of the problems which come up when one approaches Peirce from a depth interpretation of Wittgenstein (as we have done), with the goal of reconciling the concepts of fallibilism (specifically, Peirce's version) and hermeneutic depth.<sup>12</sup>

Before turning to some texts to set up our main points, we want to state our central doctrine which constitutes the foundation of our position: naturalism and fallibilism both have an inherent depth which must be mined productively in order both to do justice to the achievements of science and to describe satisfactorily and exhaustively the nature of scientific inquiry. If one does not posit a depth to naturalism and fallibilism (embraced both as methodology and doctrine), one will have either to

---

<sup>11</sup> It should also be pointed out that Wittgenstein would accede to much of what Peirce has to say about language and meaning, especially his ideas on the mutability and elasticity of language; as noted above, language-games come into being, die, change, and combine with each other (PI 7, 23, and many other relevant passages).

<sup>12</sup> We think that one *can* find scientific fallibilism in the later Wittgenstein, but only if one enlarges his conception of a "form of life" to *make explicit* the naturalistic element inherent in our world-embeddedness.

deny any truth to the conclusions science has reached about nature so far (which, to us, amounts to asserting extreme relativism, which, as we have argued, is descriptively bankrupt); or to adopt a positivistic philosophy of science, which, although fallibilist, reifies “units” of sense-data and adheres to a dogmatic rejection of all metaphysics, which is again descriptively inadequate, but also superficial in its imposing on science overly restrictive criteria of meaningfulness—science must be given more creative and speculative room.

When one looks at the enormous number of revisions physics has had to make of its basic worldview (never mind the innumerable changes which individual theories have undergone), one cannot help but believe that the “material” world has no *absolute* bottom. This bottomlessness is what we mean by depth, and this conception of depth can be equally applied to the world of human experience.

Getting back to science, the idea that physical scientists will someday arrive at a set of theories which gives a complete description of the world and which are able to predict any phenomena, is these days considered absurdly idealistic (in the non-technical sense of the term). Scientists simply do not think in these terms, but rather in terms of models which are better than the previous ones. This confession that they must be content, in this age of quantum physics, with the “mucking along”<sup>13</sup> that characterizes their research we interpret as an implicit pointing on the part of scientists to the depth of the natural world.

Does Peirce’s idea of the final interpretant go against depth as we here define it? This is the crucial question, for if it does, then saying that Peirce’s naturalism is a necessary addition to Wittgenstein’s ideas on forms of life and language-games is a misguided position. Peirce’s final interpretant, and his theory of meaning in general, must be fallibilistic enough so as to avoid a commitment to absolute truth. So, the question stated above defers necessarily to the question about his theory of truth:

---

<sup>13</sup> This oft-used phrase somehow captures perfectly the frustration inherent in contemporary scientific inquiry, communicating indirectly the need for patience when one’s object is the physical world around us. For, we cannot force things to be as we would like them to be; instead, we must always listen to the truth being uttered by every phenomenon which we cannot adequately explain or which does not conform to a model of ours. However, we strongly disagree with the school of thought which sees *philosophy* as “mucking along” also. We make an absolute methodological distinction between the disciplines of philosophy and science (with the philosophy *of* science falling solely under the first category).

what kind of truth does scientific inquiry produce? This truth must walk the fine line between absolutism and total relativism in order for it to fit the depth which we claim he sees in nature.

John K. Sheriff, in *The Fate of Meaning*, stresses the important role that Peirce's concepts of ground and interpretant play in his theory of meaning, especially regarding the general point that signing activity never reaches an absolute end, such that there is a sign-object relationship which does not further produce another sign (this process of course having no end). However, Sheriff's exposition of Peirce contains a point which is more directly relevant to our topic in this paper. On p. 56 he acknowledges the difficulty in understanding what Peirce means by "ground" and then goes on to write, "The 'ground'...turns out to be nothing more nor less than the context or language game within which the sign relates to the interpretant." He follows this statement with a very revealing quote from Peirce's collected papers: "The peculiarity of it [a sign], therefore, lies in its mode of meaning; and to say this is to say its peculiarity lies in its relation to its interpretant." (2.252)<sup>14</sup>

The *way* the sign relates to the interpretant (which is itself another sign, with its own object and interpretant, thus keeping the triadic signing process going) has to do with the nature of the ground, i.e., the nature of the meaning-context. The ground's nature makes this process go on without an end, so that there is no absolute meaning reached when one has the absolutely correct interpretation. However, this same nature, it must be argued, makes some interpretations better than others, i.e., is the reason why interpretive anarchism does not truthfully reflect how our meaning-contexts are. Even though Peirce seems to have an inordinately complex and formal theory of signs, with its several layers of triadic differentiation, there is beneath it all a naturalistic depth which makes his thought quite different from that of structuralist theoreticians like Saussure and Levi-Strauss.

It is this naturalism that we want to exploit in our presentation of Peirce as a non-positivistic fallibilist, and the essence of his position here cannot be understood without a proper view of what he means by "final interpretant." It is our contention that if one understands the final inter-

---

<sup>14</sup> Charles Sanders Peirce, *Collected Papers*, 8 vols., ed. Charles Hartshorne and Paul Weiss (vols. 1-6) and Arthur Brooks (vols. 7-8) (Cambridge: Harvard University Press, 1931-58). References made to this work will follow the standard practice of giving the volume and page number in parentheses.

pretant as a pragmatic and fallibilistic notion, one that depends on meaning as community-based (and thus based on mutual agreement, rather than on subjective opinions *or* on absolute external criteria which are somehow “in” the things themselves -- a quite uncritical and un-Peircean notion); then philosophy can preserve a conception of scientific truth which is not positivistic (based on simplicity or some other form of irreducibility), yet which also cannot be relativized by a “just one interpretation among many—no better, no worse” kind of argument.

In effect, science will be given a conception of truth which is faithful to its methodology and which also retains for it a fallibilistic objectivity, with the result being a philosophy of science that is in agreement both with experience and with a sophisticated theory of meaning. Fallibilistic positivism/atomism is replaced by a fallibilistic contextual naturalism, thus restoring to “depth” its proper meaning.

In order to get an adequate idea of Peirce’s conception of the final interpretant, it is necessary to contrast it with what he calls the dynamical interpretant. About this concept, he writes that it is “the actual effect which the Sign, as a Sign, really determines.” (4.536) He also says it is “the direct effect actually produced by a sign upon an interpreter of it.” (*Ibid.*) Speaking in terms of modes, the dynamic interpretant has the status of actuality: it is how the interpreter in fact interprets the sign. Science is obviously always engaged in the process of interpretation of data, trying to come up with the most workable and effective model for the set of phenomena at hand.

In order for science’s notion of truth to be normative, so that the concepts of progress and improvement have real meaning (not just meaning for one particular scientist, based on subjective criteria), there must be a *direction* built into this actuality. In other words, a particular actual interpretation must be able to be considered good or bad in reference to an interpretive ideal, whether this ideal be specifically formulated or basically hypothetical in nature. What is important is that there be a formal characterization of this ideal, i.e., a methodological conception of what constitutes the formal nature of this ideal.<sup>15</sup>

---

<sup>15</sup> We of course cannot have a specific idea of what this ideal is like, or else science’s *theoretical* work would in a sense be done, leaving only the empirical investigations needed to test this model and, eventually, prove that it has no faults which anyone can point out for the time being. (This qualification preserves Peirce’s fallibilism.)

Peirce has provided us with such a formal characterization: his idea of the final interpretant. In an exceptionally eloquent yet simple passage, he describes the final interpretant as something “which *would finally* be decided to be the true interpretation if consideration of the matter were carried so far that an ultimate opinion were reached.” (8.184) Two elements of this definition need to be pointed out: 1). that the word “true” is softened from any absolutist connotations by the concept of an “ultimate opinion”-- this interpretation is always considered an opinion (although an extremely well-founded one, having satisfied the demands of the leading thinkers in that field), subject to revision as soon as someone comes up with data or a theory which casts doubt on its truth; and 2). that Peirce sees the essence of scientific inquiry as communal, with the truth of its interpretations being *decided* by the members of the community of inquirers in this field.

Here Peirce respects the later Wittgensteinian conception of meaning and language-use in its intersubjectivist nature; the inquirers all function in meaning-contexts whose nature shows our imbeddedness in communities as well as nature (as organisms), able to understand (to a certain extent, at least) the physical world because we are part of it. Despite this oneness with nature, we still must have a fallibilistic theory of scientific truth, for these meaning-contexts seem to us (and we really could not, in our present state of understanding, be justified in believing otherwise) to have no absolute bottom: our interpretive ideal is only based on the views of the community members, rather than an *a priori* model of the end of interpretation, and these views are more likely than not only temporary, waiting for a problematic piece of data to come along and force us to resume the process of inquiry.

Now that we have shown how Peirce’s conception of meaning adds a necessary naturalistic element to the later Wittgenstein’s conception, while still preserving fallibilism, hermeneutic depth, and the correct conception of our role as language-users in the community, we want to point to a theme in Peirce which can be taken to areas of thought which he might not have been very attuned to (or at least might not have felt are important to scientific investigations). Our point is that the conception of *agency* (even if it can only be conceived of in post-metaphysical terms), so crucial to Peirce, can allow one to take the two following (of many) directions: agency is necessary in order for any arguments for emancipation (whether it be political, social, ethical, or economic) to be advanced; and agency can allow an individual to explore willfully new

areas of thought (even though there are certain acknowledged limits: e.g., no private language), coming up with original philosophical perspectives which, despite their necessarily at least negative connection to the tradition and the status quo, constitute an undeniable, definitive break from established ways of thinking.<sup>16</sup> We feel it is very important to acknowledge this ability of human thought, and to see that it exists *because* we have agency.

Nothing in Wittgenstein's thought, early or later, denies the existence of agency, but, as is the case with naturalistic concepts, it receives very little attention in his texts.<sup>17</sup> Of course, the conception of agency which we have in mind, and which is that of Peirce, is a non-Cartesian, non-metaphysical one. The inclusion of concepts like power and deferral into one's analysis of agency does not harm its status as we conceive it (see footnote 16), nor does the fallibilistic theory of meaning suffer. Indeed, such thinkers as Foucault and Derrida, if they cared to explore in any detail the relation of meaning to (physical) scientific methodology, would no doubt embrace a fallibilism (even if it was a more radically open-ended one than Peirce's: no final interpretant).

However, again drawing on our penultimate footnote, science's ability to *progress* is hampered seriously by the existence of any agents who desire to promote their own selfish interests over those of the scientific community as these latter pertain to the search for objective scientific truth. Thus, an adequate theory of meaning and an abundant supply of talented scientists are not enough to ensure that science will make progress in its various projects and lines of inquiry. To stress a negative aspect of the nature of communicative interaction (in contrast to Habermas' seemingly unbounded optimism here): there is *always* the possibility that instances of bad willing can fatally contaminate the scientific community, or any other community whose work is based on dialogue. We therefore would like to end with the observation that the non-

---

<sup>16</sup> A corollary of this point which, unfortunately, we will not be able to explore in this paper is that problems can arise for the scientific method due to an *excess* of agency. Here we are thinking of the effects of certain Freudian, Nietzschean, and Foucauldian concepts on the decision-making processes involved in science, especially that of the will to power: egoism in the scientific research community.

<sup>17</sup> An important exception: Wittgenstein's comments on the will and willing made toward the end of the *Tractatus* and those scattered throughout the pages of his *Notebooks, 1914-16*, trans. G. E. M. Anscombe and ed. Anscombe and G. H. von Wright (Chicago: The University of Chicago Press, 1979).

essentialist theory of meaning is something which science can depend on as the foundation and guide of its work; whereas agency is destined to remain a double-edged sword, a central yet inherently unpredictable element of all communicative contexts, no matter which attempts are made to formulate and then apply models of ideal dialogue and communication.

*University of New Mexico*

*Fordham University*