# LANGUAGE, LINGUISTICS, AND PHILOSOPHY: A COMPARISON OF THE WORK OF ROMAN JAKOBSON AND THE LATER WITTGENSTEIN, WITH SOME ATTENTION TO THE PHILOSOPHY OF CHARLES SAUNDERS PEIRCE

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# Chapter One

## Introduction

Academic specialization has proceeded far enough that philosophers and linguists usually have at best a smattering of knowledge of what is going on in each other's fields. Sadly, this is too often true even for philosophers who are interested in language and linguists who are interested in philosophical issues. This paper is an attempt to broaden the extent of interaction between philosophy and linguistics, by comparing and contrasting the work of Ludwig Wittgenstein, considered by many to be the foremost philosopher of language ever to appear in the history of philosophy, and the work of Roman Jakobson, one of the major fashioners of the Prague school of European structuralism and the originator of many other new ideas in linguistics which have been the guiding light for a school of linguistics, which, while not the most popular school at present, is perhaps the school that addresses itself most directly and explicitly to the questions about the nature of language that concerned Wittgenstein. In dealing with philosophical questions about language, Jakobson had the great advantage of being able to build on the foundation

laid by the American philosopher and semioticist Charles Saunders Peirce, who approached many of the questions about language that troubled Wittgenstein from a very fruitful angle and an angle quite different from that of Wittgenstein's approach to language. Peirce was a philosophical pragmatist who had a great respect for, and even identified himself with the doctrines of scholastic realism; while Wittgenstein came out of the Vienna circle that engendered logical positivism and later blazed his own trail with a method of philosophico-linguistic analysis that concentrated on the description of "language-games" as a means of resolving philosophical difficulties. The two camps--the camp of Wittgenstein and the camp of Jakobson and Peirce--show no evidence of ever having affected each other directly. Wittgenstein apparently worked on his own for the most part--even his relationship with the Vienna circle has been described as being that of the god on the hill to whom the circle sent its emissaries to obtain the latest revelation--and Jakobson, while he quotes profusely throughout his work from a wide variety of sources, to my knowledge never takes anything from Wittgenstein. Peirce, of course, could not react to much of anything from Wittgenstein since he predates Wittgenstein in the main, dying in 1914 at the age of 74 when Wittgenstein was not quite 25 and had yet to publish his first book. Yet despite the absence of direct influence of Jakobson and Peirce on Wittgenstein and vice versa, the two camps show a

remarkable similarity in some of their views about language and in the kind of phenomena in language that they consider important. Not surprisingly, the two camps also have some serious disagreements about other aspects of language, principally in relation to the unity of a word's meaning and the amount of structure in language.

"The Later Wittgenstein" in the title of this paper requires some explanation. Wittgenstein's work is customarily divided into an early and a late period and one even speaks of "the Early Wittgenstein" and "the Late Wittgenstein" because his work, while always concentrating on the same questions, underwent what is considered by most scholars to be a drastic change in its approach and in its assertions about the nature of language. The Early Wittgenstein is almost entirely represented by a single book, the Tractatus Logico-Philosophicus, published in 1921 when Wittgenstein was 32 and the only book Wittgenstein published in his lifetime. As there will be little treatment of the Early Wittgenstein of the Tractatus Logico-Philosophicus in the main text of this paper, it might be of service to quote here what the Encyclopedia Britannica says about the Tractatus, to help clarify some of the quirks in Wittgenstein's exposition of his later views that are the principle concern of this paper:

> In his Tractatus, Wittgenstein taught that the world consists of "things" (simples) which are configurated to "atomic facts." Things in the world are represented by names in language. In the "elementary proposition" names are configurated to a "picture" of a possible state of affairs. Language,

> thus, is a picture of reality. Significant propositions, which are not elementary, are "truth-functions" of elementary propositions. Among truth-functions a singular position is held by tautologies. Tautologies are true, regardless of the truth or falsehood of elementary propositions. All truth which is a priori or logical, as distinct from experiential or factual, is, according to the Tractatus, tautological truth. . . . Philosophy is none of the sciences. It is an activity, the objective of which is to make us see what cannot be said--the limits of language--through clearly displaying the logical grammar of propositions.[1]

The Tractatus presents a model of language that has served as a philosophical background for mathematical logic. To this day the Tractatus remains important as an exposition of the philosophical presuppositions of the kind of mathematical logic Kurt Gödel used to prove his famous incompleteness theorem. Wittgenstein later rejected many of the tenets he had set down in the Tractatus but never fully escaped the delineation of questions about language he had set for himself in that first work, although toward the end of his life, and especially in Philosophical Investigations, which is the culmination and pinnacle of his work, he began to see many subtle aspects of language that went beyond the questions he had started out with in the Tractatus. However, despite an ever more subtle appreciation of the complexity of language, Wittgenstein seems to retain in his later work the view that "Philosophy . . . . is an activity, the objective of which is to make us see . . . the limits of language--through clearly displaying the logical grammar of propositions." Though one of the aspects of Wittgenstein's thought that changed

most was his notion of the "logical grammar" of words and propositions which he sought to display.

The aim of this paper is not only to compare Peirce and Jakobson's views on language and Wittgenstein's views on language, but also through considering the work of all three men in conjunction to achieve a better idea as to the nature of language, in particular, trying to put together at least provisional answers to some of the following questions about language:

1. How should one describe language as a whole?

2. What is the relationship of the constituent elements of language to the whole?

3. What is the relation of language to the individual and to society?

4. How do signs signify?

5. How does language exist in time?

6. How is constancy of meaning maintained in each new circumstance of a word's use?

7. What is the role of unconsciousness in language?

8. How great is the potential of language for obscuring the shape of the reality it purports to describe?

9. Is the meaning of a linguistic form unitary or plural?

10. What is the role of context in determining meaning?

The mention of unconsciousness in the seventh question deserves some comment, because of the almost allergic reaction students of Wittgenstein often have to any use of the word "unconscious" to describe what happens in language. In this paper "unconscious" is used primarily as

an adjective to describe activities such as walking or tying a shoelace that are not performed step by step through conscious action. This is a far cry from using "unconscious" as Freud did when he spoke of "The Unconscious" as if there were a well-defined region of the human psyche that corresponded to the term. In fact, there are many different operations of the brain that are unconscious. In keeping with Wittgenstein's wariness of explanation by means of things we know nothing of (especially things that are supposed to go on in the unconscious) there has been an attempt in this paper not to presume any knowledge of unconscious processes beyond what can be gathered by direct observation of human behavior.

The outline of this work is first, in chapter two, to give a summary of Jakobson's views on language. Then, with that as a basis, several of the more obvious confluences between Wittgenstein and Jakobson's thought are explored in chapter three. Chapter four treats the major issue of the relationship of language to time as well as introducing the issue of unconsciousness in the use of language. On these issues, Jakobson and Peirce have some serious differences with Wittgenstein, but the clash between the two camps is especially fruitful because they all recognize and point out many of the same phenomena, even though Wittgenstein explains those phenomena differently than Jakobson or Peirce would and ends the chain of explanation at a different point than they would. In chapter five

Wittgenstein's views come to the fore, as his belief that language can often obscure the nature of things as much as it can clarify them is expounded. In relation to this, the writings of Jakobson and Peirce are of great assistance in taxonomizing the causes of the kinds of linguistic confusions Wittgenstein is concerned with. Finally, in chapter six, the issue of contextual variation and the unity of a form's meaning is addressed and contextual influences on meaning are also discussed for their intrinsic importance. The unity of a form's meaning is one of the issues on which Jakobson and Wittgenstein most strikingly disagree. Yet their actual approaches to language are not as different as one might suspect from that disagreement. Jakobson and Wittgenstein see too many of the same things to differ from each other too much in their descriptions of language.

It is unfortunate that this paper can only include as much of the thought of Peirce as it does. It was late in the preparation of this paper that I fully realized the depth of Peirce's insights into language. What is presented here of the work of Peirce only scratches the surface of his theories of language and of signs. The treatment of Jakobson's thought is also incomplete, though more extensive in relation to the whole of his work than the treatment of Peirce's thought. The treatment of Wittgenstein's work is by far the most comprehensive. Although there is no end to what can be found in any

serious author's work, Wittgenstein's Philosophical Investigations, which continues the greatest part of Wittgenstein's major interests was culled quite thoroughly for items that related in any way to the work of Jakobson and Peirce, which turned out to include most of the issues that were Wittgenstein's central concerns.

## Chapter Two

## Jakobson's View of Language

Before attempting much comparison between Wittgenstein and Jakobson, it will be helpful to summarize Jakobson's views on language. Jakobson's teachings can then serve as a springboard to understanding the much more difficult and enigmatic views of Wittgenstein.

### Language as a System of Oppositions

One of the most salient aspects of Jakobson's view of linguistics is his insistence that language is a structured whole. This passage from The Sound Shape of Language illustrates that idea:

> The idea of language as a structured, coherent system of devices from the smallest to the highest units has for ages been enrooted in sciences, striving against the superstitious and lifeless image of a fortuitous aggregate of scattered particulars.[1]

Jakobson describes this structured coherence as a kind of "Gestalt" or as an instance of "final causation," where "final causation is that kind of causation whereby the whole calls out its parts."[2] The tightness of this structure is guaranteed by its existing largely outside of consciousness: "This relative non-interference of the individual consciousness with language explains the rigid

and obligatory character of its pattern--a whole where all parts hold firmly together."[3]

The constituent bonds--the mortar--of this linguistic structure are the oppositions among the elements of the structure. The notion of opposition has a special significance for Jakobson that goes beyond mere contrast:

> The inalienable property of opposition which separates it from all other, contingent differences is, when we are dealing with one opposite, the obligatory copresence of the other one in our minds, or in other words, the impossibility of evoking long without a simultaneous, latent idea of short, or expensive without cheap, 'voiced' without 'voiceless', and vice versa, . . .[4]

In regard to the importance of oppositions, Jakobson is fond of quoting Peirce's statement "A thing without oppositions ipso facto does not exist."[5] In quoting that statement, Jakobson has something like this in mind:

> Any notion of opposites is inseparable from the notion of opposition as such and neither of the two opposites can function in the neighborhood of other concurrent or successive features if such a neighborhood excludes the appearance of the other opposite. . . . If in certain contexts only one of the opposites can appear, the feature loses its distinctiveness and becomes inactive and disabled. The opposition is alive when both opposites are able to occur in the same context, . . .[6]

Jakobson's oppositions are not equal partnerships but are "consistently hierarchical." Jakobson calls the main element of the opposition "unmarked" and the secondary element "marked." Thus he can speak of "the inequality between the terms of any opposition, namely the fruitful idea of the correlation between markedness and the absence of mark."[7]

Jakobson's notion of the linguistic system is summed up in his definition of "grammar," made in connection with a discussion of the nature of art:

> To speak of the "grammar" of an art is not to employ a useless metaphor: the point is that all art implies an organization of polar and significant categories that are based on the opposition of marked and unmarked terms.[8]

The words to emphasize in that definition of "grammar" are organization (system), polar (opposition), and marked versus unmarked (hierarchy).

## The Relation of an Element to the System in Which it Belongs

The great importance of the linguistic system is that the elements of the system are defined to a very great extent by their place in the whole. Jakobson writes:

> In his dialogue Philebus Plato states that none of us could learn any STOICHEION [element] by itself without learning all of the members of the given SYSTEMA and their mutual bonds.[9]

> The manner of being of the parts reveals their solidarity with the whole and it is according to this whole that each of its component parts emerge. This interdependence between the whole and the parts creates a patent referral from the parts to the whole and vice versa.[10]

> In connection with the structure of the ultimate constituents of language, let us once more refer to Peirce, . . . : "How is it possible for an undecomposable element to have any differences of structure? Of internal structure, it would be clearly impossible. But, as to the structure of its possible compounds, limited differences of structure are possible."[11]

Jakobson often uses place in the system of oppositions as an aid to explaining subtle differences of sense. For example, the difference between "half-full" and "half-

empty" is that the implicit comparison is to "full" in one case and to "empty" in the other, or as Jakobson puts it, there is a "relational divergence" between the two expressions:

> A relational divergence underlies the semantic variance of near-synonyms. Thus, the adjectives half-full and half-empty refer to quantitatively the same status of the bottle, but the former attribute used by the anecdotal optimist and the latter one substituted by the pessimist betray two opposite frames of reference, the full and the empty bottle. Two slightly deviant frames of reference separate the anticipatory twenty minutes to six from the retrospective five forty.[12]

Because of the influence of place in the system of oppositions on "the structure of an element," the alteration of bonds within the system is an important way in which the meaning of forms change:

> If the connection between a given linguistic entity and related formations is "forgotten in the feeling of the people," it stands to the side until it falls under the influence of "a new family of words or category of forms."[13]

Jakobson feels this variability of structure to be a fundamental characteristic of the linguistic system:

> The notion of structure is inseparable from that of 'transformation' (transmutation) and, as Lange points out, "wholes can never remain in a changeless state, they must change constantly" . . . . In this respect, language is not an exception among systems, and the frequent question "why do all languages keep changing all the time?" loses its edge.[14]

Thus, changes in the meaning of any one form are usually part of more general changes involving the entire system or some sub-system.

Explicating the nature of an element by its place in the system requires that one take the element as a vector

of various properties that are the coordinates locating the element within the system. For example, in phonology,

> . . . the entire phoneme as a bundle of features contains a diversity of elementary properties--for instance, /u/ is opposed to /i/ in one respect and to /ü/ in a quite different way . . .[15]

This splitting up of an element into a bundle of features is necessary for the true oppositional nature of the system to become apparent:

> Saussure's, and earlier Baudouin's . . . , recourse to the idea of opposition was an efficacious event; however, this device was not applicable to phonemes as wholes. The question "what is the opposite of the English [m]?" makes no sense. There is no unique opposite. But the feature nasality finds its true and single opposite in the absence of nasality, . . . : all other things being equal, the nasality of [m] has its self-evident opposite in the nonnasality of [b], or of [n] in [d], . . .[16]

## Signs

Jakobson sees linguistics as a part of the larger discipline of semiotics--the science of signs. A sign, for him, was not just a sound or a mark, but a relationship that consisted in signifying and being signified:

> . . . Ferdinand de Saussure's interpretation of the sign, in particular the verbal sign, as an indissoluble unity of two constituents--signifiant and signifié-- . . . was taken over entirely from the twenty-two-hundred-year-old Stoic theory. This doctrine considered the sign (semeion) as an entity constituted by the relation of the signifier (semainon) and the signified (semainomenon). The former was defined as "perceptible" (aistheton) and the latter as "intelligible" (noeton) . . . . St. Augustine's writings exhibit an adaptation and further development of the Stoic inquiry into the action of signs (semeiosis), with Latinized terms, in particular signum comprising both signans and signatum. . . . The twofold character and the consequent "double cognition" of any sign, in Ockham's terms, was thoroughly assimilated by the scientific thought of the Middle Ages.[17]

In more popular terms signans is 'form' and signatum is 'meaning,' which together make up the 'sign.' Jakobson cites psycholinguistic evidence for the inseparability of signans and signatum that figures in this Stoic doctrine:

> . . . there is no such field as sounds for themselves only. For the speaker and listener speech sounds necessarily act as carriers of meaning. Sound and meaning are, both for language and for linguistics an indissoluble duality. . . . The degree to which speech sounds are a completely peculiar phenomenon among auditory events was made clear by the remarkable experiments conducted in diverse countries during the last decade: these investigations have proved the privileged position of the right ear, connected with the left hemisphere, in perceiving speech sounds. Is it not a remarkable fact that the right ear is a better receptor of speech components, in contradistinction to the superiority of the left ear for all non-verbal sounds, whether musical tones or noises?[18]

In other words, speech sounds are perceptually different than non-speech sounds; they are actually processed by different halves of the brain. But it is not only true that the form cannot exist without the meaning; it is just as true that the meaning cannot exist without the form: ". . . an afunctional structure and a nonstructured function are both pointless and empty fictions."[19]

The distinctive features, which make up the phonemes, are themselves signs, but the distinctive features (and therefore the phonemes also) are different from other signs in having very little meaning by themselves, but great range and power of meaning in combination. This is what is called "The 'double articulation' of language . . . , or, in other words, the composition of meaningful units from discrete subunits devoid of their own inherent meaning, . .

. ."[20] Jakobson extends this idea of meaning in combination as against meaning in isolation to larger linguistic units as well:

> Of course, any speech sound exists for its producer as well as for the perceiver both as a whole and as a concurrence of those parts which are imposed by the code of their language and imply single distinctions. . . . seal exists simultaneously for speakers of English both as a lexical whole and as a sequence of its speech sounds, **just as in turn a whole conventional sentence, such as take it easy, necessarily coexists in the mind of speakers both as a phraseological whole and as a set of single words.**[21] (Boldface added)

Thus, not only phonological units, but even words take on much of their meaning only in combination.

## Peirce's three types of signs

Given the understanding of the two-sided character of a sign, a key question is that of the nature of the bond between the two parts of the sign. Charles Sanders Peirce made a great advance in the field of semiotics by investigating and elucidating the three basic modes of signification. Jakobson follows Peirce very closely in his explanation of the three modes of semeiosis, which each correspond to an idealized polar type of sign:

> . . . (1) the index is a referral from the signans to the signatum by virtue of an effective contiguity; (2) the icon is a referral from the signans to the signatum by virtue of an effective similarity; (3) the symbol is a referral from the signans to the signatum by virtue of an "imputed," conventional, habitual contiguity.[22]

Here is Peirce's own description of the three polar types of sign:

> An icon is a representamen of what it represents and for the mind that interprets it as such, by virtue of its being an immediate image, that is to say by virtue

> of characters which belong to it in itself as a sensible object [i.e., as an object of the senses], . . . . Of a completely opposite nature is the kind of representamen termed an index. This is a real thing or fact which is a sign of its object by virtue of being connected with it as a matter of fact and by also forcibly intruding upon the mind, quite regardless of its being interpreted as a sign. . . . A symbol is a representamen whose special significance or fitness to represent just what it does represent lies in nothing but the very fact of there being a habit, disposition, or other effective general rule that it will be so interpreted.[23]

To give specific examples, an icon might be a sketch, a diagram or a model; an index might be a pointing finger, a spotlight, a footprint, the smoke from a fire; and a symbol might by a code-word for the initiation of a military operation, a flag, a red traffic light, or the integration sign in mathematics. An icon signifies by being similar to its object, an index signifies by a physical relation to its object and a symbol signifies by being habitually or conventionally associated with its object:

> The Icon has no dynamical connection with the object it simply happens that its qualities resemble those of that object, and excite analogous sensations in the mind for which it is a likeness. But it really stands unconnected with them. The index is physically connected with its object; they make an organic pair, but the interpreting mind has nothing to do with this connection, except remarking it, after it is established. The symbol is connected with its object by virtue of the idea of the symbol-using mind, without which no such connection would exist.[24]

Trying to find common English words that more or less correspond to Peirce's terms "icon," "index" and "symbol," one might call an icon a "figure," an index an "exhibitor" and a symbol an "evoker."

From what has been said so far, it might seem that the three modes of signification were all on a par with one another, but in fact, there is a serious inequality between the symbol and icons and indices, for only the symbol is a "general rule." Icons and indices only exist in individual instances, while a symbol can cut across many different individual cases: ". . . the symbol as such is not an object; it is nothing but a frame-rule which must clearly be distinguished from its functioning in the form of 'replicas' or 'instances,' . . . ."[25] Any sign that hinges on a general rule of application must be at least partly symbolic; while any sign that depends on the perceptual characteristics of the individual signans must be at least partly iconic, and any sign that hinges on the locational characteristics of the individual signans must be at least partly indexical.

Peirce's division of signs into icon, index and symbol is difficult enough to grasp and important enough to all of the discussions that follow that it is worthwhile to give Jakobson's extended explanation of what an icon, an index or a symbol is:

> 1) The icon acts chiefly by a factual similarity between its signans and signatum, e.g., between the picture of an animal and the animal pictured: the former stands for the latter "merely because it resembles it."
>
> 2) The index acts chiefly by a factual, existential contiguity between its signans and signatum, and "psychologically, the action of indices depends upon association by contiguity"; e.g., smoke is an index of a fire, and the proverbial knowledge that "where there is smoke, there is fire" permits any interpreter of smoke to infer the existence of fire irrespective of

> whether or not the fire was lighted intentionally in order to attract someone's attention; . . .
>
> 3) The symbol acts chiefly by imputed, learned contiguity between signans and signatum. This connection "consists in its being a rule" and does not depend on the presence or absence of any similarity or physical contiguity. The knowledge of this conventional rule is obligatory for the interpreter of any given symbol, and solely and simply because of this rule will the sign actually be interpreted.[26]

Images and diagrams

It will be important in some discussions to know the distinction between the two types of icons identified by Peirce--images and diagrams. Jakobson writes:

> He [Peirce] singled out two distinct subclasses of icons--images and diagrams. In images the the signans represents the "simple qualities" of the signatum, whereas for diagrams the likeness between the signans and signatum exists "only in respect to the relations of their parts". Peirce defined a diagram as "a representamen which is predominantly an icon of relation and is aided to be so by conventions." Such an "icon of intelligible relations" may be exemplified by two rectangles of different size which illustrate a quantitative comparison of steel production in the USA and the USSR. The relations in the signans correspond to the relations in the signatum. . . . Theory of diagrams occupies an important place in Peirce's semiotic research; . . . The discussion of different sets of diagrams leads him to the ascertainment that "every algebraic equation is an icon, insofar as it exhibits by means of the algebraic signs (which are not themselves icons) the relations of the quantities concerned." Any algebraic formula appears to be an icon, "rendered such by the rules of commutation, association, and distribution of the symbols." Thus "algebra is but a sort of diagram", and "language is but a kind of algebra". Peirce vividly conceived that "the arrangement of the words in the sentence, for instance, must serve as icons, in order that the sentence may be understood."[27]

In other words, an image has a signans that is similar to the signatum in toto; while a diagram has a signans composed of several parts (which may not resemble anything

in the signatum) arranged in a structure that is similar to the structure of the signatum.

## Meaning and Translation

One of Peirce's most fruitful and important concepts is that of meaning as translation, which Jakobson makes heavy use of. This idea of meaning as translation complements the above-mentioned notion of meaning as the place of an element in the system of hierarchical oppositions. Jakobson states: "The signans is perceptible, the signatum intelligible. Or to put it more concretely and operationally, in Charles Peirce's terms: the signatum is translatable."[28] Jakobson is referring to Peirce's definition: ". . . the conception of "meaning," which is, in its primary acceptation, the translation of a sign into another system of signs, . . . ."[29] For instance:

> . . . "A gander is an adult male goose", but also conversely "An adult male goose is a gander." The former proposition is an example of C. S. Peirce's thesis that any sign translates itself into other signs in which it is more fully developed, whereas the reverse translation from a more explicit to a terser way of expression is exemplified by the latter proposition.[30]

Jakobson outlines three types of "translation":

> We distinguish three ways of interpreting a verbal sign: it may be translated into other signs of the same language, into another language, or into another, nonverbal system of symbols. These three kinds of translation are to be differently labeled:
> 1) Intralingual translation or rewording . . .
> 2) Interlingual translation or translation proper . . .
> 3) Intersemiotic translation or transmutation . . .[31]

But there is a fourth type of "translation" that may be the most important of all: translation of a word's meaning from one instance of a word's usage to the next. This kind of translation is the essence of what a Peircian symbol is. Labelling this problem of the use of a symbol from instance to instance a problem of "translation" has the advantage of making all of Jakobson's discussion of translation applicable by analogy to the problem of the use of symbols over time, a problem that is beautifully expressed by a statement of Jakobson's made in connection with translation: "Equivalence in difference is the cardinal problem of language and the pivotal concern of linguistics."[32]

The importance of "equivalence in difference" as an issue in linguistics becomes more evident when one considers that unlike the case of physics, where transformation from one frame of reference to another is between totally isomorphic systems, translation from one linguistic system or sub-system to another usually requires dealing with a difference of structure. To use a simple example of Jakobson's:

> In order to translate accurately the English sentence I hired a worker, a Russian needs supplementary information, whether this action was completed or not and whether the worker was a man or a woman, because he must make his choice between a verb of completive or noncompletive aspect--nanjal or nanimal--and between a masculine and feminine noun--rabotnika or rabotnicu. . . . On the other hand, whatever the choice of Russian grammatical forms to translate the quoted English message, the translation will give no answer to the question of whether I hired or have hired the worker,

> or whether he/she was an indefinite or definite worker (a or the).[33]

Within a single language, the translation of scientific explanations into popular parlance provides a good example of the nuances that have to give way in order to translate from one sub-system to another. In general, the problem is to find an analogue in the second system that has the most important characteristics of the original in the first system.

However, "equivalence in difference" also points to an even more fundamental question in linguistics alluded to above: **the question of how a general rule can be applied to an individual case that is in at least some respects unlike any case that has ever gone before.** It is important to remember that "A symbol, for instance a word, is a 'general rule' which signifies only through the different instances of its application, namely the pronounced or written--thinglike--replicas."[34] Jakobson explicitly recognizes the problem of how the individual is related to the species in writing of "The dialectical tension between the generic unity of the inherent meaning, on the one hand, and the multitude of contextual meanings."[35] In the following passage, Jakobson discusses the conception of a "general meaning" in close connection with the issues of translation and of individual versus species:

> One can't help but agree with his [Peirce's] view of meaning as translatability of a sign into a network of other signs and with his reiterated emphasis on the inherence of a "general meaning" in any "genuine symbol" as well as with the sequel of the quoted

> assertion: A symbol "cannot indicate any particular thing: it denotes a kind of thing. Not only that, but it is itself a kind and not a single thing" (Collected Papers, 2.301). The contextual meanings which particularize, specify, or even modify such a general meaning are dealt with in Peirce's speculative grammar as secondary, "environmental" interpretants.[36]

Of course, the various "senses" of a word that might be called "contextual meanings" (for example, the use of "division" to mean "the process of dividing" in some cases and "a military unit made up of several battalions" in others) are themselves "frame-rules" rather than "objects." Thus the distinction between the general meaning of word and one of its "senses" or sub-meanings is technically one of genus and species rather than one of species and individual. Each sub-meaning is brought into play by particular type of context.

The nature of the signatum, or meaning, of a symbol as a genus is matched by the nature of the signans as a genus. The comparison between the generic nature of signans and signatum is useful because to linguists, the nature of the signans as a genus is relatively well understood and can aid in the understanding of how the signatum can be a genus. Jakobson writes:

> . . . phonemes draw on sound matter, but readjust this extrinsic matter, selecting, dissecting, and classifying it along their own lines. Thus these items of sound matter are transformed into semiotic elements. . . . Likewise, languages draw meaning and semantic values from the intelligible world . . . that is, from the world of human experience, from the world of reference; but as in phonology they readjust this extrinsic matter selecting, dissecting, and classifying it along their own lines. Thus items of experience are transformed into semiotic elements.

> From the start he [Franz Boas] distinctly saw the cardinal task in its double aspect: as a limited number of sounds and sound-clusters have been selected by each language . . . from the infinitely large mass of possible sounds and sound-clusters, so the infinitely varied range of ideas has been reduced by classification in each single language . . . to a lesser number. . . . This two-sided selection converts foreign bodies into linguistic values; it creates fixed PHONEMIC units from the sound matter and fixed SEMANTIC units from the conceptual matter.[37] (Italics mine.)

Thus, the semiotic value of either sound matter or conceptual matter depends on the classification of that matter into genera and species, in accordance with the nature of a symbol, for which both the signans and the signatum must be "a kind and not a single thing."

When it is all added up, Jakobson's range of thought on the nature of language is impressive. Jakobson was not afraid to deal with issues that have serious philosophical implications. It is because of that fearlessness that he has provided us with a body of work that can be compared with Wittgenstein on so many questions. Jakobson's view of the relation of a part to a whole has its counterpart in Wittgenstein's thinking and Jakobson's discussion of opposition and hierarchy will be very helpful in explicating many phenomena identified by Wittgenstein. After those characterizations of the nature of language overall, the threads in Jakobson's work for the elucidation of Wittgenstein's thought are Jakobson's discussion of translation, which is a key to the problem of "equivalence in difference" as it will come up in the treatment of language and time and Jakobson's discussion of double

articulation, which will be relevant to the treatment of transparency and opacity in language. Finally, Peirce's trichotomization of the modes of signification will be one of the basic tools of analysis throughout this paper. Peirce's insight on these three "semiotic tenses"[38] is invaluable to the kind of investigation into the nature of language pursued in this paper.

## Chapter Three

### Opposition, Neutralization and the Social Nature of Language

As a philosopher, Wittgenstein gained some very important insights into the nature of language. The Later Wittgenstein spent most of his efforts fighting against views of language that were too mechanical or that tried to describe it on the basis of comparisons to mathematics. For Wittgenstein, it is important that language is not something outside of us, but a part of what we are as human beings. Wittgenstein recognized that language is so close to our own nature, that it is sometimes hard to see language as it is. This understanding of language as something very close to us is reflected in Wittgenstein's views on the proper method of semantics or any other investigation into the essence of language. For example, he argues that semantics is peculiar in dealing with goings-on and relationships which, by their nature, cannot be hidden from us:

> If it is asked: "How do sentences manage to represent?"--the answer might be: "Don't you know? You certainly see it, when you use them." For nothing is concealed.
>
> How do sentences do it?--Don't you know? For nothing is hidden.[1]

If the workings of meaning seem to be hidden from us, it is because they are too obvious--right under our noses:

> What we have to mention in order to explain the significance, I mean the importance, of a concept, are often extremely general facts of nature: such facts as are hardly ever mentioned because of their great generality.[2]

> The aspects of things that are most important for us are hidden because of their simplicity and familiarity. (One is unable to notice something--because it is always before one's eyes.) The real foundations of his enquiry do not strike a man at all. Unless that fact has at some time struck him.--And this means: we fail to be struck by what, once seen, is most striking and most powerful.[3]

Therefore, the method of Wittgenstein's philosophical semantics is not "scientific" in the sense of resembling the method of the natural sciences, but rather a method of pure description.

> It was true to say that our considerations could not be scientific ones. . . . we may not advance any kind of theory. . . . We must do away with all explanation, and description alone must take its place. And this description gets its light, that is to say its purpose--from the philosophical problems. These are, of course, not empirical problems; they are solved, rather, by looking into the workings of our language, and that in such a way as to make us recognize those workings: in despite of an urge to misunderstand them. The problems are solved, not by giving new information, but by arranging what we have always known.[4]

One value Wittgenstein's work has for the study of language is in his method of description and in his actual descriptions of various words and their workings. His method is to use concrete examples of the uses of words in a sequence that allows one to get some understanding of how all of the particular cases fit together or run into one

another. Wittgenstein calls this "gaining a perspicuous view of the use of a word":

> A main source of our failure to understand is that we do not command a clear view of the use of our words.--Our grammar is lacking in this sort of perspicuity. A perspicuous representation produces just that understanding which consists in 'seeing connexions'. Hence the importance of finding and inventing intermediate cases. . . .
>
> A philosophical problem has the form: "I don't know my way about".
>
> Philosophy may in no way interfere with the actual use of language; it can in the end only describe it. For it cannot give it any foundation either. It leaves everything as it is.[5]

Thus, hearing the description of a word's use is like being shown around an unfamiliar neighborhood in order to get a feel for the terrain and a familiarity with the layout of the streets and buildings. Since words show their meanings just as much in fiction as they do in factual reporting, much of this terrain of word usage can be purely imaginary. Wittgenstein often employed invented examples which he called "language-games." These were simple linguistic interactions, conceived of as representing entire systems unto themselves. A simple example of a language game is as follows:

> Let us look at a simple example of operating with words. I give someone the order: "fetch me six apples from the grocer", and I will describe a way of making use of such an order: The words "six apples" are written on a bit of paper, the paper is handed to the grocer, the grocer compares the word "apple" with labels on different shelves. He finds it to agree with one of the labels, counts from 1 to the number written on the slip of paper, and for every number counted takes a fruit off the shelf and puts it in a bag.--And here you have a case of the use of words.[6]

Wittgenstein wrote this of the value of his "language-games" for linguistic description:

> . . . this general notion of the meaning of a word surrounds the working of language with a haze which makes clear vision impossible. It disperses the fog to study the phenomena of language in primitive kinds of application in which one can command a clear view of the aim and functioning of words.[7]

At one time, Wittgenstein thought that a full-blown language (Such as English, French, Chinese, etc.) could be built up out of these simple language-games, but later, true to his views on the importance of description as opposed to explanation, he held that the language-games had to be thought of as independent structures in their own right that had some value for comparison with certain aspects of common languages. In The Blue Book, which preceded Philosophical Investigations, Wittgenstein writes:

> Language games are the forms of language with which the child begins to make use of words. The study of language games is the study of primitive forms of language or primitive languages. . . . we recognize in these simple processes forms of language not separated by a break from our more complicated ones. We see that we can build up the complicated forms from the primitive ones by gradually adding new forms.[8]

But later, in Philosophical Investigations, Wittgenstein writes:

> Our clear and simple language-games are not preparatory studies for a future regularization of language--as it were first approximations, ignoring friction and air-resistance. The language-games are rather set up as objects of comparison which are meant to throw light on the facts of our language by way not only of similarities, but also of dissimilarities.
>
> For we can avoid ineptness or emptiness in our assertions by presenting the model as what it is, as an object of comparison--as, so to speak, a measuring-rod; . . .[9]

In effect, the purpose of a language-game is to induce a different set of comparisons than are normally made and thereby cause things that are normally invisible (or transparent in the terminology that will be introduced in chapter four) to become visible.

## Language as a System

Given the preceding introduction into Wittgenstein's method, we can start to compare some of his views to those of Jakobson. To begin with, Wittgenstein, like Jakobson, saw the importance of the linguistic system in establishing the meaning of any linguistic element. The following is an example of a language-game which Wittgenstein used to discuss the relation of linguistic elements to the linguistic system:

> Let us imagine a language . . . . The language is meant to serve for communication between a builder A and assistant B. A is building with building-stones: there are blocks, pillars, slabs and beams. B has to pass the stones, and that in the order in which A needs them. For this purpose they use a language consisting of the words "block", "pillar", "slab", "beam". A calls them out;--B brings the stone which he has learnt to bring at such-and-such a call.----Conceive this as a complete primitive language. . . .
>
> But what about this: is the call "Slab!" in example (2) a sentence or a word?--If a word, surely it has not the same meaning as the like-sounding word of our ordinary language, for in 2 it is a call. But if a sentence, it is surely not the elliptical sentence: "Slab!" of our language. . . .
>
> . . . We say that we use the command in contrast with other sentences because our language contains the possibility of those other sentences. . . .
>
> The sentence ["Slab!" in our language] is 'elliptical', not because it leaves out something that we think when we utter it, but because it is shortened --in comparison with a particular paradigm of our grammar.[10]

This is a somewhat oblique example of how an utterance derives part of its character from its place in the whole system--that is, from the implicit comparisons to its paradigmatic alternatives, but Wittgenstein also recognizes explicitly the dependence of the meaning of elements on the system to which they belong. For instance, he writes:

> The sign (the sentence) gets its significance from the system of signs, from the language to which it belongs. Roughly: understanding a sentence means understanding a language.[11]

> "I set the brake up by connecting up rod and lever."--Yes, given the whole of the rest of the mechanism. Only in conjunction with that is it a brake-lever, and separated from its support it is not even a lever; it may be anything, or nothing.[12]

> Can I say "bububu" and mean "If it doesn't rain I shall go for a walk"?--it is only in a language that I can mean something by something.[13]

A very powerful analogy for illustrating the dependence of an element's meaning on the system is the analogy of language to a chess game. Chess, like language is a system based largely on convention, as opposed to a system like the mechanism of the locomotive, which is based on mechanical connections.

> We are talking about the spatial and temporal phenomenon of language, not about some non-spatial, non-temporal phantasm. . . . But we talk about it as we do about the pieces in chess when we are stating the rules of the game, not describing their physical properties.
>
> The question "What is a word really?" is analogous to "What is a piece in chess?"[14]

## Oppositions

Wittgenstein agrees with Jakobson not only on the importance of the linguistic system in establishing the

element in its meaning, but also on the importance of oppositions within the system. One place Wittgenstein discusses opposition in language is in connection with negation. Wittgenstein discusses the way in which a condition contains the possibility of its negation, so that there are two real alternatives at issue even though only one is in the foreground:

> . . . if I say "I have no pain in my arm", does that mean that I have a shadow of the sensation of pain, which as it were indicates the place where the pain might be?
>
> In what sense does my present painless state contain the possibility of pain?[15]

The operation of negation in language is, in itself, an important clue to the widespread currency of opposition in language. In particular, Wittgenstein argues that the word "not" could not by itself contain all the information necessary to guess what the negation of a word or phrase should be; thus, when the word "not" triggers "negation," it must be tapping into pre-existing oppositional relationships by which the negations of words are established.

> "How can the word 'not' negate?"--"The sign 'not' indicates that you are to take what follows negatively." We should like to say: The sign of negation is our occasion for doing something--possibly something very complicated. It is as if the negation-sign occasioned our doing something. But what? That is not said. It is as if it only needed to be hinted at; as if we already knew. As if no explanation were needed, for we are in any case already acquainted with the matter.[16]

It is going too much beyond what Wittgenstein says here to suggest that what we are already acquainted with, so

that it only needs to be hinted at is the oppositional structure of the language. One might say that the word not gives the instruction to go to the other member of an opposition. When there is no pre-existing oppositional pair, the word not may fabricate the other member of an opposition out of whole cloth.

Inactivation of oppositions

Related to the idea of opposition is that of neutralization--the loss of an element's normal functioning in situations where there is no opposition because there is only one real alternative. "Neutralization" is a term borrowed from the Prague school of linguistics which was originally used to describe situations in which a distinctive feature opposition is inactive, such as when an orthographic "t" and an orthographic "d" in German in a final position are both pronounced as /t/ (e.g., in "Bunt" and "Bund"). This principle of neutralization is an important key to understanding Wittgenstein's discussion of "internal" phenomena, which lack some of the oppositions active in the "external world". Wittgenstein continually insists that something is lost when there is not a functioning oppositional relationship between real alternatives:

> "I know what I want, wish, believe, feel, . . . . . ." (and so on through all the psychological verbs) is either philosophers' nonsense, or alternatively not a judgment a priori.
>
> "I know . . ." may mean "I do not doubt . . ." but does not mean that the words "I doubt . . ." are senseless, that doubt is logically excluded [as in the

> case of knowing what is going on in one's consciousness].
>
> One says "I know" where one can also say "I believe" or "I suspect"; where one can find out.[17]

> To ask "are you sure that it's you who have pains?" would be nonsensical [being in pain does not admit of an opposition between knowing one is in pain and being in pain without knowing it]. Now, when in this case no error [thinking one is not in pain when one actually is in pain] is possible, it is because the move which we might be inclined to think of as an error, a 'bad move', is no move of the game at all.[18]

> I can know what someone else is thinking, not what I am thinking.
>
> It is correct to say "I know what you are thinking", and wrong to say "I know what I am thinking." [There can be no issue of knowing vs. being unaware in relation to one's own thinking.]
>
> (A whole cloud of philosophy condensed into a drop of grammar [no doubt an allusion to Descartes' dictum "I think, therefore I am." which makes the knowledge that one thinks into a paradigm of certainty].)[19]

Wittgenstein also points out that our feeling that the meaning of the word "same" is self-evident stems in part from expecting that a set of cases where the word "same" is neutralized (the "sameness" of an object with itself), and where therefore its application seems self-evident, ought to instruct us in the use of the word in contexts where it is not neutralized--where there can be some question as to whether two things are "the same" or "different":

> But isn't the same at least the same?
>
> We seem to have an infallible paradigm of identity in the identity of a thing with itself. I feel like saying: "Here at any rate there can't be a variety of interpretations. If you are seeing a thing you are seeing identity too."
>
> Then are two things the same when they are what one thing is? And how am I to apply what the one thing shews me to the case of two things?
>
> "A thing is identical with itself."--There is no finer example of a useless proposition, which yet is connected with a certain play of the imagination. It

> is as if in imagination we put a thing into its own shape and saw that it fitted.[20]

Wittgenstein expresses the loss of power the word "same" suffers when it is not in opposition to a possible difference by calling "A thing is identical with itself" a "useless proposition"; though Wittgenstein concedes that such a sentence could have what Jakobson might call a "poetic" content to it. Wittgenstein argues that many of the things we feel must be true by logic are cases of words that have poetic, imagery-producing value even though they are in neutralized contexts where we can do no more than simply define some terminology--where they certainly cannot say much about the world.

> What does it mean when we say: "I can't imagine the opposite of this" or "What would it be like, if it were otherwise?"--For example, when someone has said that my images are private, or that only I myself can know whether I am feeling pain, and similar things.
>
> . . . . These words are a defence against something whose form makes it look like an empirical proposition, but which is really a grammatical one. . . .
>
> Example: "Every rod has a length." That means something like: we call something (or this) "the length of a rod"--but nothing "the length of a sphere." Now can I imagine 'every rod having a length'? Well, I simply imagine a rod. Only this picture, in connexion with this proposition, has a quite different role from one used in connexion with the proposition "this table has the same length as the one over there". For here I understand what it means to have a picture of the opposite (nor need it be a mental picture).
>
> But the picture attaching to the grammatical proposition could only shew, say, what is called "the length of a rod". And what should the opposite picture be?[21]

## Two Fundamental Oppositions in Language

### The foundedness of falsehood on truth

Wittgenstein makes the important distinction between definitional or "grammatical" propositions and empirical propositions. "Every rod has a length" is a grammatical proposition rather than an empirical one; thus, it is not clear what it could mean to say "This rod does not have a length," since length is part of what makes us call something a "rod." Wittgenstein reminds his reader on many occasions of this principle that certain presuppositions and 'grammatical' conventions are built into any language game, without which it would soon lose its coherency or its point. For example, he writes:

> "If it is possible for someone to make a false move in some game, then it might be possible for everybody to make nothing but false moves in every game."--Thus we are under a temptation to misunderstand the logic of our expressions here, to give an incorrect account of the use of our words.
>
> Orders are sometimes not obeyed. But how would it look if no orders were ever obeyed? The concept 'order' would have lost its purpose.[22]

The fact that orders are at least sometimes obeyed is an important "constituent" of the concept 'order' just as Wittgenstein describes the use of "true" and "false" as a constituent of the concept 'proposition' and "check" as a constituent of the concept 'king' in chess:

> . . . what a proposition is is in one sense determined by the rules of sentence formation . . . , and in another sense by the use of the sign in the language-game. And the use of the words "true" and "false" may be among the constituent parts of this game; and if so it belongs to our concept 'proposition' . . . As we might also say, check belongs to our concept of the

> king in chess (as so to speak a constituent part of it).[23]

The fact that the king can be checked cannot be questioned within the framework of the game, for to do so is to ask for another game. When the game is our entire English language, there are many things that cannot be questioned at all except if one wishes to suggest he would prefer a different language to English or another word to the one at issue:

> It looks as if it followed from the nature of negation that a double negative is an affirmative.
> . . .
> There cannot be a question whether these or other rules are the correct ones for the use of "not". (I mean, whether they accord with its meaning.) For without these rules the word has as yet no meaning; and if we change the rules, it now has another meaning (or none), and in that case we may just as well change the word too.[24]

Thus, there are some "extremely general facts of nature" or perhaps more accurately, some linguistic conventions based in varying degrees on facts of nature, that cannot be questioned without undoing the very language which is the means of questioning (such as, for example, that rain is wet), while there are other things that can be questioned (for example, that it is raining right now):

> 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 defence of this one says that these sense-impressions can deceive us. But here one fails to reflect that the false appearance is precisely one of rain is founded on a definition.

> The point here is not that our sense-impressions might lie, but that we understand their language. (And this language like any other is founded on convention.)[25]

The possibility of uttering a falsehood, depends on the existence of a language which has words and ways of using those words that cannot be questioned as to truth or falsehood ("we understand their language") and which we therefore are inclined to call "true." In Jakobsonian terms, one might say that falsehood is marked in relation to truth. Falsehoods depend on the truth in much the same way that exceptions are founded on the rule:

> "So you are saying that human agreement decides what is true and what is false?"--It is what human beings <u>say</u> that is true and false; and they agree in the <u>language</u> they use. That is not agreement in opinions but in form of life.[26]

> . . . 'false moves' can only exist as the exception. For if what we now call by that name became the rule, the game in which they were false moves would have been abrogated.[27]

The relationship between the foundation of language which cannot be questioned as to truth or falsity and opinions (sentences, statements) of which the truth can be questioned can be made clearer by thinking of how a child becomes able to utter a falsehood. Wittgenstein claims "A child has much to learn before it can pretend."[28] and "Lying is a language-game that needs to be learned like any other one."[29] Jakobson is in explicit agreement with Wittgenstein on this point. He describes how the child becomes able to speak falsehoods:

> . . . in learning his mother tongue, the child realizes that he has the right to impose different predicates on

> the same subject, "dog" ("the dog . . . runs, sleeps, eats, barks") as well as he may combine different subjects ("dog, cat, Peter, Mommy") with one and the same predicate (e.g. "runs"). Then why not extend this freedom to assign new predicates and say "the dog meows"? The misuses of freedom is a typical side-effect of the child's verbal and mental liberation from the given situation. As long as he merely says "runs", or "cat", or "dog", he is totally dependent on the present temporal and spatial environment, but with the appearance of subject-predicate clauses, he suddenly can speak of things distant in time or space, events belonging to the remote past or to the future, and furthermore he can build entire fictions.[30]

Jakobson also addresses the issue of fiction more generally:

> . . . even if we pedantically censor any image-bearing expression and deny the existence of green ideas, also then, as in the case of 'quadrature of the circle' or 'pigeon's milk', the nonexistence, the fictitiousness of these entities has no bearing on the question of their semantic significance. The possibility of questioning their being is the best warning against a confusion of ontological irreality with senselessness.[31]

One way to take this reminder of the meaningfulness of fictions is to say that the fictions of "quadrature of the circle" and "pigeon's milk" are meaningful because they are founded on the realities of "quadrature," "circles," "pigeons," and "milk." (To that suggestion, Wittgenstein would insert the caution that "quadrature," "circle," "pigeon," and "milk" must not be thought of as irreduceable <u>simples</u>, but each as an involved concept in its own right.[32])

<u>The foundedness of inner speech on outer speech</u>

Wittgenstein and Jakobson agree not only on the issue of falsehood (fiction) as marked in relation to truth

(reality) but also on the similar issue of "inner speech" or psychology in general as marked in relation to "outer speech." Here is Jakobson's description of the development of inner speech on the basis of outer speech:

> On the threshold of the transition from infancy (literally 'speechlessness') to language, a child starts his interpersonal communication by addressing one of the nearest adults, most usually his mother. Later, his one-to-one communication is complemented by a more-than-two person system with a plurality of participants and with a developing distinction between the true addressee of the child's messages and the unadressed auditors. On the other hand there arises a less-than-two person system--dialogues with an older interlocutor are complemented by the child's gradual mastery of a narrowed intrapersonal network of communication.[33]

> . . . A. N. Sokolov's investigation of the relation between thought and inner speech shows how the latter "arises genetically on the basis of outer speech as its interior projection and constantly develops and improves under the direct influence of external speech. In spite of its elliptic and generalized character, inner speech does not possess any separate, idiosyncratic, logical and grammatical structure" . . .[34]

Wittgenstein's view on the intimate relationship of inner and outer speech can be gathered to some extent from the following:

> Silent 'internal' speech is not a half hidden phenomenon which is as it were seen through a veil. It is not hidden at all [as a phenomenon, though individual instances of internal speech may be hidden from another person], but the concept may easily confuse us, for it runs over a long stretch cheek by jowl with the concept of an 'outward' process, and yet does not coincide with it. . . .
>
> The close relationship between 'saying to oneself' and 'saying' is manifested in the possibility of telling out loud what one said to oneself, and of an outward action's accompanying inward speech. (I can sing inwardly, . . . and beat time with my hand as I do so.)[35]

Wittgenstein argues that all of our language for "inner experiences" must be founded on public, shared experiences, because anything completely "private" could never play a role in language:

> "Imagine a person whose memory could not retain what the word 'pain' meant--so that he constantly called different things by that name--but nevertheless used the word in a way fitting in with the usual symptoms and presuppositions of pain"--in short he uses it as we all do. Here I should like to say: a wheel that can be turned though nothing else moves with it, is not part of the mechanism.[36]

The mechanism here is the social function of words; "pain" is as much a word with a social function as is "yellow" or "flower" in this example of Wittgenstein's:

> Could the justification of an action as fulfilment of an order run like this: "You said 'Bring me a yellow flower', upon which this one gave me a feeling of satisfaction; that is why I have brought it"? Wouldn't one have to reply: "But I didn't send you to bring me the flower which should give that sort of feeling after what I said!"?[37]

Just so, one cannot use the word "pain" arbitrarily to suit one's own notion of what "pain" should mean. In fact, one's own idiosyncratic experience with pain does not figure into the meaning of pain at all, except insofar as the peculiar character of that experience is itself expressible. In the following passage, Wittgenstein gives a good image of how purely idiosyncratic, private aspects of psychological experience are cancelled out when such an experience is expressed in language.

> If I say of myself that it is only from my own case that I know what the word "pain" means--must I not say the same of other people too? And how can I generalize the one case so irresponsibly?

> Now someone tells me that he knows what pain is only from his own case!--Suppose everyone had a box with something in it: we call it a "beetle". No one can look into anyone else's box, and everyone says he knows what a beetle is only by looking at his beetle.--Here it would be quite possible for everyone to have something different in his box. One might even imagine such a thing constantly changing.--But suppose the word "beetle" had a use in these people's language?--If so it would not be used as the name of a thing. The thing in the box has no place in the language-game at all; not even as a something: for the box might even be empty.--No, one can 'divide through' by the thing in the box; it cancels out, whatever it is.
>
> That is to say: if we construe the grammar of the expression of sensation on the model of 'object and name' the object drops out of consideration as irrelevant.[38]

Thus, whatever "one can only know from one's own case" is simply irrelevant in language. Because the function of language is to communicate, the meanings of words must be built on things that are communicable. Words can make things communicable that were not communicable before, but only by combination, not by a metaphysical connection between the word and an inner process that each person can "only know from his own case."

There are serious problems with trying to base the meanings of a word on a metaphysical connection between it and an inner process or condition. For one thing, we can often communicate with others quite well without really knowing if what goes on in their minds is like what goes on in our minds. In relation to the idea that one experiences an atmosphere surrounding a word that indicates its various uses, Wittgenstein writes:

> For if it is like this, if the possible uses of a word do float before us in half-shades as we say or hear it--this simply goes for us. But we communicate

> with other people without knowing if they have this experience too.[39]

Wittgenstein points out that the question of whether everyone's experience of "red" is alike is moot from the point of view of language. If one insists on the importance of each person's subjective experience of "red" for the meaning of the word, entities are soon multiplied far beyond necessity:

> The assumption would thus be possible--though unverifiable--that one section of mankind had one sensation of red and another section another.
>
> What am I to say about the word "red"?--that it means something 'confronting us all' and that everyone should really have another word, besides this one, to mean his <u>own</u> sensation of red? Or is it like this: the word "red" means something known to everyone; and in addition, for each person, it means something known only to him? (Or perhaps rather: it <u>refers</u> to something known only to him.)[40]

The way to avoid metaphysical disputes of this sort, for which there can be no evidence on either side is to recognize that a word is a social thing. In Jakobson's words: "There is no such thing as private property in language: everything is socialized."[41] It is not private experience that is the basis of words' meanings, but public experience. The meaning of words must be based on social criteria, as Wittgenstein argues in this discussion of "understanding" something and "being able to play chess":

> How should we counter someone who told us that with <u>him</u> understanding was an inner process?--How should we counter him if he said that with him knowing how to play chess was an inner process?--We should say that when we want to know if he can play chess we aren't interested in anything that goes on inside him.--And if he replies that this is in fact just what we are interested in, that is, we are interested in whether he can play chess--then we shall have to draw his

was like a human being in essential respects that we would say it had consciousness.

Of course, Wittgenstein recognizes that our ability to see another person's "inner state" has its limits:

> "We also say of some people that they are transparent to us. It is, however, important as regards this observation that one human being can be a complete enigma to another." We learn this when we come into a strange country with entirely strange traditions; and, what is more, even given a mastery of the country's language. We do not <u>understand</u> the people.[50]

Even in favorable circumstances, one cannot gauge what is going on in another person's mind or emotions in every instance. In fact, this is how Wittgenstein explains the feeling that thoughts and feelings are hidden from view: "'What anyone says to himself is hidden from me' might of course also mean that I can for the most part not <u>guess</u> it . . . "[51] But there is a difference between being hidden sometimes and being hidden all the time that parallels the difference between making a false move sometimes and making a false move all the time:

> Would it be imaginable that people should never speak an audible language, but should still say things to themselves in the imagination?
>
> "If people always said things only to themselves, then they would merely be doing <u>always</u> what as it is they do <u>sometimes</u>."--So it is quite easy to imagine this: one need only make the easy transition from some to all. (Like: "An infinitely long row of trees is simply one that does <u>not</u> come to an end.") Our criterion for someone's saying something to himself is what he tells us and the rest of his behaviour; and we only say that someone speaks to himself if, in the ordinary sense of the words, he <u>can speak</u>.[52]

Talk of inner states or inner speech is founded on the existence of outward speech and outwardly visible states.

> . . . . we forget that what should interest us is the question: how do we compare these experiences; what criterion of identity do we fix for their occurrence?[54]

Here Wittgenstein mentions the possibility of some kind of inner psychical criterion for "sudden understanding," though he only gives outward criteria. In discussing the verb "to read," Wittgenstein shows how much readier we are to trust outward criteria than to trust "psychical criteria" when we are forced to make a choice:

> . . . when we think the matter over we are tempted to say: the one real criterion for anybody's reading is the conscious act of reading, the act of reading the sounds off from the letters. "A man surely knows whether he is reading or only pretending to read!"
> . . .
> . . . imagine the following case: We give someone who can read fluently a text that he never saw before. He reads it to us--but with the sensation of saying something he has learnt by heart (this might be the effect of some drug). Should we say in such a case that he was not really reading the passage? Should we here allow his sensations to count as the criterion for his reading or not reading?[55]

The key issue in both of these examples is that of defining characteristics, or, in Wittgenstein's words, the "criterion of identity." A "criterion of identity" can sometimes be problematic, as Wittgenstein illustrates in the following two passages:

> 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 the use of the words: "to say such-and-such to oneself" by someone's pointing to a process in the larynx or the brain? Is it not also perfectly possible that my image of the sound a and his correspond to different physiological processes? The question is: How do we compare images?[56]

> "Another person can't have my pains."--Which are my pains? what counts as a criterion of identity here? Consider what makes it possible in the case of physical objects to speak of "two exactly the same", for example, to say "This chair is not the one you saw here yesterday, but is exactly the same as it".[57]

When Wittgenstein asks what the criterion of identity for a thing is, he is pointing out that the meaning of "same" is not as self-evident as is ordinarily supposed:

> Perhaps a logician will think: The same is the same--how identity is established is a psychological question. (High is high--it is a matter of psychology that one sometimes sees and sometimes hears it.)
>
> What is the criterion for the sameness of two images?--What is the criterion for the redness of an image? For me, when it is someone else's image: what he says and does. For myself, when it is my image: nothing. And what goes for "red" also goes for "same".[58]

For myself, there can be no criterion, because any criterion would require for its application a judgment just as questionable as the original judgment that the two images were the same. Wittgenstein writes about the possibility of trying to confirm a memory by referring to another memory:

> Let us imagine a table (something like a dictionary) that exists only in our imagination. A dictionary can be used to justify the translation of a word X by a word Y. But are we also to call it a justification if such a table is to be looked up only in the imagination?--"Well, yes; then it is a subjective justification."--But justification consists in appealing to something independent. . . .
>
> Looking up a table in the imagination is no more looking up a table than the image of the result of an imagined experiment is the result of an experiment.[59]

One may try to justify one memory by means of another that seems more solid, but ultimately, the various memories can

only be justified by something outside the mind.

Wittgenstein writes:

> "But surely I can appeal from one memory to another. For example, I don't know if I have remembered the time of departure of a train right and to check it I call to mind how a page of the time-table looked. Isn't it the same here?"--No; for this process has got to produce a memory which is actually correct. If the mental image of the time-table could not itself be tested for correctness, how could it confirm the correctness of the first memory? (As if someone were to buy several copies of the morning paper to assure himself that what it said was true.)[60]

A justification of one's memory or one's judgment (often shown by one's use of a word) must eventually be a social justification: ". . . if I need a justification for using a word, it must also be one for someone else."[61] The social basis for a word's use comes from the original teaching of the word's use, which depends on the teacher's being able to recognize the learner's nonverbal response to things, or the learner's response in terms of words already known:

> "Before I judge that two images which I have are the same I must recognize them as the same." And when that has happened, how am I to know that the word "same" describes what I recognize? Only if I can express my recognition in some other way, and if it is possible for someone else to teach me that "same" is the correct word here. . . .
>
> How do I recognize that this is red?--"I see that it is this; and then I know that that is what this is called." This?--What?! What kind of answer to this question makes sense? . . . .
>
> How do I know that this colour is red? It would be an answer to say: "I have learnt English".[62]

Thus, for very many words, the only guarantee that one uses the word correctly is the training in the word's use one received at the time of learning the language. Even though

one cannot justify one's use of the word, there may be no serious doubt that one is using it correctly.

> "When I say 'I am in pain' I am at any rate justified before myself."--What does that mean? Does it mean: "If someone else could know what I am calling 'pain', he would admit that I was using the word correctly"?
>
> To use a word without a justification does not mean to use it without right.[63]

## Convention

If "to use a word correctly" is to use it as one was taught to, it is not surprising that there is an important element of convention in language. Not every part of a language is determined as a matter of logic or inherent "rightness"; many things must be specified by custom--or in other words, by our desire to communicate with one another; Jakobson gives the basis for custom or convention in language when he writes: "Everyone, when speaking to a new person, tries, deliberately or involuntarily, to hit upon a common vocabulary: either to please or simply to be understood or, finally, to bring him out, he uses the terms of his addressee."[64] Wittgenstein is quick to point out cases where what seems to be a logical necessity is only one of many possible conventions. Wittgenstein is ready to argue that even our forms of arithmetic and logic are matters of custom. In relation to arithmetic, Wittgenstein writes:

> But what would this mean: "Even though everybody believed that twice two was five it would still be four"?--For what would it be like for everybody to believe that? Well, I could imagine, for instance, that people had a different calculus, or a technique

> which we should not call "calculating". But would it be wrong? (Is a coronation wrong? To beings different from ourselves it might look extremely odd.)[65]

On the subject of negation, Wittgenstein writes:

> We can easily imagine human beings with a 'more primitive' logic, in which something corresponding to our negation is applied only to certain sorts of sentence; perhaps to such as do not themselves contain any negation. It would be possible to negate the proposition "He is going into the house", but a negation of the negative proposition would be meaningless, or would count only as a repetition of the negation. Think of means of expressing negation different from ours: by the pitch of one's voice, for instance. What would a double negation be like there?[66]

It is misguided to say that negation which yields an affirmative when doubled is genuine negation while negation that is only strengthened by doubling is logically wrong, even though there is a considerable temptation to say just that:

> It looks as if it followed from the nature of negation that a double negative is an affirmative. (And there is something right about this. What? Our nature is connected with both.)
>
> There cannot be a question whether these or other rules are the correct ones for the use of "not". (I mean, whether they accord with its meaning.) For without these rules the word has as yet not meaning; and if we change the rules, it now has another meaning (or none), and in that case we may just as well change the word too.[67]

Wittgenstein's parenthetical remark in the first paragraph of the preceding quotation can be interpreted as saying that there is something right about having a double negative be an affirmative, because most fundamentally, there is an opposition between negative and affirmative in which each pole points to the other, and the negative pole,

in particular, refers back to its unmarked counterpart, the affirmative pole. However, the negative pole also points in its own direction, so that repetition could just as logically strengthen the negation contrast as undo it. Both types of negation occur in languages of the world. Double negatives that have a negative meaning are the rule in Spanish and are very common in colloquial English, while double negatives that have an affirmative meaning are the rule in formal English. According to which rule prevails, the word corresponding to "not" in that language has a somewhat different meaning.

In Pierce's theory of semeiosis, the conventional aspect of language is identified with the symbol. As Jakobson notes, Plato, in the Cratylus, has the character Socrates ". . . agree that representation by likeness is superior to the use of arbitrary signs, but despite the attractive force of likeness he feels obliged to accept a complementary factor--conventionality, custom, habit."[68] The advantage of convention or habit which counterbalances the obvious attractiveness of signs that have a genuine likeness to what they represent is that convention or habit allows more than one instance of a sign to be tied together in usage. "Arbitrariness" of a sign allows for constancy despite contextual variation since if the signans does not have to be actually similar or actually connected to its signatum, equivalence of the signans can be maintained despite variation in the signatum so that a symbol can

effectively signal a partial similarity in the signatum. Just such a capability for dealing with partial similarity is what is necessary in order for a sign to go beyond particular instances. Because the conventional symbol has this capability, it can even reach into the future, which is always bound to the past by relations of partial similarity. Peirce, and Jakobson, following Peirce, clearly recognize this relation of the symbol to time, and in particular to the future:

> While the icon has such being as belongs to the past experience, the nature of a symbol, especially such as a verbal sign or the network of language, is the really working general rule. According to Peirce, "whatever is truly general refers to the indefinite. . . . It is a potentiality; and its mode of being is esse in futuro" (II #148). "The value of a symbol is that it serves to make thought and conduct rational and enables us to predict the future" (IV #448).[69]

Interestingly, Wittgenstein also points to convention, and in particular, to language in its conventional aspect, as the sine qua non of looking toward the future--wishing something, expecting something, intending something, etc. Of wishing, Wittgenstein writes: "Suppose it were asked 'Do I know what I long for before I get it?' If I have learned to talk, then I do know."[70] Of expecting, he writes: "It is in language that an expectation and its fulfilment made contact."[71] And finally, of intending, Wittgenstein argues:

> But didn't I already intend the whole construction of the sentence (for example) at its beginning? So surely it already existed in my mind before I said it out loud! . . . But here we are constructing a misleading picture of 'intending', that is, of the use of this word. An intention is imbedded in its situation, in

> human customs and institutions. If the technique of the game of chess did not exist, I could not intend to play a game of chess. In so far as I do intend the construction of a sentence in advance, that is made possible by the fact that I can speak the language in question.[72]

Wittgenstein's ideas about customs and institutions, rules and conventions is crucial to Wittgenstein's theory of language. Because Wittgenstein treats rules and customs in connection with the use of language over time in such great depth, exploring Wittgenstein's ideas in this regard and comparing them to the views of Peirce and Jakobson will occupy the greater share of the next chapter.

## Chapter Four

### Language in Time: Memory and Anticipation

Jakobson, following Peirce, stresses the need to examine rules and customs in order to understand the operation of symbols in pointing out that "A symbol, for instance a word, is a 'general rule' which signifies only through the different instances of its application, namely the pronounced or written--thinglike--replicas."[1] Because a symbol must be applied in each instance to a situation that is not completely like any other situation in which the symbol has ever been used, Jakobson's statement that "Equivalence in difference is the cardinal problem of language"[2] not only bears on the problem of translation from one language or semiotic system to another or from one phrase to another, but perhaps even more profoundly, it bears on the question of how the use of a symbol is translated from one situation to the next. There are two riddles to be solved about how the translation of a symbol's use from one situation to the next. One is the riddle of how the invariant in the symbol's use can continue in existence to be carried over from one situation to the next. The other riddle is that of how whatever it

is that manages to persist over time from one situation to another can be suitably modified so that it can fit into the new situation, which cannot possibly admit a meaning in the later context exactly like its meaning in the earlier one. Wittgenstein offers two different answers for this pair of questions. One is that as to the first question, what is carried over from one circumstance of a symbol's use to the next is simply the full or fragmentary memory of all the earlier situations when one has heard (seen, felt, etc.) the symbol used or has used it oneself, and as to the second question, that the capacity for appropriate use of the symbol in each new situation is partly a mystery and partly an illusion created by our inattention to how ad hoc our use of symbols really is. Wittgenstein's other answer, which comes much closer to the answer given by Jakobson and by Charles Saunders Peirce, is that the use of a symbol depends on dispositions and skills built up in the course of experience which lead us to respond in certain ways to any new occurrence of the symbol, these dispositions and skills being what subsist from one time to the next; where the dispositions and skills can include the ability to differentiate one's response to the symbol according to context. The difference between Wittgenstein's remembered examples theory and his disposition/skill theory is analogous to the difference that has been identified by researchers into memory between <u>fact memory</u> and <u>skill</u>

memory. Some of the results of this research were summarized in Discover, November, 1983:

> These studies have led scientists, beginning with McGill University's Richard Hirsh, to conclude that there must be at least two categories of memory (see chart), one that might be called "fact" memory, the other "skill" memory.
>
> Fact memory, they believe, is the capacity to learn explicit information--names, dates, places, faces, words [specific words, not the way to use words], historical events, and so forth. This is the memory that amnesiacs lack--and that other people take for granted. Fact memories can be acquired quickly, are usually recorded along with the context in which they were learned ("I met So-and-So at a partly last week"), and are often easy to forget (one may remember a telephone number only long enough to dial it), although they can be stored for a very long time as well.
>
> Skill memory, on the other hand, is concerned with less conscious learning--riding a bicycle, playing a musical instrument, solving certain puzzles. Skill memories are acquired only by practice. They do not preserve the actual circumstances of learning (a baseball player does not remember all the practice swings that led to proficiency with a bat), and are hard to unlearn if they are once learned wrong. In sharp contrast to fact memories, skill memories are never explicitly recalled except when they are actually performed. (A golfer does not "remember" how to swing a golf club without going through the motion.) And many skill memories are best performed without conscious thought--as anyone knows who has ever tried to "think" his way through tying a shoelace.[3]

If the use of a word depended primarily on remembering examples of its past use, fact memory, which records a thing along with the context in which it was learned, would be the key to the workings of language. But if the use of a word depends mainly on dispositions and skills, it is skill memory that would be crucial to the workings of language. The characteristics of skill memory listed above--namely, acquisition by practice, forgetfulness of how and when one learned the skill, durability,

undisclosedness except in use, and reflexiveness--recur over and over in Wittgenstein's descriptions of the workings of language. When Wittgenstein tries to make sense of those characteristics of language at work along the lines of his remembered examples theory, all order in language seems to dissolve and everything remains a mystery, but as Wittgenstein moves toward a disposition/skill theory of the use of language, many more observed phenomena begin to seem intelligible. This will become clear in the following exposition of Wittgenstein's remembered examples theory of language use (or rule following) and his disposition/skill theory.

## Wittgenstein's Remembered Examples Theory of Language Use

Before examinings what happens when Wittgenstein tries to explain language by his remembered examples theory, it is necessary to see what the theory is. Perusal of the following several passages from Wittgenstein should began to make this clear. In this next passage, Wittgenstein argues that one's knowledge of the use of a word must be entirely expressible in the examples one can give.

> What does it mean to know what a game is? What does it mean, to know it and not be able to say it? Is this knowledge somehow equivalent to an unformulated definition? So that if it were formulated I should be able to recognize it as the expression of my knowledge? Isn't my knowledge, my concept of a game, completely expressed in the explanations that I could give? That is, in my describing examples of various kinds of game; shewing how all sorts of other games can be constructed on the analogy of these; saying that I should scarcely include this or this among games; and so on.[4]

But it does not seem that a mere list of examples could adequately express the use of a word. For instance, if a teacher shows a learner a finite number of examples, how is it that the learner can then go on to use the word sensibly in cases beyond those included in the examples?

> The expressions "and so on", "and so on ad infinitum" are also explained in this teaching. . . .
> Teaching which is not meant to apply to anything but the examples given is different from that which 'points beyond' them.
> "But then doesn't our understanding reach beyond all the examples?"--A very queer expression, and a quite natural one!--[5]

Wittgenstein emphasizes that the teacher does not know any more than the learner in this regard--both know only what is contained in the examples they know. The only difference between the teacher and the learner is that the teacher knows the examples first.

> Then am I defining "order" and "rule" by means of "regularity"?--How do I explain the meaning of "regular", "uniform", "same" to anyone?--I shall explain these words to someone who, say, only speaks French by means of the corresponding French words. But if a person has not yet got the concepts, I shall teach him to use the words by means of examples and by practice.--And when I do this I do not communicate less to him than I know myself.[6]

Yet there seems to be something more than just the examples themselves that has to be conveyed by teaching, but Wittgenstein denies that this is so.

> But is that all? Isn't there a deeper explanation; or mustn't at least the understanding of the explanation be deeper?--Well, have I myself a deeper understanding? have I got more than I give in the explaanation?--But then, whence the feeling that I have got more? . . .
> "But do you really explain to the other person what you yourself understand? Don't you get him to guess the essential thing? You give him examples,--but he has to guess their drift, to guess your intention."-

> -Every explanation which I can give myself I give to him too.[7]

Since both the teacher and the learner have only a set of examples to go on, both are in need of some means of "guessing the drift" of the examples, or at any rate, some means of using the examples to generate good usages of the word in new situations. In Wittgenstein's words:

> One gives examples and intends them to be taken in a particular way.--I do not, however, mean by this that he is supposed to see in those examples that common thing which I--for some reason--was unable to express; but that he is now to employ those examples in a particular way.[8]

If knowing a rule, such as that for the use of a word, is mainly a matter of remembering past applications of the rule, there must be some capacity human beings have to generalize those past applications to new situations in ways that their fellows recognize as similar to the way they would extend the application of the rule. Wittgenstein's remembered examples theory of rules leads one to posit an inexplicable human capacity to fashion an understandable future out of the dead past and the solitary present. For instance, Wittgenstein describes the way one might continue an algebraic series:

> "We see a series in just one way!"--All right, but what is that way? Clearly we see it algebraically, and as a segment of an expansion. Or is there more in it than that?--But the way we see it surely gives us everything!"--But that is not an observation about the segment of the series; or about anything that we notice in it; it gives expression to the fact that we look to the rule for instruction and do something, without appealing to anything else for guidance. . . .
>
> "The line intimates to me which way I am to go" is only a paraphrase of: it is my last arbiter for the way I am to go.[9]

The unexplained fact is how one can simply "do something" and have it make sense to anyone else, or how one can go from a set of past examples or early terms in a sequence to an appropriate choice of the next term or next use of a word.

## Wittgenstein's view of the meaning of a word as a concept with blurred edges, held together by family resemblances

It does not seem that a finite set of examples could pin down the proper use of a word. Wittgenstein admits that this is so, and merely argues that the way we use words might be good enough, even if it is somewhat indeterminate:

> How should we explain to someone what a game is? I imagine that we should describe games to him, and we might add: "This and similar things are called 'games'". And do we know any more about it ourselves? Is it only other people whom we cannot tell exactly what a game is?--But this is not ignorance. We do not know the boundaries because none have been drawn. To repeat, we can draw a boundary--for a special purpose. Does it take that to make the concept usable? Not at all! (Except for that special purpose.) No more than it took the definition: 1 pace = 75 cm. to make the measure of length 'one pace' usable. And if you want to say "But still, before that it wasn't an exact measure", then I reply: very well, it was an inexact one. . . .
>
> One might say that the concept 'game' is a concept with blurred edges.--"But is a blurred concept a concept at all?"--Is an indistinct photograph a picture of a person at all? Is it even always an advantage to replace an indistinct picture by a sharp one? Isn't the indistinct one often exactly what we need?
>
> . . . . is it senseless to say "Stand roughly there"? Suppose that I were standing with someone in a city square and said that. As I say it I do not draw any kind of boundary, but perhaps point with my hand--as if I were indicating a particular spot.[10]

What Wittgenstein means by saying that the concept "game" may have blurred edges is apparent in his famous discussion of the meaning of the word "game."

> 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. . . .
>
> 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.
>
> And for instance the kinds of number form a family in the same way. Why do we call something a "number"? Well, perhaps because it has a--direct--relationship with several things that have hitherto been called number; and this can be said to give it an indirect relationship to other things we call the same name. And we extend our concept of number as in spinning a thread we twist fibre on fibre. And the strength of the thread does not reside in the fact that some one fibre runs through its whole length, but in the overlapping of many fibres.[11]

This passage presents a somewhat disorganized picture of language use that is contradicted by the bulk of Jakobson's work on the structure of language and particularly of semantics. The notions of opposition, relative invariance and the relation of acontextual invariant meanings to contextual meanings, and of diagrammatic signification in

language all go to show that the meanings words take on in various situations are not accidental. In what he says about the meaning of "game," Wittgenstein describes the range of a word's employment as something that grows more or less haphazardly by extension from a few original uses. It is as if one took control of the territory that was to be the meaning of a word first by controlling a few cities here and there, then extending control over the countryside as well as fighting over the border between this and adjoining territories. In all of the consolidation of power after the initial invasion, there is a movement outward from the positions of strength (the most frequent uses of the word or the standard examples of the word's usage) which have already been established. Unfortunately, one of Wittgenstein's most famous statements, ". . . the meaning of a word is its use in the language."[12] when combined with the picture of a word's use as something anarchic makes the study of meaning into the study of a collection of arbitrary traditions of usage. This is close to how the so-called "linguistic philosophers," who flourished in England in the 1950's and 60's and considered themselves followers of Wittgenstein, tried to do semantics. However, Wittgenstein's identification of the meaning of a word with its use would take on an entirely different aspect if the use of a word were thought to have some governing principle. It would then become a directive to look carefully at a word's

actual use before jumping to conclusions as to what meaning or the governing principle of the word's use is, advice that is quite appropriate for Jakobsonian semantics. Wittgenstein uses the maxim of ". . . the meaning of a word is its use in the language" in this way as well as in the disassembling fashion of the "linguistic philosophers."

The meaning of a word on the edge of its normal range of use

In his lines of thought that I have termed his remembered examples theory of language use, Wittgenstein not only argues that the various contextual meanings of a word bear only family resemblances to each other, devoid of any central governing principle for all the various contextual meanings, but also that each instance of a word's use (in any of the word's contextual meanings) is fundamentally ad hoc; that is, the use is ultimately determined in each particular case for that particular case alone. If all one knows about a word's meaning is contained in the finite number of examples of its use one has been taught, there is no way the proper use can be pinned down in full by the instruction one has received. One is always partly on one's own in each instance of using a word. In Wittgenstein's view, a kind of meaningless "originality" pervades the ordinary use of language. This kind of enforced originality is easiest to see in the hard cases when it is not easy to tell how or whether a word should be used. For example:

> I say "There is a chair". What if I go up to it, meaning to fetch it, and it suddenly disappears from sight?---"So it wasn't a chair, but some kind of illusion".---But in a few moments we see it again and are able to touch it and so on.---"So the chair was there after all and its disappearance was some kind of illusion".---But suppose that after a time it disappears again--or seems to disappear. What are you we to say now? Have you rules ready for such cases--rules saying whether one may use the word "chair" to include this kind of thing?[13]

Since our words are adapted to our physical, social and historical situation, as well as to our beliefs, it can become unclear how to use a word when some of those circumstances or beliefs begin to unravel or are called into question. The extreme example is this:

> 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.[14]

The primary meaning of a word depends on a large set of facts about the world as we know it and on the beliefs commonly accepted for social interaction. Wittgenstein takes examples of this paradigmatic dependence of a word's meaning on our view of the world as evidence that a word's meaning is not fixed, but must be determined in each instance:

> Consider this example. If one says "Moses did not exist", this may mean various things. . . .
> . . . . Have I decided how much must be proved false for me to give up my proposition ["Moses did not exist"] as false? Has the name "Moses" got a fixed and unequivocal use for me in all possible cases?--Is it not the case that I have, so to speak, a whole series

> of props in readiness, and am ready to lean on one if another should be taken from under me and vice versa?--Consider another case. When I say "N is dead", then something like the following may hold for the meaning of the name "N": I believe that a human being has lived, whom I (1) have seen in such-and-such places, who (2) looked like this (pictures), (3) has done such-and-such things, and (4) bore the name "N" in social life.--Asked what I understand by "N", I should enumerate all or some of these points, and different ones on different occasions. So my definition of "N" would perhaps "the man of whom all this is true".--But if some point now proves false?--Shall I be prepared to declare the proposition "N is dead" false--even if it is only something which strikes me as incidental that has turned out false? But where are the bounds of the incidental?--If I had given a definition of the name in such a case, I should now be ready to alter it.
>
> And this can be expressed like this: I use the name "N" without a fixed meaning. (But that detracts as little from its usefulness, as it detracts from that of a table that it stands on four legs instead of three and so sometimes wobbles.)[15]

Here, the only evidence Wittgenstein gives that the names "Moses" or "N" do not have a fixed meaning is that one cannot state explicitly beforehand when one will still be willing to use that name and when one will refuse to. If it is credible that a fixed meaning could exist without being easily retrievable the way fact memory is, the argument against the existence of a fixed meaning vanishes. It is at least possible, however, that there is not one set of characteristics that defines the name "Moses," but that several characteristics are important to the concept of "Moses" and one will become more uneasy with the use of the name the more of those characteristics are missing. In such a case where some of the key characteristics of one's concept of "Moses" were missing, one might be tempted to explicitly qualify one's use of the word--"Moses did not

exist--'Moses' meaning . . . ." One might be argued that the compulsion to explain oneself in such a case stems from the fact that the fixed meaning of "Moses" is being violated in some respect. The fixed meaning that it has would be an unmarked sense of the word, which could be modified in various ways by adding qualifiers--but the fact that it has to be overridden by qualifiers is an evidence that the fixed meaning is there.

The very situations that Wittgenstein considers to be proof against the fixed meaning of words--these borderline cases when the meaning of a word seems to be in doubt--are used to good effect in Jakobsonian semantics to show the persistence of an invariant meaning into new situations. Wittgenstein writes that the appropriate use (and therefore the appropriate meaning) of a word becomes unclear in unusual situations:

> 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. The more abnormal the case, the more doubtful it becomes what we are to say.[16]

But in Jakobson's view, it is precisely at the edge of a word's range of use, where the word is the least supported by context that its true colors are often shown. If the true invariant meaning of a word turns out to be different than one expected, one should not put that down to the word's having no fixed meaning, but rather investigate whether there is a pattern in the unexpected results one has found, both in other uses of the word by the same

person and unpremeditated agreement in the unusual use between various people. In science or scholarship, to equate the merely unexpected or unforeseen too quickly with the chaotic is a sure route to ignorance.

## The unconsciousness of the invariant meanings of words

Even if one disagrees with his view of meaning as something with blurred edges held together by family resemblances, Wittgenstein has identified an important fact. If there is a fixed meaning to words, it is not always known to the speaker of a language in any fashion that is consciously retrievable except in the actual use of the word. It is clear that one does not always know how one will respond in this or that circumstance until one actually gets there. To maintain that there are fixed meanings to words, one must maintain that there are patterns in the use of language that a linguist can identify that the speakers of the language do not always know. As Jakobson indicates, there is " . . . a clearcut distinction between the 'unconscious activity' (l'activité inconsciente) of the participants in verbal communication and the 'conscious operations' (operations conscientes) of the linguist . . . ."[17] Peirce mentions such unconscious activity when he writes: "Swarming facts positively leave no doubt that vivid consciousness, subject to attention and control, embraces at any one moment a mere scrap of our psychical activity."[18] The linguist consciously describes the

unconscious activities of the speakers. The problem of the linguist in trying to discern the fixed meaning of a word is something like what Wittgenstein describes here:

> What do I call 'the rule by which he proceeds'?--The hypothesis that satisfactorily describes his use of words, which we observe; or the rule which he looks up when he uses signs; or the one which he gives us in reply if we ask him what his rule is?--But what if observation does not enable us to see any clear rule, and the question brings none to light?--For he did indeed give me a definition when I asked him what he understood by "N", but he was prepared to withdraw and alter it.--So how am I to determine the rule according to which he is playing? He does not know it himself.[19]

If "the rule by which he proceeds" must be found out by observation, it is inevitable that a linguist will sometimes be able to discern it and sometimes not, just as there are certain customs of alien cultures that remain mysterious to us until a particularly perceptive anthropologist comes along. The functional role of the custom can be there all the time even though the natives themselves cannot explain it and though a whole series of outside observers trying to understand it cannot.

There are good reasons why the true fixed meaning of a word would not always be seen by an ordinary speaker of the language. One is that no rule for the use of a word where the whole of the rule could be stated in words could be unambiguous enough to determine the proper use of the word if it was in turn dependent on a fully expressible rule, and so on ad infinitum. If a rule is expressible in signs, then the rule depends on the meaning of those signs, which is itself in question if one is trying to find out

how words mean anything. Overt expressions of rules are always subject to interpretation and bending, which is only limited in the end by the feeling that one is going contrary to "the spirit" of the rule--i.e., contrary to what is quite clearly there in the rule but which cannot be fully expressed.

If language were governed by the kind of rules that could be consciously stated, and if they were applied in the use of the language with all of the leeway that is common to consciously applied rules, language would soon trip over itself, just like someone who tried to walk by moving all the necessary muscles in sequence according to rules. People who do sports are especially aware of how harmful consciousness of the details of one's movements can be to one's performance. When one is conscious of those details the problems and difficulties are confronted afresh each time. By contrast, motor skills can be modified bit by bit so that eventually, if one gets it right, one can continue to get it right without quite knowing how one does it--that is, without knowing all of the fine differences in motor action that differentiate the final pattern that one repeats because success reinforces it from the earlier pattern that was extinguished because it was not successful. Similarly, doing everything in language consciously would force one to confront all the problems each time and commit errors at a rate of 5% or 1% in each instance, where unconscious skill learning allows one's

language use to be gradually modified until it is satisfactory and can be reproduced satisfactorily with a very high probability. Skill learning, which drops below conscious awareness once it is completed satisfactorily allows conscious attention to be applied to only the new elements of a situation rather than being applied to the old aspects of the situation; conscious action merely incurs a needless risk of error with little possible benefit. Thus, there is a superiority of the unconscious parts of the mind in performing tasks that needed to be honed down to some degree of precision. Peirce writes this about the relative precision and dependability of the unconscious as opposed to the conscious part of the mind:

> . . . three propositions may be laid down. (1) The obscure part of the mind is the principal part. (2) It acts with far more unerring accuracy than the rest. (3) It is almost infinitely more delicate in its sensibilities. Man's fully-conscious inferences have no quantitative delicacy, except where they repose on arithmetic and measurement, and which are mechanical in process; and they are almost as likely as not to be downright blunders. But unconscious and semi-conscious irreflective judgment of mother-wit, like instintive inferences of brutes, answer questions of "how much" with curious accuracy; and are seldom totally mistaken.[20]

## The inadequacy of conscious rules as a basis for the use of signs

Wittgenstein argues strongly against the idea that language could be governed by outwardly expressible rules on just the basis suggested above: that any rule that could be given in signs seems to admit of more than one interpretation--or rather, it is not clear why one should

say that a rule definitely says this or that when one does not understand how the signs that make up the rule can mean in the first place. Below are some of Wittgenstein's examples of how it is theoretically possible to take almost any sign in more than one way even when in practice the sign is unambiguous:

> I see a picture; it represents an old man walking up a steep path leaning on a stick.--How? Might it not have looked just the same if he had been sliding downhill in that position? Perhaps a Martian would describe the picture so. I do not need to explain why we do not describe it so.[21]

If one can imagine more than one way of taking a sign, one can also imagine taking an intended explanation of that sign in more than one way. As Wittgenstein says:

> Don't always think that you read off what you say from the facts; that you portray these in words according to rules. For even so you would have to apply the rule in the particular case without guidance.[22]

Explanations of the meaning of signs are themselves signs and are subject to the same kinds of doubts. For instance, one might try to explain the meaning of a word by a picture, but a picture need not be univocal either, or as Wittgenstein says, any compulsion there may be to use it in one particular way is at most a psychological and not a logical compulsion:

> What really comes before our mind when we <u>understand</u> a word?--Isn't it something like a picture? Can't it <u>be</u> a picture?
>
> Well suppose that a picture does come before your mind when you hear the word "cube", say the drawing of a cube. In what sense can this picture fit or fail to fit a use of the word "cube"?--Perhaps you say: "It's quite simple;--if that picture occurs to me and I point to a triangular prism for instance, and say it is a

> cube, then this use of the word doesn't fit the picture."--But doesn't it fit? I have purposely so chosen the example that it is quite easy to imagine a method of projection according to which the picture does fit after all.
>
> The picture of the cube did indeed suggest a certain use to us, but it was possible for me to use it differently.
>
> Then what sort of mistake did I make; was it what we should like to express by saying: I should have thought the picture forced a particular use on me? How could I think that? What did I think? Is there such a thing as a picture, or something like a picture, that forces a particular application on us; so that my mistake lay in confusing one picture with another?--For we might also be inclined to express ourselves like this: we are at most under a psychological, not a logical compulsion.[23]

Wittgenstein presses his point by noting that an attempt to explain the way the picture of the cube is to be taken would encounter similar problems. There is no way to escape the possibility of taking a sign in the wrong way.

> Suppose, however, that not merely the picture of the cube, but also the method of projection comes before our mind?--How am I to imagine this?--Perhaps I see before me a schema shewing the method of projection: say a picture of two cubes connected by lines of projection.--But does this really get me any further? Can't I now imagine different applications of this schema too?[24]

The problem with rules stated in signs like such a schema representing the mode of projection is that Wittgenstein calls into question how any signs signify, including the signs employed in expressing a rule about sign usage. Wittgenstein worries over how inadequate signs seem to be for their communicative duties when one thinks of having to use signs consciously:

> "There is a gulf between an order and its execution. It has to be filled by an act of understanding."

> "Only in the act of understanding is it meant that we are to do THIS. The order--why, that is nothing but sounds, ink-marks.--"
>
> Every sign by itself seems dead. What gives it life?--In use it is alive. Is life breathed into it there?--Or is the use its life?[25]

It can even seem mysterious how indexical and iconic signs that have some natural relation to their meaning, such as pointing arrows and direct modeling of a desired motion can get across all that they do:

> "Everything is already there in . . . ." How does it come about that this arrow >>>-----> points? Doesn't it seem to carry in it something besides itself?--"No, not the dead line on paper; only the psychical thing, the meaning, can do that."--That is both true and false. The arrow points only in the application that a living being makes of it.
>
> This pointing is not a hocus-pocus which can be performed only by the soul.[26]

> When we give an order, it can look as if the ultimate thing sought by the order had to remain unexpressed, as there is always a gulf between an order and its execution. Say I want someone to make a particular movement, say to raise his arm. To make it quite clear, I do the movement. This picture seems unambiguous till we ask: how does he know that he is to make that movement?--How does he know at all what use he is to make of the signs I give him, whatever they are?[27]

One might try to call in "intuition" to help explain how signs manage to signify, but Wittgenstein points out that intuition itself would be expressed by signs--as he describes it, "an inner voice." One does not get any nearer the answer of how signs signify by talking about intuition. The problem keeps reappearing in another guise:

> So it must have been intuition that removed this doubt?--If intuition is an inner voice--how do I know how I am to obey it? And how do I know that it doesn't mislead me? For if it can guide me right, it can also guide me wrong.
>
> ((Intuition an unnecessary shuffle.))[28]

When one is thinking in this way about signs, it begins to seem that there is indeed a great gulf between signs and actions or "an order and its execution." Wittgenstein emphasizes the importance of the leap from sign to action when he makes a distinction between interpreting a sign, by which he means producing another sign intended to explain or restate the first sign, and acting in response to a sign.

> . . . there is an inclination to say: every action according to the rule is an interpretation. But we ought to restrict the term "interpretation" to the substitution of one expression of the rule for another. . . . 'obeying a rule' is a practice.[29]

There are two ways one can look at this distinction between interpretation and a practice. One is to see signs and actions as things of a very different sort and the distinction as one between stepping from sign to sign and leaping from sign to action. The other way to see this distinction between interpretation and a practice as the difference between a change of expressions that remains at the same level of generality and the jump down from the general rule down to the specific case. Of the two chasms, between action and sign and between specific case and general rule, the one between specific and general would be by far the deepest. Wittgenstein's concern about that latter gulf between the general rule and specific cases is evidenced somewhat in the following passage:

> "But how can a rule shew me what I have to do at <u>this</u> point? Whatever I do is, on some interpretation, <u>in</u> accord with the rule."--That is not what we ought to say, but rather: every interpretation, together with

> what is being interpreted, hangs in the air; the former cannot give the latter any support. . . .
> . . . in the course of our argument we give one interpretation after another; as if each one contented us at least for a moment, until we thought of yet another standing behind it [facing us with the problem of an infinite regression of interpretations]. What this shews is that there is a way of grasping a rule which is not an interpretation, but which is exhibited in what we call "obeying the rule" and "going against it" in actual cases.[30]

Wittgenstein shows quite clearly by his arguments that going from the general to the specific is something that cannot be fully accomplished at the conscious level. One might say that it is impossible to watch this jump from the general rule down to its specific application even if it can be made quite dependably. Jakobson, quoting A. E. Sherozia, notes this need for the jump from general to specific to be made unconsciously:

> Sherozia points the way to psychological explanation and dialectical resolution of linguistic antinomies such as "the duality of the nature of the word--its individuality and its generality." An assertion of Sherozia's in particular, [is] that our word "always bears a greater amount of information than our consciousness is able to extract from it, since at the basis of our words lie our unconscious linguistic sets", . . .[31]

Here, Sherozia speaks of "unconscious linguistic sets" that cause signs to bear a "greater amount of information" than is consciously extractable. These "unconscious linguistic sets" would be, in the terminology introduced earlier, skill memories in accord with what Jakobson suggests earlier in the same article on linguistics and the unconscious from which the Sherozia quotation is taken:

> Baudouin's inaugural lecture in St. Petersburg, the one whose insistence on unconscious factors had so

> to words like "red", "dark", "sweet".--"But then how does an explanation help me to understand, if after all it is not the final one? In that case the explanation is never completed; so I still don't understand what he means, and never shall!"--As though an explanation as it were hung in the air unless supported by another one. Whereas an explanation may indeed rest on another one that has been given, but none stands in need of another--unless we require it to prevent a misunderstanding. One might say: an explanation serves to remove or avert a misunderstanding--one, that is, that would occur but for the explanation; not every one that I can imagine.[33]

We also do not doubt in every case where it seems possible to doubt:

> I said that the application of a word is not everywhere bounded by rules. But what does a game look like that is everywhere bounded by rules? whose rules never let a doubt creep in, but stop up all the cracks where it might?--Can't we imagine a rule determining the application of a rule, and a doubt which it removes --and so on?
>
> But that is not to say that we are in doubt because it is possible for us to imagine a doubt. I can easily imagine someone always doubting before he opened his front door whether an abyss did not yawn behind it, and making sure about it before he went through the door (and he might on some occasion prove to be right)--but that does not make me doubt in the same case. . . .
>
> It may easily look as if every doubt merely revealed an existing gap in the foundations; so the secure understanding is only possible if we first doubt everything that can be doubted, and then remove all these doubts.
>
> The sign-post is in order--if, under normal circumstances, it fulfils its purpose.[34]

Philosophical doubt can afflict almost anything, but genuine doubt is much rarer. The philosopher Hume doubted almost everything philosophically, but said that when he left his study he found it impossible to continue doubting. Peirce, self-styled as a "pragmaticist," distinguishes between philosophical doubt which does not interfere with

action and genuine doubt which does and indicates how habit overcomes philosophical doubt:

> Every natural or inbred belief manifests itself in natural or inbred ways of acting, which in fact constitute it a belief-habit. . . . A true doubt of such a belief must interfere with this natural mode of acting. If a philosophist, reflecting upon the belief from an extraneous or unnatural point of view, develops new modes of manifestation of that belief (as, for example, by associating it with certain phrases), these new habits must not be regarded as expressions of the natural belief simply; for they inevitably involve something more. Consequently, if subsequent reflexion results in doubt of them, it is not necessarily doubt of the original belief, although it may be mistaken for such doubt.[35]

In other words, since genuine belief is manifested in a habit, philosophical doubt that operates only on the conscious plane might leave it untouched, though it may prevent the conscious recognition and willingness to admit to the belief. The doubts it is possible to imagine about almost anything can cause some discomfort, but life does not come grinding to a halt because the range of genuine doubt is much more restricted. As an antidote to philosophical scepticism, Wittgenstein advises empirical observation.

> A rule stands there like a sign-post.--Does the sign-post leave no doubt open about the way I have to go? Does it shew which direction I am to take when I have passed it; whether along the road or the footpath or cross-country? But where is it said which way I am to follow it; whether in the direction of its finger or (e.g.) in the opposite one?--And if there were, not a single sign-post, but a chain of adjacent ones or of chalk marks on the ground--is there only one way of interpreting them?--So I can say, the sign-post does after all leave no room for doubt. Or rather: it sometimes leaves room for doubt and sometimes not. And now this is no longer a philosophical proposition, but an empirical one.[36]

It is the facts of certainty and doubt that can be determined from actual observation that are crucial to the workings of language. On such observation it becomes clear that the workings of language depend critically on certain natural and socially transmitted dispositions of human beings. If there were people who habitually followed signposts in a direction opposite the normal one, a signpost would not get across what it had to for one of them to find his or her destination. The successful use of signs in communication depends critically on the empirical fact that human beings tend to respond to them in certain ways and not others. Peirce's iconic and indexical signs gain much of their seeming self-evidence from natural dispositions to respond to them in certain ways and symbols gain much of their power to communicate from the fact that human beings can gain dispositions to respond to them in certain ways. Wittgenstein shows how much we depend on such common ways of responding to things by illustrating how much at a loss we would be if someone did not respond to an instruction in the usual way:

> Let us return to our example (143). Now--judged by the usual criteria--the pupil has mastered the series of natural numbers. Next we teach him to write down other series of cardinal numbers and get him to the point of writing down series of the form
>
> o, n, 2n, 3n, etc.
>
> at an order of the form "+n"; so at the order "+1" he writes down the series of natural numbers.--Let us suppose we have done exercises and given him tests up to 1000.
>
> Now we get the pupil to continue a series (say +2) beyond 1000--and he writes 1000, 1004, 1008, 1012.

> We say to him: "Look what you've done!"--He doesn't understand. We say: "You were meant to add two: look how you began the series!"--He answers: "Yes, isn't it right? I thought that was how I was meant to do it."---Or suppose he pointed to the series and said: "But I went on in the same way."--it would now be no use to say: "But can't you see . . . . ?"--and repeat the old examples and explanations.--In such a case we might say, perhaps: It comes natural to this person to understand our order with our explanations as we should understand the order: "Add 2 up to 1000, 4 up to 2000, 6 up to 3000 and so on."
>
> Such a case would present similarities with one in which a person naturally reacted to the gesture of pointing with the hand by looking in the direction of the line from finger-tip to wrist, not from wrist to finger-tip.[37]

Wittgenstein's recurring theme is one stated explicitly in an earlier quotation, that there is "at most a psychological and not a logical compulsion" for people to respond to signs in the way they do. However, this statement that there is not a logical compulsion arises largely from the narrow view of logic Wittgenstein took from the Vienna circle and from the tradition of formal mathematical logic exemplified by the work of Gottlob Frege. It might be better to take the position of Peirce, that the power of signs is a matter of logic, but that the nature of our logic is not something that can be divorced from our humanity:

> I am quite aware that this position is open to two serious objections, which I have not time to discuss, but which I have carefully considered and refuted. The first is that this is making logic a question of psychology. But this I deny. Logic does rest on certain facts of experience among which are facts about men, but not upon any theory about the human mind or any theory to explain facts.[38] [emphasis added]

One might call logic a law about human intellectual behavior. Human communication, human social existence, and

even human science, depend more than in usually admitted on the fact that human beings do not do any number of things that might be just as reasonable or more reasonable to some other sort of beings as what human beings do. As Wittgenstein writes: "What has to be accepted, the given, is--so one could say--forms of life."[39] or,

> What we are supplying are really remarks on the natural history of human beings; we are not contributing curiosities however, but observations which no one has doubted, but which have escaped remark only because they are always before our eyes.[40]

Within the "natural history of human beings" one of the most remarkable facts is the fact of human agreement in responding to signs, and in the other intellectual capacities that go along with the use of signs. Wittgenstein writes: "If language is to be a means of communication there must be agreement not only in definitions but also (queer as this may sound) in judgments. This seems to abolish logic, but does not do so."[41] This agreement in the use of language is in marked contrast to the kind of disagreement human beings always seem to get into in regard to any kind of conscious action. Only habitual action--skills and techniques--can be brought into such close accord that common judgments can be depended on. Judgments made "cold" without training or experience are likely to err and differ from one another. When uniformity is necessary, consciousness often stands in the way.

## Natural dispositions as the headwaters of human certainty

The second place in which Wittgenstein's recognition that something like skill memory is important in the operation of language appears is in his discussion of the confidence people have in using signs. He points out how ill-equipped we usually are to explain our confidence:

> How can he know how he is to continue a pattern by himself--whatever instruction you give him--Well, how do I know?--If that means "Have I reasons?" the answer is: my reasons will soon give out. And then I shall act, without reasons.
>
> When someone whom I am afraid of orders me to continue this series, I act quickly, with perfect certainty, and the lack of reasons does not trouble me.
>
> . . .
>
> How am I able to obey a rule?--If this is not a question about causes then it is about the justification for my following the rule in the way I do.
>
> If I have exhausted the justifications I have reached bedrock, and my spade is turned. Then I am inclined to say: "This is simply what I do."[42]

People have a confidence in their ability to use language that they cannot rationally explain, except perhaps by the facts of experience, which cannot by themselves stretch far enough to insure that one will be able to make it work the next time. How can one know that one will be able to explain to someone how to do something or that one will be able to describe something or even distinguish colors correctly:

> The deep aspect of this matter readily eludes us.
>
> "I don't see anything violet here, but I can shew it you if you give me a paint box." How can one know that one can shew it if . . . ., in other words, that one can recognize it if one sees it?[43]

Wittgenstein describes the confidence that comes from past experience and its imperviousness to philosophical arguments against that confidence:

> The character of the belief in the uniformity of nature can perhaps be seen most clearly in the case in which we fear what we expect. Nothing could induce me to put my hand into a flame--although after all it is only in the past that I have burnt myself.[44]

We can sometimes feel confident of our ability to do something while we are doing it and before, but not understand how on looking back afterward:

> "This queer thing, thought"--but it does not strike us as queer when we are thinking. Thought does not strike us as mysterious while we are thinking, but only when we say, as it were retrospectively: "How was that possible?" How was it possible for thought to deal with the very object itself? We feel as if by means of it we had caught reality in our net.[45]

A simple answer to why what one did seems impossible on looking back at it could be that one looks back with the conscious brain centers associated with fact memory which would indeed be helpless if faced with the task of going from object to word or word to object, a task that in practice is performed by the brain centers associated with skill memory, which operate less consciously. The conscious brain centers that look back had little part in what was done in making the "mysterious" connection of language with reality. The doing of something and an awareness of how it is done cannot be concurrent because they are accomplished by different parts of the brain which could not watch each other's activities without interfering with the action. As Wittgenstein puts it: "When one

thinks something, it is oneself thinking"; so one is oneself in motion. One is rushing ahead and so cannot also observe oneself rushing ahead.[46] If there is a separation in the brain between the two functions of conscious analysis and language skills and perceptual dispositions, the confidence that fire will burn me or that I can use language could be impervious to the "rational arguments" of philosophers, in part, because it did not come from rational thought in the first place.

> "The certainty that I shall be able to go on after I have had this experience--seen the formula, for instance,--is simply based on induction." What does this mean?--"The certainty that the fire will burn me is based on induction." Does that mean that I argue to myself: "Fire has always burned me, so it will happen now too?" . . .
>
> Is our confidence justified?--What people accept as a justification is shewn by how they think and live.
>
> We expect <u>this</u>, and are surprised at <u>that</u>. But the chain of reasons has an end.[47]

In other words, experience has an effect on us that is not all a matter of conscious reflection and reasoning, but also partly a matter of natural dispositions to be affected by occurrences in a certain way. These natural dispositions help to decide the case between the idea that fire will burn me in the future as it has in the past and the idea that fire has burned me in the past only because of freak circumstances and is not particularly likely to burn me in the future. As Peirce wrote:

> With overwhelming uniformity, in our past experience, direct and indirect, stones left free to fall have fallen. Thereupon two hypotheses only are open to us. Either
>
> 1. the uniformity with which those stones have fallen has been due to mere chance and affords no

> ground whatever, not the slightest for any expectation that the next stone that shall be let go will fall; or
>
> 2. the uniformity with which stones have fallen has been due to some active general principle, in which case it would be a strange coincidence that it should cease to act at the moment my prediction was based upon it. . . .
>
> Of course, every sane man will adopt the latter hypothesis. If he could doubt it in the case of the stone--which he can't--and I may as well drop the stone once for all--I told you so!--if anybody doubts this still, a thousand other such inductive predictions are getting verified every day, and he will have to suppose every one of them to be merely fortuitous in order reasonably to escape the conclusion that **general principles are really operative in nature.**[48]

One reason we are able to catch on to the "general principles operative in nature" is that our minds themselves operate according to such general principles. Firstly, a skill memory or the like represents a general principle of verbal or non-verbal action. Secondly, habits or skill memories are built up according to general principles. Peirce writes of the effect of experience in building up habits:

> It can be proved that the only mental effect that can be so produced [by a sign] that is not a sign but is of general application is a habit-change; meaning by a habit-change a modification of a person's tendencies toward action, resulting from previous experiences or from previous exertions of his will or acts, or from a complexus of both kinds of cause.[49]

In other words, general principles of action can themselves be built up and torn down, strengthened or weakened according to general principles of how experience of signs from without and experience of signs originating from within should affect them.

## The role of unconscious operations in understanding one's own signs

It is apparent that confidence in dealing with signs points to the existence of semi-automatic habits. An inquiry into the role of habits in language does well to look for instances of inexplicable confidence. Nowhere is the confidence of human beings in using signs shown more clearly than the ability of a person to understand his or her own signs. When responding to one's own signs, one can sometimes get a lot out of a very little. Wittgenstein makes note of this fact in connection with a question about "lightning-like thought":

> I can see or understand a whole thought in a flash in exactly the sense in which I can make a note of it in a few words or a few pencilled dashes.
>
> What makes these notes into an epitome of this thought?
>
> The lightning-like thought may be connected with the spoken thought as the algebraic formula is with the sequence of numbers which I work out from it.
>
> When, for example, I am given an algebraic function, I am CERTAIN that I shall be able to work out its values for the arguments 1, 2, 3, . . . up to 10. This certainty will be called 'well-founded', for I have learned to compute such functions, and so on. In other cases no reasons will be given for it--but it will be justified by success.[50]

Jakobson agrees with Wittgenstein in tying together speedy thought and the elliptic use of outward signs:

> Inner speech is radically elliptic; the sound shape of words receives a merely fragmentary evocation in our mind, and frequently they totally lose their phonic makeup ("zero signans"). However, neither these losses nor the tendency to replace verbal signs by other semiotic units permit us to return to an assumption of wordless, or even signless, asemiotic thinking.[51]

Thus, if it is possible to explain how one can understand a cryptic note to oneself, we will be well on the way to

explaining speedy thought. A part of the explanation of how one understands a cryptic note to oneself could be that one has information that other people lack. The meaning of my scribble or my own utterance to me will depend on many aspects of the situation that only I may know in a given case, just as the meaning of the utterance of speaker A to listener B may depend on aspects of the circumstances of the speech-act that would be obvious only to those involved (for example, Jakobson's "shifters" "this," "that," "I," "now," etc., that derive part of their meaning from the obvious aspects of the situation in which they are spoken) or may depend on things not in the immediate situation but known from past experience by the specific participants in the speech-event, such as the case of old friends speaking together or a group of professionals who have been trained in the same specialty. The case of a person considering his own signs, when the sender and receiver of the signs is the same individual, is a kind of limiting case of signs used in conditions of extensive shared knowledge. But shared knowledge at the conscious level cannot be a full explanation of our understanding of self-generated signs. In some cases, all of one's conscious memories (i.e., one's fact memories) would not suffice explain how one can explicate the meaning of one's own signs. The best example of how consummately able we are to make sense of our own signs is the way one can continue a train of thought after being interrupted:

> "You were interrupted a while ago; do you still know what you were going to say?"--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.--But, of course, the situation and the thoughts which I had contained all sorts of things to help the continuation of the sentence.
>
> When I continue the interrupted sentence and say that this was how I had been going to continue it, this is like following out a line of thought from brief notes.
>
> Then don't I interpret the notes? Was only one continuation possible in these circumstances? Of course not. But I did not choose between interpretations. I remembered that I was going to say t his.
>
> "I was going to say . . . . ."--You remember various details. But not even all of them together shew your intention. It is as if a snapshot of a scene had been taken, but only a few scattered details of it were to be seen: here a hand, there a bit of a face, or a hat--the rest is dark. And now it is as if we knew quite certainly what the whole picture represented. As if I could read the darkness. . . .[52]

Wittgenstein points out the similarity of how one can know what one intended to say and how one can know what one intended to do by immediately preceeding his discussion intended words with a discussion of intended actions:

> When people talk about the possibility of foreknowledge of the future they always forget the fact of the prediction of one's own voluntary movements.[53]

In trying to explain how one can "read the darkness" and remember what one was going to say or do where it seems it should be possible only to guess at one's intended words or actions, Wittgenstein points toward an explanation on the basis of human dispositions and habits when, after rejecting many possible explanations of how one knows what one had intended, he gives up on explanation and says, in

effect, just what he said about human agreement in the use of language: "That is the way it is. The facts of life must be taken as they are."

> Imagine this case: I tell someone that I walked a certain route, going by a map which I had prepared beforehand. Thereupon I shew him the map, and it consists of lines on a piece of paper; but I cannot explain how these lines are the map of my movements, I cannot tell him any rule for interpreting the map. Yet I did follow the drawing with all the characteristic tokens of reading a map. . . .
>
> Could I now say: "I read off my having then meant to do such-and-such, as if from a map, although there is no map"? But that means nothing but: I am now inclined to say "I read the intention of acting thus in certain states of mind which I remember."
>
> Our mistake is to look for an explanation where we ought to look at what happens as a 'proto-phenomenon'. . . .
>
> The question is not one of explaining a language-game by means of our experiences, but of noting a language-game.[54]

Wittgenstein also explicitly connects our ability to know what we intended to say before with having had certain kinds of training:

> Is it correct for someone to say: "When I gave you this rule, I meant you to . . . . in this case"? Even if he did not think of this case at all as he gave the rule? Of course it is correct. For "to mean it" did not mean: to think of it. But now the problem is: how are we to judge whether someone meant such-and-such **--The fact that he has, for example, mastered a particular technique in arithmetic and algebra, and that he taught someone else the expansion of a series in the usual way, is such a criterion.**[55] [boldface added]

He also notes the importance of other kinds of habits that do not come from training, but yet are built up by experience, such as a habit of hate:

> "At that moment I hated him."--What happened here? Didn't it consist in thoughts, feelings and actions? And if I were to rehearse that moment to myself I should assume a particular expression, think of certain

> happenings, breathe in a particular way, arouse certain feelings in myself. I might think up a conversation, a whole scene in which that hatred flared up. And I might play this scene through with feelings approximating to a real occasion. That I have actually experienced something of the sort will naturally help me to do so.[56]

In general, it is "forms of life," that is, the habit patterns and dispositions that make up the "day to day practice" of things that connect an intention up with the thing intended:

> There is no doubt that I now want to play chess, but chess is the game it is in virtue of all its rules (and so on). Don't I know, then, which game I want to play until I <u>have</u> played it? or are all the rules contained in my act of intending? Is it experience that tells me that this sort of game is the usual consequence of such an act of intending? so is it impossible for me to be certain what I am intending to do? And if that is nonsense--what kind of super-strong connexion exists between the act of intending and the thing intended?--- Where is the connexion effected between the sense of the expression "Let's play a game of chess" and all the rules of the game?--Well in the list of rules of the game, in the teaching of it, in the day-to-day practice of playing.[57]

Once one has the notion of a habit or skill memory, it becomes possible to answer this conundrum of Wittgenstein's:

> If I give anyone an order I feel it to be <u>quite enough</u> to give him signs. And I should never say: this is only words, and I have got to get behind the words. Equally, when I have asked someone something and he gives me an answer (i.e. a sign) I am content--that was what I expected--and I don't raise the objection: but that's a mere answer.
>
> But if you say: "How am I to know what he means, when I see nothing but the signs he gives?" then I say: "How is <u>he</u> to know what he means, when he has nothing but the <u>signs</u> either?"[58]

In either case--understanding one's own signs or someone elses, the way signs are funneled into meanings is through

habits. The wide variety of different ways one can imagine taking a sign are narrowed down to one, or at most a small number of possible interpretations. When one is dealing with one's own signs, not only does one have a great deal of information that other people lack, one also has a great many skill memories, habits and dispositions that others lack, all of which contribute to one's understanding of one's own signs.

## Unconscious habit and the inexhaustibility of symbols

In a previous quotation, Wittgenstein compared the way one can understand one's own signs despite marked abbreviation to the way one can work out an algebraic series from a formula or from the first few terms of the series. This comparison of the working out of a series with the working out of the full intended meaning of a few remembered signs suggests the potential for not only the unfolding of the full meaning of elliptic signs, but also for the expansion and development of signs without limit. As Peirce maintains, symbols (i.e., those signs that depend on habits and dispositions for their operation) point toward the unbounded future: "The value of a symbol is that it serves to make thought and conduct rational and enables us to predict the future."[59] Peirce writes in greater detail of the connection of symbols to the future by the relationship of meaning in the following passage:

> But we constantly predict what is to be. Now what is to be, according to our conception of it, can never

> become wholly past. In general we may say that meanings are inexhaustible. We are too apt to think that what one means to do and the meaning of a word are quite unrelated meaning of the word "meaning," or that they are only connected by referring to some actual operation of the mind. Professor Royce especially in his great work The World and the Individual has done much to break up this mistake. In truth the only difference is that when a person means to do anything he is in some state in consequence of which the brute reactions between things will be moulded [in] to conformity to the form to which the man's mind is itself moulded, while the meaning of a word really lies in the way in which it might, in a proper position in a proposition believed, tend to mould the conduct of a person into conformity to that to which it is itself moulded. Not only will meaning always, more or less, in the long run, mould reactions to itself, but it is only in doing so that its own being consists. For this reason I call this element of the phenomenon or object of though the element of Thirdness. It is that which is what it is by virtue of imparting a quality to reactions in the future.[60]

Wittgenstein sees clearly both what Peirce calls "the inexhaustibility of meaning" and the way signs (in particular, symbols) point into the future, though he is uneasy about these properties of signs. For instance, Wittgenstein is disturbed by the attribution of infinity and extension into the future to the signs themselves, thought of as things outside of time. Wittgenstein insists that "infinity" is bound up with the flow of time and is not something that can be crystalized in the present.

> "But then doesn't our understanding reach beyond all the examples?"--A very queer expression, and a quite natural one!-- . . .
>
> Is it like the case where I interpret what is not limited [infinity] as a length that reaches beyond every length? . . .
>
> Whence comes the idea that the beginning of a series is a visible section of rails invisibly laid to infinity? Well, we might imagine rails instead of a rule. And infinitely long rails correspond to the unlimited application of a rule.

> "All the steps are really already taken" means: I no longer have any choice. The rule, once stamped with a particular meaning, traces the lines along which it is to be followed through the whole of space.---But if something of this sort really were the case, how would it help? . . .
>
> My symbolical expression was really a mythological description of the use of a rule. . . .
>
> I believe that I perceive something drawn very fine in a segment of a series, a characteristic design, which only needs the addition of "and so on", in order to reach to infinity.[61]

The word "infinite" originally comes from the Latin prefix "in-," meaning "not" and "finitus," the past participle of "finire," meaning "to limit"; therefore it literally signifies "not limited." However, mathematics and philosophy have interpreted what is without any definite limit as "a length that reaches beyond every length." Wittgenstein, as it were, rejects the modern notion of infinity in favor of the original idea of something that is without any definite limit--something that could always be extended a little more; or in other words, Wittgenstein is anxious to point out that "all the steps" are not "already taken" even though they can be at any time. If a rule "contains within itself" all the determinations that could ever be made in following it, it does so only as a part of of human life. The "infinite" or unlimited operation of a rule depends on the sureness with which human beings can reproduce certain responses: "The rule can only seem to me to produce all its consequences in advance if I draw them as a <u>matter of course</u>. As much as it is a matter of course for me to call this colour 'blue'."[62]

The potential for infinite application of a rule in sequence is a special case of the "inexhaustibility of meaning." There is a potential for unlimited application of signs in breadth, even if that unlimited application is not conceived of as being in sequence. For instance, on the question of "Whether a sign can have any meaning, if by its definition it is the sign of something absolutely incognizable." Peirce writes:

> It would seem that it can, and that universal and hypothetical propositions are instances of it. Thus, the universal proposition, "all ruminants are cloven-hoofed," speaks of a possible infinity of animals, and no matter how many ruminants have been examined, the possibility must remain that there are others which have not been examined. In the case of a hypothetical proposition, the same thing is still more manifest; for such a proposition speaks not merely of the actual state of things, but of every possible state of things, all of which are not knowable, inasmuch as only one can so much as exist.[63]

Thus, a sign can have a "possible infinity" of application "in parallel" as well as "in series." Wittgenstein is as troubled by this unlimited sweep of a sign's application just as he is by the unlimited potential for the application of a sign or rule in sequence. This becomes apparent in his argument that what a signs "means" is sometimes determined by later events, or to put it another way, that one says a sign "meant" is partly determined by what happens now. For instance, it is not necessary for someone to have a proviso on a command in mind at the time the command is given for the proviso to be a very real one.

> Someone says to me: "Shew the children a game." I teach them gaming with dice, and the other says "I didn't mean that sort of game." Must the exclusion of

skill memories for the use of signs seems to elide the distance between the physical (audible or visible) signans and its inexhaustible meaning, or, to use a different metaphor, the unconsciousness of the skill of using signs makes the audible or visible signans transparent so that it seems one can see through it into the intelligible signatum. For instance, in reading, one does not usually notice the shape of the letters, but is only aware of the words and what the words "say." The unconsciousness of the articulation of letters into words is virtually complete for most adult readers, so that as signantia letters are almost always transparent, while even the consciousness of the articulation of words into sentences can sometimes be little enough that words become transparent and only whole concepts are consciously apprehended. The understanding of speech often shows even greater transparency than the understanding of writing, since, except in poetry, the phonetic makeup of words is almost always perceived unconsciously and it is not at all uncommon for people in conversation to be unaware of the words they hear even though fully cognizant of what is being said.

Wittgenstein makes note of the phenomenon of transparency of signs in many places. For instance, on the transparency of words in the course of speech, Wittgenstein writes: "If a sensitive ear shews me, . . . , that I have now this now that experience of the word--doesn't it also show me that I often do not have any experience of it in

the course of talking?"[66] Wittgenstein also shows an awareness of transparency in relation to signs other than speech signs. In regard to visual perception, Wittgenstein writes: "The only thing that is natural to us is to represent what we see three-dimensionally; special practice and training are needed for two-dimensional representation whether in drawing or in words."[67] Only trained artists can reproduce the actual signans to which the signatum of a three-dimensional world corresponds.

The transparency of visual signs may not stop with "seeing" three dimensional objects where the stimulus is only two-dimensional. Wittgenstein recognizes the possibility of transparency down to deeper or shallower levels (as in the case of reading where everything down to the words or everything all the way down to the "ideas" can be transparent) in the following passage:

> What does it mean to understand a picture, a drawing? . . . A picture is perhaps a still-life; but I don't understand one part of it: [it may be that] I cannot see solid objects there, but only patches of colour on the canvas.--Or I see everything as solid but there are objects that I am not acquainted with (they look like implements, but I don't know their use).--Perhaps, however, I am acquainted with the objects, but in another sense do not understand the way they are arranged.[68]

The picture can be totally "opaque" so that one sees only patches of color; it can be transparent down to the three-dimensional form of objects while the nature of the objects remains opaque; or one may see what the objects are, or even into the significance of the whole arrangement of objects.

Wittgenstein makes the most of transparency of visual perception, but also makes note of transparency in regard to auditory perception.

> I may be able to tell the direction from which a sound comes only because it affects one ear more strongly than the other, but I don't feel this in my ears; yet it has its effect: I know the direction from which the sound comes; for instance, I look in that direction.[69]

Finally, he gives a marvelous example of transparency in relation to the sense of touch when one is using a cane to feel one's way around, and "feels" where various obstacles and other objects are, but never notices the actual pressures of the cane against one's hand that enable one to tell when there is something at the other end of the cane:

> "When I touch this object with a stick I have the sensation of touching in the tip of the stick, not in the hand that holds it." . . . What goes with this is that when I touch the object I look not at my hand but at the tip of the stick; that I describe what I feel by saying "I feel something hard and round there"--not "I feel a pressure against the tips of my thumb, middle finger, and index finger . . ." If, for example, someone asks me "What are you now feeling in the fingers that hold the probe?" I might reply: "I don't know---[but] I feel something hard and rough over there."[70]

This kind of transparency, in relation to language may help to explain one of Wittgenstein's puzzles--that one seems to "hear" in full inner speech that is, in fact, "radically elliptic":

> One can say things in one's head very 'distinctly', when one reproduces the tone of voice of one's sentences by humming (with closed lips). Movements of the larynx help too. But the remarkable thing is precisely that one then hears the talk in one's imagination and does not merely feel the skeleton of it, so to speak, in one's larynx.[71]

One of the most important kinds of transparency is that which allows us, without knowing quite how we do it, to put together complex, subtle and often scattered hints into an awareness of the feelings and motives of others. The semiotic transparency of the indices of human feelings--to the point where the indices themselves are often invisible to us even though the feelings indicated by them are quite clear--has lead many to think of "mental states" as if they belonged to a wholly different plane from the physical, but in fact, much of our knowledge of psychology comes from physically seeing, hearing and touching other human beings. In Wittgenstein's words, "The human body is the best picture of the human soul."[72] or "If one sees the behavior of a living thing, one sees its soul."[73] Understanding the phenomenon of semiotic transparency provides grounds for a concern in psychology with "the things of the soul" even in the absence of any source of knowledge about another person's thoughts and feelings other than that person's outward behavior. A person's behavior is the signans for his or her feelings without which the feelings would be imperceptible, just as the letters on a printed page are the signans without which the words and ideas would be indiscernible. Wittgenstein characterizes the relationship between behavior and inner psychology in this way:

> Then psychology treats of behaviour, not of the soul?
>
> What do psychologists record?--What do they observe? Isn't it the behaviour of human beings, in

> particular their utterances? But these [observations] are not about behaviour.
>
> "I noticed that he was out of humour." Is this a report about his behaviour or his state of mind? . . . Both; not side-by-side, however, but about the one via the other.[74]

What the psychologists discover laboriously by the piecing together of different bits of information about behavior should be what is confirmed in the judgments we make unconsciously all the time about the feelings of others. Those ordinary unconscious judgments are based in the main on the very same data as the psychologists' judgments, though in the case of everyday psychological judgments, one may never be consciously aware of the data itself. The way in which everyday psychological judgments depend on data that may be inconspicuous at the conscious level is described by Wittgenstein in this way:

> "The genuineness of an expression cannot be proved; on has to feel it." . . .
>
> It is certainly possible to be convinced by evidence that someone is in such-and-such a state of mind, that, for instance, he is not pretending. But 'evidence' here includes 'imponderable' evidence. . . .
>
> Imponderable evidence includes subtleties of glance, of gesture, of tone.
>
> I may recognize a genuine loving look, distinguish it from a pretended one (and here there can, of course, be a 'ponderable' confirmation of my judgment). But I may be quite incapable of describing the difference.[75]

What is called "imponderable" evidence in the judgment of feelings need not be anything more than evidence that is weighed out and evaluated according to human skills and abilities which work smoothly enough that only the results of the judgment become fully conscious.

The principle of transparency is one by which a signans, whether icon, index or symbol can become invisible or nearly invisible so that only the signatum is seen. In some cases the signans itself is noticeable enough that it is recognized that the signatum has a vehicle in the signans, but in other cases--especially those involving visual perception and everyday psychological judgments--the signans itself is so seldom noticed that the dependence of our knowledge of the signatum (feelings, solid shapes) on the signans (behavior, two-dimensional retina images) is often ignored or disbelieved. In spoken language there are examples of both cases: obvious signification where both the signans and the signatum are evident (whether at the same time or not), and inconspicuous signification where the signans is seldom if ever noticed, though the signatum is quite clearly apprehended. In the category of obvious signification falls the dictionary meanings of nouns, adjectives and verbs, which are usually apprehended quite readily at a conscious level; while in the category of inconspicuous signification falls the meaning of the arrangement of words that are not determined by grammar, emotive choices between words that are cognitively near synonyms, and the phonetics of words. These last represent the type of signification in language that has always been the essence of verbal art--literature and poetry. As Jakobson writes: "... the unconscious elaboration of the

most hidden linguistic principles frequently constitutes the very essence of verbal art . . ."[76]

## Language and Life

Once the role of skills, habits and dispositions in language is acknowledged, it becomes clear that there is no real gulf between signs and actions. The are all woven together into the fabric of life or into what Wittgenstein calls " . . . the whole, consisting of language and the actions into which it is woven, . . . ."[77] Not only that, but on consideration, it is hard to distinguish signs and actions, for any action can be a sign (to anyone who sees or otherwise notices the action) and any sign produced by a human being is an action. The problem of how one make the leap between sign and action disappears once one sees that signs and actions are not of a radically different nature to begin with. O

One source of the idea that signs are very different from actions is the tendency to identify signs with the kind of signs used in academic discourse, which can sometimes seem very far removed from any kind of action. One is less tempted to see a great distance between signs and actions if one looks at the whole range of what signs do. In order to dispel the notion that signs always do the same thing, Wittgenstein lists some of the different functions of language:

> . . . the speaking of language is part of an activity, or of a form of life.
>
> Review the multiplicity of language-games in the following examples, and in others:

> Giving orders, and obeying them--
> Describing the appearance of an object, or giving its measurements--
> Constructing an object from a description (a drawing)--
> Reporting an event--
> Speculating about an event--
> Forming and testing a hypothesis--
> Presenting the results of an experiment in tables and diagrams--
> Making up a story; and reading it--
> Play-acting--
> Singing catches--
> Guessing riddles--
> Making a joke; telling it--
> Solving a problem in practical arithmetic--
> Translating from one language into another--
> Asking, thanking, cursing, greeting, praying.[78]

Thus, the purpose of a sign is not always to transfer thoughts from one person's mind to another's, as in this description of Wittgenstein's:

> "The purpose of language is to express thought."--So presumably the purpose of every sentence is to express a thought. Then what thought is expressed, for example, by the sentence "It's raining"?--[79]

The function of talking about the weather is not usually to inform or even to express any thought, but merely to commiserate together in a circumstance that was already obvious to everyone. Even the word "communication" is not a good description of all that is done with language:

> Not: "without language we could not communicate with one another"--but for sure: without language we cannot influence other people in such-and-such ways; cannot build roads and machines, etc.. And also: without the use of speech and writing people could not communicate.[80]

If the functions of language are nearly as varied as the forms of life itself, why is it that we often think of language as doing only one type of thing? Part of the answer is that symbols, of which words are the prime

example, do not by themselves give much idea of the thing they signify. Peirce writes: ". . . symbols rest exclusively on habits already definitely formed but not furnishing any observation even of themselves . . . ."[81] Symbols, unlike icons and indices, are largely autonomous in their day-to-day operation from the underlying physical reality they purport to represent. Because of this autonomy, when relations among symbols are used as the basis of people's view of the world, a kind of "linguistic mythology" sometimes obscure their vision. Jakobson writes of the conflict of such a "linguistic mythology" and logical thought in an essay relating to the work of Franz Boas:

> We had learned that each language is arbitrary in its classifications, . . . but solely "from the point of view of another language" in space or in time. To the native speakers of a language, be it "primitive" or "civilized", none of its classifications are arbitrary. Such classifications develop "in each individual and in the whole people entirely sub-consciously" and build a kind of linguistic mythology which may direct the attention of the speaker and some mental activities of the given speech community along definite lines. Thus linguistic forms exert an influence not only upon poetry and beliefs but even upon speculative thought and "scientific views, which are apparently based entirely on conscious reasoning". In itself every grammatical pattern, a "civilized" as much as a "primitive" one, is in permanent conflict with logical reasoning . . .[82]

Jakobson describes the process by which these classifications of a language arise as follows (quoting Baudouin de Courtenay):

> "When considering even the apparently simplest processes going on in language, it is necessary to keep in mind the force of unconscious generalization by the action of

> which a people subsumes all phenomena of its mental life under certain general categories" (IT I, 46). . . .
>
> In Baudouin's lecture of 1870 (It, I, 38) "unconscious generalization" was characterized as "apperception, i.e. a force by the action of which people subsume all the phenomena of their mental life under certain general categories," and to this he added a comparison of the systems of categories in language, which are "joined together by the force of unconscious generalization," with "the systems of the celestial bodies which operate under the influence of the force of gravity."[83]

This almost gravitational force leading to the subsumption of all phenomena into a few linguistic categories vastly simplifies the outward form of language, which can make us forget all that is really going on in language. In Wittgenstein's words, "We remain unconscious of the prodigious diversity of all the everyday language-games because the clothing of our language makes everything alike."[84] There is an advantage of economy in this sort of linguistic categorization, but it has the danger of causing us to disregard important features of phenomena not reflected in the general categories, and to ride roughshod over fine distinctions in the press of an immediate need to place each phenomenon into one pile or another. The danger of misunderstanding arising from a conflict between language and phenomena, grammar and the true being of things, is a serious concern of Peirce, Wittgenstein and Jakobson. It is the main subject of the next chapter.

## Chapter Five

## Language and the World

Language is of importance to us not merely for its own sake, but in large measure because it bears some relationship to the world. Wittgenstein reminds us of this relationship in these words:

> "The agreement, the harmony, of thought and reality consists in this: if I say falsely that something is red, then, for all that, it isn't red. And when I want to explain the word "red" to someone, in the sentence "That is not red", I do it by pointing to something red."[1]

### Peirce's Thought on the Relation of Language to the World

The question of what the relationship between language and the world consists in has been a subject of dispute for several thousand years. For instance, Plato presented in the Cratylus a debate on whether words are related to their meanings by nature or by convention. This debate, in terms of Peirce's theory of signs, is a debate about the relative importance of the symbolic mode of signification, which is based on convention, as opposed to the deictic and iconic modes of signification, based respectively on actual causal connection and genuine

similarity between signans and signatum. Peirce's division of signs "by nature" into icons and indices adds a new dimension to the controversy over how language is linked to the world. Peirce also provides an answer of sorts to the original controversy over whether nature or convention is the premier force in language. Peirce argues that the conventional symbol is crucial to the workings of language because only the symbol can be an active general rule going beyond each separate case. But he also maintains that the active general rule constituted by a symbol often requires the evocation of an icon or an index. Peirce describes the evocation of an icon or index by a symbol as follows:

> . . . a symbol may have an icon or an index incorporated into it, that is, the active law that it is may require its interpretation to involve the calling up of an image, or a composite photograph of many images of past experiences, as ordinary common nouns do; or it may require its interpretation to refer to the actual surrounding circumstances of the occasion of its embodiment, like such words as that, this, I, you, which, here, now, yonder, etc.[2]

Because of the original dependence of language acquisition on signs that act by nature, one can argue that the action of any symbol ultimately depends on the action of icons and indices, though symbols generalize the action of the particular icons and indices that aided in the learning of the symbol to cases far removed from those original icons and indices. As Peirce writes: "The value of a symbol is that it serves to make thought and conduct rational and enables us to predict the future."[3] That is, a symbol enables us to compare things separated in time and space

and thereby accomplish rational thought and to predict the future on the basis of the past. But although the symbolic mode of signification allows us to bridge gaps of time or space, it cannot signify anything by itself. Peirce recognizes this when he writes of ". . . the impotence of mere words to fulfill the function of a grammatical subject."[4] The power of words to denote a grammatical subject--to refer to something--is based largely on indices evoked by the active general rules that those words are: words like "this," "that," "here," "now," etc., directly evoke indices like triggers immediately connected to a firing mechanism for indices, while other common nouns are defined in turn by means of such "demonstrative" words. Natural indices such as the positions of a speaker or listener, a pointing finger, perceptual saliency, etc., can be quickly generalized and embodied in the symbolic form of demonstrative words, and specific instances of the use of demonstrative words plus the direct action of the natural indices (indices not evoked by a symbol) makes the learning of common nouns possible. Peirce writes as follows about the relation of common nouns to demonstratives:

> Words like this, that, lo, hallo, hi there, have a direct, forceful action upon the nervous system, [derived from the "forceful action" of natural indices like pointing fingers, spotlights, physical presence, etc., on the nervous system] and compel the hearer to look about him; and so they, more than ordinary words, contribute towards indicating what the speech is about. But this is a point that grammar and the grammarians . . . are so far from seeing as to call demonstratives, such as <u>that</u> and <u>this</u>, pronouns--a literally preposterous designation, for nouns may more truly be called pro-demonstratives.[5]

The "forceful action" of both natural and symbolically evoked indices is sometimes termed by Peirce a relation of "contiguity"--that is, a relation by which one thing touches another causally so that it cannot help affecting the other. Peirce describes the relation of "contiguity," which is the basis of the power of indexes, as the relation which delimits our experience, or to put it another way, what the boundaries of our subjective situation at any instant will be: ". . . experience is bound together, and only recognisable, by forces acting upon us, or, to use an even worse chosen technical term, by means of associations by contiguity."[6]

Peirce and Wittgenstein give examples of how words can depend on deixis, or contiguity, which should help clarify the preceding discussion. Peirce gives this example of how an utterance can depend on the specific deixis (such as the location and bodily orientation of a speaker) of the speech situation it belongs to:

> Two men meet on a country road. One says to the other, "that house is on fire." "What house?" "Why, the house about a mile to my right." Let this speech be taken down and shown to anybody in the neighboring village, and it will appear that the language by itself does not fix the house. But the person addressed sees where the speaker is standing, recognises his right hand side . . . estimates a mile . . . , and looking there, sees a house.[7]

Wittgenstein gives this example of how the meaning of both common and proper nouns could eventually go back to the deixis of a pointing finger:

> If we were doubtful about how the sentence "King's College is on fire" can be a picture of King's College

> on fire, we need only ask ourselves: "How should we explain what the sentence means?" Such an explanation might consist of ostensive definitions. We should say e.g., "this is King's College" (pointing to the building), "this is a fire" (pointing to a fire). This shews you the way in which words and things may be connected.[8]

Language depends on deixis in both of these ways, directly through overtly indexical words and phrases such as "that" and "my right," and through the dependence of other words on deixis for the original possibility of learning them.

Despite Peirce's contention that common nouns should be considered pro-demonstratives, more than just an indexical power is necessary. Common nouns can act as pro-demonstratives by referring back to cases when a certain object was pointed out or was otherwise in evidence, and an ordinary adjective or verb can work as a pro-demonstrative by referring back to a variety of instances when a certain characteristic or quality of things was in evidence or to occasions when a certain action was taking place, but the objects, characteristics and actions referred back to must exist in either conscious fact memory or unconscious skill memory as <u>iconic images</u>. Deixis--the power of indexes--points out or exhibits the relevant items in each situation, but those items that are indicated can only go into memory as icons. Peirce writes:

> An icon has such being as belongs to past experience. It exists only as an image in the mind. An index has the being of present experience.[9]

In other words, an index indicates things within each situation--each successive "present"--while those things

indicated, when reduced to the form that can be stored in memory, are iconic images; therefore, iconic images make up the substance of the past.

There are many iconic images of the past in fact memory, but it is the ones in skill or habit memory on which the meanings of most symbols are founded. The process of symbolic habit formation might be something similar to the following: in becoming imbedded in a skill or habit, various images coalesce according to relations of similarity. It is important both that images be similar to each other and that forms used in the various situations when those images are indicated be similar. Relations of similarity can then be extended into the future so that a similarity of form can cause one to look for a feature in the new situation similar to the features in former situations referred back to through the mediation of the linguistic habit. Peirce considers this sort of thing to be the basis of a symbol's meaning. He writes of how various features of situations that have been impressed upon us by the force of indices are later bound together by relations of similarity in a way that allows them to serve as the basis for an unconscious symbolic habit:

> The meanings of words ordinarily depend upon our tendencies to weld together qualities and our aptitudes to see resemblances, or, to use the received phrase, upon associations by <u>similarity</u>;[10]

When such associations by similarity are established as part of a linguistic habit, the original deixis that went into establish the habit is forgotten, so that the iconic

signification evoked by the symbol can eventually stand on its own, independent of present deixis, though it always depends on past deixis.

## Predicates and Grammatical Meaning

So far, all of the discussion about the relationship of language to the world has only explained what might loosely by called "reference"--that is, a direct relationship between a word and features of the extra-linguistic world in either past or present experience. Too often the debate about language and the world has stopped with the consideration of how words refer; there has been a hidden presumption that one is concerned with the connection of names with their objects, whether actions, characteristics or things. In Peirce's terminology, there has been much more interest in the designation of the "subject" of a sign, than with the signification of its "predicate." Peirce's distinction between the "subject" and "predicate" of a sign is set forth in the following passage:

> . . . the structure of such languages as I am acquainted with, . . . distinguishes the subjects and predicates of propositions. The subjects are the indications of the things spoken of, the predicates, words that assert, question, or command whatever is intended. The subjects are the indications of the things spoken of, the predicates, words that assert, question, or command whatever is intended.[11]

One might say that the subject of a proposition is an answer to the question "What is it about?" while the predicate is an answer to the question "What about it?" In

any proposition, something must be singled out for comment, and something must be said about it.

The distinction between subject and predicate becomes much more important than merely a parsing device if one applies it to signs in general rather than just propositions. Even single words can have in them both an indication of what is being talked about and some description of how it exists or how it is to be taken (i.e., the attitude one is to have towards it), as for example, nouns in Russian which always embody a case form that tells how the nouns is to be taken or verbs in Japanese that have something embedded in them to show the honorific level. Applied to individual words in languages that have declension, or to units such as prepositional phrases in languages without declension, Peirce's distinction of subject and predicate is very much akin to Jakobson's distinction between lexical and grammatical meaning, a distinction Wittgenstein also shows an awareness of in making this observation:

> We speak of understanding a sentence in the sense in which it can be replaced by another which says the same; but also in the sense in which it cannot be replaced by another. (Any more than one musical theme can be replaced by another.)
>
> In the one case the thought in the sentence is something common to different sentences; in the other, something that is expressed only by these words in these positions. (Understanding a poem.)[12]

The grammatical meaning of a word can be thought of as all of the meaning of the word that goes beyond mere reference.

That there is a great deal of meaning to words beyond reference, Jakobson argues in the following:

> . . . no one can understand the word cheese unless he has an acquaintance with the meaning assigned to this word in the lexical code of English. . . .
>
> The meaning of the words cheese, apple, nectar, acquaintance, but, mere, and of any word or phrase whatsoever is definitely a linguistic or--to be more precise and less narrow--a semiotic fact. . . . The meaning of the word "cheese" cannot be inferred from a nonlinguistic acquaintance with cheddar or with camembert without the assistance of the verbal code. An array of linguistic signs is needed to introduce an unfamiliar word. Mere pointing will not teach us whether cheese is the name of the given specimen, or of any box of camembert, or of camembert in general, or of any cheese, any milk product, any food, any refreshment, or perhaps any box irrespective of its contents. Finally, does a word simply name the thing in question, or does it imply a meaning such as offering, sale, prohibition, or malediction? (Pointing actually may mean malediction; in some cultures, particularly in Africa, it is an ominous gesture.)[13]

In the example of the word "cheese," both the fact that the word is to be taken simply as a name of the thing in question rather than as a malediction or anything else and that "cheese" is the name of a type of food of considerable generality (on a par with "milk," "bread," "poultry," etc.) is part of the grammatical meaning of "cheese," in that it tells of how something exists, or is to be taken. Another part of the definition of grammatical meaning given by Jakobson (and borrowed by Jakobson from Franz Boas) is that grammatical meaning is made up of those semantic distinctions that are obligatory in a language. On this, Jakobson cites Boas as follows:

> Grammar, according to Boas, singles out, classifies, and expresses various aspects of experience and, moreover, performs another important function:

> "it determines those aspects of each experience that must be expressed."[14]

For most of the predicates Jakobson mentions for the subject of the word "cheese"--whether the word is to be taken as a proper name, the name of a brand or sub-type of cheese, of food or refreshment in general, or any box or and whether it is an offer, sale, prohibition or malediction--there is at least some language that obligatorily expresses just that. Other languages neglect one or more of those distinctions. For instance, English has no special noun form for malediction. Thus, grammatical meaning is the part of a word's meaning most dependent on the structure of the rest of the language. It is mainly by oppositional relationships between words and phrases that grammatical distinctions are established. A great part of grammatical meaning is a matter of the category to which a word belongs--something that is established by its place in various oppositional relationships. Oppositional relationships and linguistic categories can help in overcoming the problem of learning the meaning of a word when its meaning goes beyond mere reference. In relation to the problem Jakobson touched on above of how the meaning of an unfamiliar word could be guessed when a thing being pointed to can be taken in so many different ways, Wittgenstein emphasizes the importance of linguistic categories or "posts" at which words can be stationed:

> The definition of the number two, "That is called 'two'"--pointing to two nuts--is perfectly exact.--But how can two be defined like that? The person one gives the definition to doesn't know what one wants to call "two"; he will suppose that "two" is the name given to this group of nuts! . . . And he might equally well take the name of a person, of which I give an ostensive definition, as that of a colour, of a race, or even of a point of the compass. That is to say: an ostensive definition can be variously interpreted in every case.
>
> Perhaps you say: two can only be ostensively defined in this way: "This number is called 'two'". For the word "number" in the definition does indeed shew this place; does shew the post at which we station the word. . . .
>
> So one might say: the ostensive definition explains the use--the meaning--of the word when the overall role of the word in language is clear. . . .
>
> When one shews someone the king in chess and says: "This is the king", this does not tell him the use of the piece--unless he already knows the rules of the game up to this last point: the shape of the king.[15]

## The origins of grammatical meaning

Grammatical meanings, since they have to do with the place of a word in the system of the language and with the "how" of a thing's existence, cannot be taught or learned by the kind of "ostensive definition" or straightforward deictic definition that often serves to define lexical meaning. They must be generated instead by oppositional contrast, implied analogies from simpler to more complex language-games, and diagrammatic relationships in the sound substance of words, phrases, and utterances. Oppositional contrast can help build up the meaning of a word because it can indicate that a word is relevant to the same kinds of situations as its various opposites and the word can absorb some patterns of use from the patterns of use of opposites. Conceptual assimilation among the various language-games

that bear the same grammatical form generates another part of grammatical meaning. Finally, some of the meaning of an utterance comes from a direct similarity between the relationships among the parts of an utterance and the relationships in the experiential world that are to be signified. Jakobson has noted many instances of this last, diagrammatic source for grammatical meaning, such as these instances:

> The substantial semantic contrast between roots as lexical and affixes as grammatical morphemes finds a graphic expression in their different position within the word; . . . .
>
> . . . , in various Indo-European languages, the positive, comparative, and superlative degrees of adjectives show gradual increase in the number of phonemes, e.g., high-higher-highest, altus-altior-altissimus. In this way the signantia reflect the gradation gamut of the signata.
>
> . . . The signans of the plural tends to echo the meaning of a numeral increment by an increased length of the form.[16]

> In a language which has both a system of prepositions and an independent case system, the meanings in the two systems are differentiated in the sense that when prepositions are used the relation itself is independently perceived, while in the case of inflection the relation becomes a kind of property of the object denoted [just as the form of the preposition is independent of the noun form while inflection is incorporated within the form of the noun].[17]

Falsehood of grammatical meaning

Because grammatical meaning stems largely from connections within language (in the three ways described above and perhaps others), rather than depending directly on connections with the experiential world, it can be false in a somewhat different fashion than lexical meaning is false. Falsity of lexical meaning can be illustrated by

saying that a particular green piece of paper is a $20 bill when in fact it is only a $10 bill. Lying with lexical meaning is lying about what something is. Falsity of grammatical meaning cannot be illustrated so easily--it will take the rest of the chapter to begin to make clear how grammatical meaning can be false--but to begin with, it can be said that falsehood in grammatical meaning is falsehood about what sort of thing something is, or in other words, about how it exists.

One place that falsehood can be studied is in relation to fiction. In literary fiction there is often more of grammatical falsehood than of lexical falsehood, because the poetic function of language so important in fiction has great potential for generating grammatical falsehood. The close connection of the poetic function of language and grammatical meaning is indicated by Jakobson in the following:

> . . . in jest, in dreams, in magic, briefly, in what one would call everyday verbal mythology, and in poetry above all, the grammatical categories carry a high semantic import.[18]

The poetic function of language is that part of the workings of a language that hinges crucially on form rather than content; therefore, it should not be surprising that grammar, which also has a close dependence on form, should be so closely connected with the poetic function of language. Wittgenstein takes special note of how powerfully the poetic function of language affects us: "Don't take it as a matter of course, but as a remarkable

fact, that pictures and fictitious narratives give us pleasure, occupy our minds."[19] Much of the remarkable power of the poetic function of language comes from the power of grammar. Jakobson writes this of the power of grammar itself:

> As Boas repeatedly noted, the grammatical concepts of a given language direct the attention of the speech community in a definite direction and through their compelling, obtrusive character exert an influence upon poetry, belief, and even speculative thought . . .[20]

Wittgenstein offers as a prime example of the power of grammar to influence one's thinking his own early enchantment with the grammar of formal logic, which he later tried to escape. Wittgenstein describes quite vividly the trap he fell into in his own thinking and how hard it was to escape it:

> It is interesting to compare the multiplicity of the tools in language and of the ways they are used, the multiplicity of kind of word and sentence, with what logicians have said about the structure of language. (Including the author of the Tractatus Logico-Philosophicus.) . . .
>
> . . . . . .
>
> Thought is surrounded by a halo.--Its essence, logic, presents an order, in fact the a priori order of the world: that is, the order of possibilities, which must be common to both the world and thought. But this order, it seems, must be utterly simple. It is prior to all experience, must run through all experience; no empirical cloudiness or uncertainty can be allowed to affect it---It must rather be of the purest crystal. But this crystal does not appear as an abstraction but as something concrete, indeed, as the most concrete, as it were the hardest thing there is (Tractatus Logico-Philosophicus No. 5.5563). . . .
>
> We want to say there can't be any vagueness in logic. The idea now absorbs us, that the ideal 'must' be found in reality. Meanwhile we do not as yet see how it occurs there, nor do we understand the nature of this "must". We think it must be in reality; for we think we already see it there. . . .

> The ideal, as we think of it, is unshakable. You can never get outside it; you must always turn back. There is no outside; outside you cannot breathe.--Where does this idea come from? It is like a pair of glasses on our nose through which we see whatever we look at. It never occurs to us to take them off.
>
> We predicate of the thing what lies in the method of representing it. Impressed by the possibility of a comparison, we think we are perceiving a state of affairs of the highest generality.[21]

What is tricky about understanding this passage is that in this passage, "the thing" being represented is language, and "the method of representing it" is logic. Therefore, Wittgenstein is saying that the grammar of logic took hold of him with its poetic force and led him to misunderstand language. Wittgenstein encapsulates his earlier confusion about language in this statement: "Language (or thought) is something unique"--this proves to be a superstition (not a mistake!), itself produced by grammatical illusions."[22]

## Wittgenstein's Battle Against Bewitchment by Language

### The danger of bewitchment

Wittgenstein maintains that a large share of men and women's speculative thinking has been contaminated by grammar: "When we do philosophy we are like savages, primitive people, who hear the expressions of civilized men, put a false interpretation on them, and then draw the queerest conclusions from them."[23] In an era when it is taboo to write of civilized men and savages, one might instead make the comparison between the false interpretations of philosophers and the misunderstandings of children. That is to say, the metalinguistic

consciousness of grammar can lead philosophers astray just as children's burgeoning metalinguistic awareness can lead them to insist on grammatical connections that do not exist in the adult language, as Jakobson describes in a passage too long to quote here.[24] The ultimate cause of the grammatical confusions of philosophers is that the forms of our language force us to simplify a complex range of experience with the actual world, until our accounts conform to the neater lines of the conceptual world given by the language. Language cannot duplicate experience, it must codify experience. Peirce argues:

> . . . the function of conceptions is to reduce the manifold of sensuous impressions to unity . . . the validity of a conception consists in the impossibility of reducing the content of consciousness to unity without the introduction of it.[25]

Similarly, Linda Waugh, giving an account of Jakobson's theory of meaning, writes:

> Furthermore, meaning categories are viewed as a classification imposed on extra-linguistic reality: such a classification groups together things which are different in objective, outside reality. Language extracts certain properties from, or better, imposes certain classifications upon, this outside reality and creates invariance for them in both the phonological and semantic systems. ["Invariance" is shorthand for the principle of "equivalence in difference."] A linguistic value, a common denominator of meaning, is set on certain salient characteristics of the outside world.[26]

As with any process of simplification, this sort of classification of experience by language runs the risk of ignoring what is important and highlighting what is unimportant. The great obstacle to language's being able to point up the key characteristics of every situation and

experience is that what is crucial in one case is of little account in another and what is immaterial in one context can be ignored only at one's peril in another. In regard to translating languages belonging to different cultures, Jakobson repeats a caveat from Boas:

> . . . Boas warns investigators against repeated egocentric efforts to foist upon remote languages the system of one's own grammatical categories or the system of categories the scholar has become used to while working on languages close to his own . . .[27]

But this sort of warning could apply just as well to borrowing the form of one language-game for use in another language-game. Wittgenstein often points out the danger of assuming that all language-games that are formally similar make sense in the same way. For example the statement that a stove is in pain is formally similar to many statements that we do make good use of, but is itself hard to know what to do with; or similarly, it is hard to know what to do with the statement that it is 5 o'clock in the afternoon on the sun:

> Yet we go on wanting to say: "Pain is pain--whether he has it, or I have it; and however I come to know whether he has a pain or not."--I might agree.--And when you ask me "Don't you know then, what I mean when I say that the stove is in pain?"--I can reply: These words may lead me to have all sorts of images; but their usefulness goes no further. And I can also imagine something in connexion with the words: "It was just 5 o'clock in the afternoon on the sun"--such as a grandfather clock which points to 5.--But a still better example would be that of the application of "above" and "below" to the earth. Here we all have a quite clear idea of what "above" and "below" mean. I see well enough that I am on top; the earth is surely beneath me! .,. . And it is only reflection that shews us that in this case "above" and "below" cannot be used in the ordinary way.[28]

To take another example, one says that time can be measured and also that a moving band can be measured, but there is a difference in kind between what one does in measuring time as against measuring a travelling band:

> It was such a "contradiction" which puzzled Saint Augustine when he argued: How is it possible that one should measure time? For the past can't be measured as it is gone by; and the future can't be measured because it has not yet come. And the present can't be measured for it has no extension.
>
> The contradiction which here seems to arise could be called a conflict between two different usages of a word, in this case the word "measure". Augustine, we might say, thinks of the process of measuring a length: say the distance between two marks on a travelling band which passes us, and of which we can only see a tiny bit (the present) in front of us. Solving this puzzle will consist in comparing what we mean by "measurement" (the grammar of the word "measurement") when applied to a distance on a travelling band with the grammar of that word when applied to time. The problem may seem simple, but its extreme difficulty is due to the fascination which the analogy between two similar structures in our language can exert on us.[29]

Jakobson himself provides an example of two language-games that may be assimilated to each other in a way that obscures the true nature of things--in this case two metalanguage-games of linguists:

> Linguists, even when interested chiefly in oral speech, often unwittingly give way to the hypnosis of written language. It is peculiar that in discussing the order of some verbal units in a sequence they use the terms "left" and "right" instead of "before" and "after" and speak about the "left-hand" and "right-hand" environment of a speech sound.[30]

Wittgenstein's aim in philosophy (or what he considers the true work of philosophy) is to clear up the misunderstandings that arise from the influence of grammar on our thinking, or from the grammatical assimilation of different language games:

> Philosophy, as we use the word, is a fight against the fascination which forms of expression exert upon us.[31]

> Philosophy is a battle against the bewitchment of our intelligence by means of language.[32]

> What is your aim in philosophy?--To shew the fly the way out of the fly-bottle.[33]

Wittgenstein describes the stickiness of the fly-bottle in this way:

> The problems arising through a misinterpretation of our forms of language have the character of depth. They are deep disquietudes; their roots are as deep in us as the forms of our language and their significance is as great as the importance of our language.---Let us ask ourselves: why do we feel a grammatical joke to be deep? (And that is what the depth of philosophy is.)
>
> A simile that has been absorbed into the forms of our language produces a false appearance, and this disquiets us. "But this isn't how it is!--we say. "Yet this is how it has to be!"[34]

Wittgenstein argues that it is the outward grammatical forms of the language have the power to make us almost irresistibly inclined to say certain things, a feeling he describes as: "Being unable--when we surrender ourselves to philosophical thought--to help saying such-and-such; being irresistibly inclined to say it . . ."[35] With the same power by which it pleases and enlightens us, the poetry of language can bewitch us, making us think that we know more than we do about a language-game because the form is the same as another simpler language-game. This kind of bewitchment occurs particularly when our metalinguistic ability to speculate about language is brought into play, as when we do philosophy; Wittgenstein is particularly aware of the way words and forms that are quite clear in

everyday usage become obscure when philosophers try to use them in language-games of a very different kind. He writes: "The confusions which occupy us arise when language is like an idling, not when it is doing work."[36] and ". . . philosophical problems arise when language goes on holiday."[37] But since, as Jakobson notes, ". . . the definition of our experience stands in complementary relation to metalinguistic operations . . . ,"[38] misunderstandings that arise from metalinguistic speculations cannot help having some effect on the normal use of language. One might say that faults developed in idle time can sometimes be carried over into working hours.

## Depth grammar and the conceptual world

Wittgenstein's discussion of the effect grammar has on our understanding is sometimes confusing because he uses the word "grammar" in two different ways: he uses "grammar" to mean more or less what anyone else would mean by "grammar," and he uses "grammar" to mean the whole of how a word is used, which amounts to the semantics of a word. Wittgenstein explains his two uses of the word "grammar" by making a distinction between "surface grammar," or syntax, and "depth grammar," or how a word is used in all of the language-games in which it plays a part:

> In the use of words one might distinguish 'surface grammar' from 'depth grammar'. What immediately impresses itself upon us about the use of a word is the way it is used in the construction of the sentence, the part of its use--one might say--that can be taken in by the ear.---And now compare the depth grammar [the

> semantics], say of the word "to mean", with what its surface grammar would lead us to suspect.[39] No wonder we find it difficult to know our way about.

The following passage may help to clarify the sort of thing Wittgenstein has in mind when he writes of "depth grammar":

> The grammar of "to fit", "to be able", and "to understand". (Exercises: (1) When is a cylinder C said to fit into a hollow cylinder H? Only while C is stuck into H? (2) Sometimes we say that C ceased to fit into H at such-and-such a time. What criteria are used in such a case for its having happened at that time? (3) What does one regard as criteria for a body's having changed its weight at a particular time if it was not actually on the balance at that time? (4) Yesterday I knew the poem by heart; today I no longer know it. In what kind of case does it make sense to ask: "When did I stop knowing it?" . . .
>
> The criteria which we accept for 'fitting', 'being able to', 'understanding', are much more complicated than might appear at first sight. That is, the game with these words, their employment in the linguistic intercourse that is carried on by their means, is more involved--the role of these words in our language other--than we are tempted to think.
>
> (This role is what we need to understand in order to resolve philosophical paradoxes. . . .)[40]

The "depth grammar" of a word is the whole of its role in the language and all of the criteria for its use in different instances.

Wittgenstein is very interested in the "depth grammar" of words and seems to be genuinely fearful of being misled by "surface grammar." Wittgenstein insists that one must never trust what the outward grammatical category of a word seems to say about its use, but must investigate that use directly:

> One cannot guess how a word functions. One has to <u>look at</u> its use and learn from that.
>
> But the difficulty is to remove the prejudice which stands in the way of doing this. It is not a stupid prejudice.[41]

In investigating the "depth grammar" or semantics of words, is related to the structure of our conceptual world. Wittgenstein indicates this relation of grammar to concepts when he writes:

> Essence is expressed by grammar.
> Grammar tells what kind of object anything is.
> (Theology as grammar.)[42]

This conceptual world must be carefully distinguished from the physical world. Concepts ultimately depend on that physical world, but can be investigated independently of it:

> If the formation of concepts can be explained by facts of nature, should we not be interested, not in grammar, but rather in that in nature which is the basis of grammar?--Our interest certainly includes the correspondence between concepts and very general facts of nature. (Such facts as mostly do not strike us because of their generality.) But our interest does not fall back upon these possible causes of the formation of concepts; we are not doing natural science; nor yet natural history--since we can also invent fictitious natural history for our purposes.[43]
>
> We are not analysing a phenomenon (e.g. thought) but a concept (e.g. that of thinking), and therefore the use of a word. So it may look as if what we were doing were Nominalism. Nominalists make the mistake of interpreting all words as names, and so of not really describing their use, but only, so to speak, giving a paper draft on such a description. [In other words, even our conceptual world is much more intricate than the Nominalists recognize, despite that conceptual world's being itself a simplified (and sometimes distorted) rendition of the physical world.][44]

Jakobson, following the medieval scholar Boethius, makes a similar distinction between the conceptual world and the physical world, claiming that the conceptual world is the proper object of study for semantics or linguistics, just

as Wittgenstein claims it as the proper object of study for his philosophy of language:

> According to Boethius' doctrine the modi significandi [modes of signification] pertain to the realm of signa or, in a closer view linguistic signs, and nothing outside of this sphere--neither res [things], nor modi essendi [modes of being]--enters into the scope of the grammarians's competence. . . . Thus, for example, a substantive does not name a substance but shows only that the given conceptus mentis [mental concept] is represented like a substance . . . yet could actually be represented by any other part of speech . . . , and on the other hand, everything, whether an actual entity or a negation or a pure figment, in its linguistic expression may obtain modum significandi essentialem nominis [the essential mode of signification of a name].[45]

Yet, though it must not be equated to the physical world, the conceptual world is of great consequence because it is the lens through which we see the physical world. In Wittgenstein's words: "Concepts lead us to make investigations; are the expression of our interests, and direct our interests."[46] As a result, flaws in our conceptual world can keep us from understanding the true structure of the extra-linguistic world, just as scratches or fog on a lens can obscure vision. For instance, Wittgenstein argues that conceptual problems are at the root of our difficulties with psychology:

> The confusion and barenness of psychology is not to be explained by calling it a "young science"; its state is not comparable with that of physics, for instance, in its beginnings. (Rather with that of certain branches of mathematics. Set theory.) For in psychology there are experimental methods and conceptual confusion. (As in the other case conceptual confusion and methods of proof.)
>
> The existence of the experimental method makes us think we have the means of solving the problems which trouble us; though problem and method pass one another by.[47]

Wittgenstein compares the kind of conceptual investigation he thinks is needed in psychology to investigations into the "foundations of mathematics."

> An investigation is possible in connexion with mathematics which is entirely analogous to our investigation of psychology. It is just as little a mathematical investigation as the other is a psychological one. It will not contain calculations, so it is not for example logistic. It might deserve the name of an investigation of the 'foundations of mathematics'.[48]

If one can get one's concepts straight, whether mathematical, psychological or any other set of concepts, one's investigations of extra-linguistic reality can proceed apace without hindrance.

## Wittgenstein's philosophical method--clarifying the use of language

Wittgenstein has a variety of approaches to the resolution of conceptual confusions, or "showing the fly the way out of the fly-bottle." Wittgenstein writes of his technique:

> . . . we now demonstrate a method, by examples and the series of examples can be broken off.--Problems are solved (difficulties eliminated), not a single problem.
> There is not a philosophical method, though there are indeed methods, like different therapies.[49]

One type of philosophical "therapy" is to remind people of things that have been forgotten because they are so obvious and thereby help us to understand what is under our noses:

> We want to understand something that is already in plain view. For this is what we seem in some sense not to understand.
> Augustine says in the Confessions "quid est ergo tempus? si nemo ex me quaerat scio; si quaerenti

> explicare velim, nescio [What therefore is time? when no one asks me, I know; when I wish to explain to someone who asks me, I do not know.]". . . . Something that we know when no one asks us, but no longer know when we are supposed to give an account of it, is something that we need to remind ourselves of. (And it is obviously something of which for some reason it is difficult to remind oneself.)[50]
>
> The work of the philosopher consists in assembling reminders for a particular purpose.[51]

Another strategy in philosophical "therapy" is to set up objects of comparison that will cause people to change their view of something--that is, to put some part of the workings of language in a different context than is usual in discussions about language. For instance, Wittgenstein writes at one point:

> I wanted to put that picture before him, and his acceptance of the picture consists in his now being inclined to regard a given case differently: that is, to compare it with this rather than that set of pictures. I have changed his way of looking at things. (Indian mathematicians: "Look at this.")[52]

What one often needs to do to clear up conceptual confusions is to emphasize certain distinctions that have been neglected and de-emphasize others that have been stressed too much. Wittgenstein writes:

> We want to establish an order in our knowledge of the use of language: an order with a particular end in view; one out of many possible orders; not the order. To this end we shall constantly be giving prominence to distinctions which our ordinary forms of language easily make us overlook.[53]

One means of changing the distinctions that are emphasized and those that are ignored is by translation from one sub-system of language to another. Translation, whether within a language, between languages or between language

and signs outside language is a good way to show the functioning of language from a different angle. Wittgenstein writes of this method of "therapy" as follows:

> Misunderstandings concerning the use of words, [are] caused, among other things, by certain analogies between the forms of expression in different regions of language.--Some of them can be removed by substituting one form of expression for another; . . .[54]

One of the great advantages of this last method of philosophical therapy (substituting one form of expression for another) is that it tends to suppress the action of the poetry in language and bring out the cognitive aspects of language. In fact, Jakobson defines the cognitive function of language and the poetic function partly on the basis of translatability: the cognitive import of a sentence is whatever easily survives translation or rewording; while the poetic sense of the sentence comprises all of those things that are often lost in translation or in second-hand reports:

> In its cognitive function, language is minimally dependent on the grammatical pattern, . . . the cognitive level of language not only admits but directly requires recoding interpretation, i.e. translation. Any assumption of ineffable or untranslatable cognitive data would be a contradiction in terms. But . . . in poetry . . . . the question of translation becomes much more entangled and controversial.[55]

Whatever the method he uses, Wittgenstein's aim is very often the aim of suppressing the poetic power of language to enable the cognitive force of expressions to come through more clearly. For those who love the poetry of language, this can seem like a very destructive task,

but Wittgenstein defends this destructive approach on the basis that it clears the ground for better cognitive understanding:

> Where does our investigation get its importance from, since it seems only to destroy everything interesting, that is, all that is great and important? (As it were all the buildings, leaving behind only bits of stone and rubble.) What we are destroying is nothing but houses of cards and we are clearing up the ground of language on which they stand.
>
> The results of philosophy are the uncovering of one or another piece of plain nonsense and of bumps that the understanding has got by running its head up against the limits of language.[56] These bumps make us see the value of the discovery.

The next few sections will examine some of these "bumps that the understanding has got by running its head up against the limits of language."

## The grammatical illusion of fictitious objects corresponding to nouns

One of the most common ways in which the grammar of our language can lead us astray is in the case of abstract nouns that seem to refer to some Platonic object. This is a frequent enough mistake in philosophy and one well enough recognized to have been given a name; it is called "reification" from Latin roots meaning "to make into a thing." Wittgenstein notes that our desire to make a noun correspond to a thing can sometimes be very resistant to evidence that a given noun does <u>not</u> correspond to a thing:

> . . . when we perceive that a substantive is not used as what in general we should call the name of an object and when therefore we can't help saying to ourselves that it is the name of an aethereal object. I mean, we already know the idea of 'aethereal objects' as a subterfuge, when we are embarrassed about the grammar

> of certain words, and when all we know is that they are not used as names for material objects.[57]

Wittgenstein provides several examples of such a tendency to invent ethereal objects corresponding to nouns. One is the reification of time.

> This kind of mistake recurs again and again in philosophy; e.g. when we are puzzled about the nature of time, when time seems to us a queer thing. . . . it is the use of the substantive "time" which mystifies us. If we look into the grammar of the word, we shall feel that it is no less astounding that man should have conceived of a deity of time than it would be to conceive of a deity of negation or disjunction.[58]

Another is the reification of the "picture" one has of something when "one has gotten a picture of it in one's mind":

> If you say he sees a private picture before him, which he is describing, you have still made an assumption about what he has before him. And that means that you can describe it or do describe it more closely. If you admit that you haven't any notion what kind of thing it might be that he has before him--then what leads you into saying, in spite of that, that he has something before him? Isn't it as if I were to say of someone: "He has something. But I don't know whether it is money, or debts, or an empty till." [In other words, "the picture he has" is grammatically a substantive, and one may call it an object if one desires, but the language game for this sort of object is very different than that for ordinary physical objects (which one can describe).][59]

The idea that everything language does is conveying thoughts about objects has been a relatively popular theory of language. Wittgenstein quotes Saint Augustine at the beginning of Philosophical Investigations giving this sort of account of language. In Augustine's account of language, objects are named by pointing or moving towards them, and attitudes about objects are shown first by body

and facial movements and then by the non-substantive parts of sentences:

> "When they (my elders) named some object, and accordingly moved towards something, I saw this and I grasped that the thing was called by the sound they uttered when they meant to point it out. Their intention was shewn by their bodily movements, as it were the natural language of all peoples: the expression of the face, the play of the eyes, the movement of other parts of the body, and the tone of voice which expresses our state of mind in seeking, having, rejecting, or avoiding something. Thus, as I heard words repeatedly used in their proper places in various sentences, I gradually learnt to understand what objects they signified; and after I had trained my mouth to form these signs, I used them to express my own desires."[60]

Wittgenstein takes exception to this view of language on the grounds that it makes a <u>thing</u> out of the meaning of every word (he does not discuss Augustine's idea that attitudes toward objects are also shown by language):

> These words [of Augustine's], it seems to me, give us a particular picture of the essence of human language. It is this: the individual words in language name objects--sentences are combinations of such names.---In this picture of language we find the roots of the following idea: Every word has a meaning. This meaning is correlated with the word. It is the object for which the word stands.[61]

Once one notices the great variety of what happens in language, the only remaining attraction in insisting that the meaning of a word must be a thing is simply that the word "meaning" is a noun.

## <u>Fictitious states and processes</u>

Confusion arising from the surface grammar of words is not limited to the reification of abstract nouns. It is just as easy to make the mistake of looking for an <u>ethereal</u>

activity corresponding to an abstract verb or an ethereal state corresponding to an adjective, prepositional phrase, or the like, as it is to make the mistake of looking for an ethereal object in the case of a noun. For instance, Wittgenstein gives the verbs "to think" and "to mean" as prime examples of words we tend to interpret as if they referred to ethereal processes:

> It seems that there are certain definite mental processes bound up with the working of language, processes through which alone language can function. I mean the processes of understanding and meaning. . . .
>
> It seems at first sight that that which gives to thinking its peculiar character is that it is a train of mental states, and it seems that what is queer and difficult to understand about thinking is the processes which happen in the medium of the mind, processes possible only in this medium. . . .
>
> Perhaps the main reason why we are so strongly inclined to talk of the head as the locality of our thoughts is this: the existence of the words "thinking" and "thought" alongside of the words denoting an activity, different from these but analogous to them, corresponding to the word "thinking". When words in our language have prima facie analogous grammars we are inclined to try to interpret them analogously; i.e. we try to make the analogy hold throughout.[62]

Wittgenstein argues that "thinking" is not an ethereal process, but something more subtle:

> Is thinking a kind of speaking? One would like to say it is what distinguishes speech with thought from talking without thinking. And so it seems to be an accompaniment of speech. A process, which may accompany something else, or can go on by itself.
>
> Say: "Yes, this pen is blunt. Oh well, it'll do." First, thinking it; then without thought; then just think the thought without the words. . . . But what constitutes thought here is not some process which has to accompany the words if they are not to be spoken without thought. . . .
>
> Thinking is not an incorporeal process which lends life and sense to speaking, and which it would be possible to detach from speaking, rather as the Devil took the shadow of Schlemiehl from the ground.---But

> how "not an incorporeal process"? Am I acquainted with incorporeal processes, then, only thinking is not one of them? No; I called the expression "an incorporeal process" to my aid in my embarrassment when I was trying to explain the meaning of the word "thinking" in a primitive way.[63]

If "thinking" and "meaning" tend to be interpreted as ethereal processes, expecting, having an opinion, knowing, understanding, etc., are often interpreted as ethereal states because they have the grammatical form of states:

> Expectation is, grammatically, a state; like: being of an opinion, hoping for something, knowing something, being able to do something. But in order to understand the grammar of these states it is necessary to ask: "What counts as a criterion for anyone's being in such a state?" (States of hardness, of weight, of fitting.)
>
> To have an opinion is a state.--A state of what? Of the soul? Of the mind? Well, of what object does one say that it has an opinion? Of Mr. N.N. for example. And that is the correct answer.
>
> One should not expect to be enlightened by the answer to <u>that</u> estion. Others go deeper: What, in particular cases, do we regard as criteria for someone's being of such-and-such an opinion? When do we say: he reached this opinion at that time? When: he has altered his opinion? And so on. The picture which the answer to these questions give us shews <u>what</u> gets treated grammatically as a <u>state</u> here.[64]

Wittgenstein illustrates some of the way one might inquire into the true semantics or "depth grammar" of a word like "understanding":

> "Understanding a word": a state. But a <u>mental</u> state?--Depression, excitement, pain, are called mental states. Carry out a grammatical investigation as follows: we say
>
> "He was depressed the whole day".
>
> "He was in great excitement the whole day".
>
> "He has been in continuous pain since yesterday".--We also say "Since yesterday I have understood this word". "Continuously", though?--To be sure, one can speak of an interruption of understanding. But in what cases? Compare: "When did your pains get less?" and "When did you stop understanding that word?"[65]

All of the above examples are of purely abstract words, but there is an interesting case of a hybrid word that is partly abstract and partly concrete: the word "read." Although reading includes an obvious action of moving one's eyes over some writing, and in the case of reading aloud, saying something as one goes along, the difference between reading and merely passing one's eyes over a page while one makes up something to say is whether one has mastered a technique and is following that technique, where "having mastered the technique" tends to be thought of as a mental state. But what is the distinguishing criterion for this state? Wittgenstein writes this:

> Consider the following case. Human beings or creatures of some other kind are used by us as reading-machines. They are trained for this purpose. The trainer says of some that they can already read, of others that they cannot yet do so. Take the case of a pupil who has so far not taken part in the training: if he is shewn a written word he will sometimes produce some sort of sound, and here and there it happens 'accidentally' to be roughly right. A third person hears this pupil on such an occasion and says: "He is reading". But the teacher says: "No, he isn't reading; that was just an accident".--But let us suppose that this pupil continues to react correctly to further words that are put before him. After a while the teacher says: "Now he can read!"--But what of that first word? Is the teacher to say: "I was wrong, and he did read it"--or: "He only began really to read later on"?--When did he begin to read? Which was the first word that he read? This question makes no sense here. . . .
>
> But in the case of the living reading-machine "reading" meant reacting [dependably] to written signs in such-and-such ways. This concept was therefore quite independent of that of a mental or other mechanism.--Nor can the teacher here say of the pupil: "Perhaps he was already reading when he said that word". For there is no doubt about what he did.--The change when the pupil began to read was a change in his behavior; and it makes no sense here to speak of 'a first word in his new state'.[66]

When someone learns to read, a change in behavior is what one sees--a change in state is only inferred because of an analogy to mechanisms we understand better than we understand the human mind:

> . . . in the different case of a reading machine which translated marks into sounds, perhaps as a pianola does, it would be possible to say: "The machine read only after such-and-such had happened to it--after such-and-such parts had been connected by wires; . . . .
>
> But isn't that only because of our too slight acquaintance with what goes on in the brain and the nervous system? If we had a more accurate knowledge of these things we should see what connexions were established by the training, and then we should be able to say when we looked into his brain: "Now he has read this word, now the reading connexion has been set up".---And it presumably must be like that--for otherwise how could we be so sure that there was such a connexion? That it is so is presumably a priori--or is it only probably? And how probable is it? Now, ask yourself: what do you know about these things?---But if it is a priori, that means that it is a form of account which is very convincing to us.[67]

The idea of a connection that is set up in the brain is so compelling because machines like the pianola do work that way. But there is no way to look into mental connections and see them as we can the internal mechanism of a pianola. Even if there were some kind of telepath who could see such a connection, or a neuro-psychologist who could detect it with his or her instruments, such a connection could not be the basis of judgments that someone knows how to read or not, since people have made those judgments quite effectively for thousands of years without using telepathy or sophisticated instrumentation. It is not knowledge that engenders our common notion of such mental connections. It

is the force of words and grammar in assimilating different language-games.

Depth grammar and psychology

Having looked at what Wittgenstein says about the semantics or "depth grammar" of psychological words, it is possible to explain how Wittgenstein's emphasis on the external criteria for what are called internal states is different from mere Behaviorism. Wittgenstein is open to the charge of closet Behaviorism in the first place because he denies that psychic processes and states are like physical processes and states:

> Misleading parallel: psychology treats of processes in the psychical sphere, as does physics in the physical.
>
> Seeing, hearing, thinking, feeling, willing, are not the subject of psychology in the same sense as that in which the movements of bodies, the phenomena of electricity etc., are the subject of physics. You can see this from the fact that the physicist sees, hears, thinks over, and informs us of these phenomena, and the psychologist observes the external reactions (the behaviour) of the subject.[68]

However, unlike behaviorists, Wittgenstein is perfectly at ease using everyday mental and psychological expressions--he merely insists that what are grammatically states or processes in psychology are not states and processes in the sense that physical states and processes are. Wittgenstein argues that the difference between psychology and physics is much greater than one between material and non-material things:

> One might say "Thinking is an incorporeal process", however, if one were using this to distinguish the [depth] grammar of the word "think" from that of, say,

> the word "eat". Only that makes the difference between the meanings look too slight.[69]

It is not the use of psychological words Wittgenstein is against, but misconceptions about the nature of the things they refer to:

> "But you surely cannot deny that, for example, in remembering, an inner process takes place."--What gives the impression that we want to deny anything? . . . The impression that we wanted to deny something arises from our setting our faces against the picture of the 'inner process'. What we deny is that the picture of the inner process gives us the correct idea of the use of the word "to remember". We say that this picture with its ramifications stands in the way of our seeing the use of the word as it is. . . .
>
> "Are you not really a behaviourist in disguise? Aren't you at bottom really saying that everything except human behaviour is a fiction?"--If I do speak of a fiction, then it is of a grammatical fiction.
>
> How does the philosophical problem about mental processes and states and about behaviourism arise?--The first step is the one that altogether escapes notice. We talk of processes and states and leave their nature undecided. Sometime perhaps we shall know more about them--we think. But that is just what commits us to a particular way of looking at the matter. For we have a definite concept of what it means to learn to know a process better. (The decisive movement in the conjuring trick has been made, and it was the very one that we thought quite innocent.)[70]

Wittgenstein's main point about psychology is that the talk of inner states and processes that is common in psychological theorizing may be helpful sometimes, but can also be very misleading, since in fact we know so little about what goes on in the mind or brain. Wittgenstein argues that what are often thought of as inner states or inner processes are actually manifested to us, and have their role in language, as intricate webs of external phenomena or phenomena in context:

> "For a moment I meant to . . . ." That is, I had a particular feeling, an inner experience; and I remember it.---And now remember quite precisely! Then the 'inner experience' of intending seems to vanish again. Instead one remembers thoughts, feelings, movements, and also connexions with earlier situations.
>
> It is as if one had altered the adjustment of a microscope. One did not see before what is now in focus.[71]

We may think something is "intangible" because we stare straight ahenad and do not notice the whole of the web of which it consists:

> The idea of the intangibility of that mental state in estimating the time is of the greatest importance. Why is it intangible? Isn't it because we refuse to count what is tangible about our state [e.g., its context] as part of the specific state which we are postulating?[72]

> And we do what we do in a host of similar cases: because we cannot specify any one bodily action which we call pointing to the shape (as opposed, for example, to the colour), we say that a spiritual (mental, intellectual) activity corresponds to these words.
>
> Where our language suggests a body and there is none: there, we should like to say, is a spirit.[73]

When one occurrence is part of a whole web of events, it takes on extra significance that seems to be something spiritual, or at least intangible. The actual happenings and contexts that do the work of enabling us to perceive what we want to call mental events get none of the credit.

## Falsehood of Predicate Images

In the above instances and in many others, the surface grammar of words suggests certain ways of thinking about what those words describe. But surface grammar is not the only source for the concepts we use in theorizing. There are also misleading predication of images to subjects that

depend on the lexical meanings of words. Some such images come from an explicitly formulated philosophical tradition, such as the dichotomy of "objective" vs. "subjective," and many others from the popular tradition, which interacts with the higher reaches of intellectual history but also follows patterns of its own. An example of this last would be the division of human doings into "rational" and "emotional" things, which comes from a conception of "mind" and "heart" as radically different things. Some of those concepts that fall almost too ready to hand when we theorize come from ideas that have become lexically embedded in the language--certain words frequently used to classify things, frozen metaphors that are periodically unfrozen and put to a literal use and the cross-connections that arise from the use of the same word in two different applications. All of these things influence our theories of things--our picture of the way things are. Because some ways of looking at things fall too ready to hand, one is sometimes led into ways of picturing things that are not helpful, or pictures for which the use is not clear. This problem of pictures or theories with no clear application is one of Wittgenstein's concerns. He stresses the need to examine what is done with a picture or theory. Is the picture something that cannot help but be idle, or does it help us to understand the way things work? For example:

> "The mind seems able to give a word meaning"--isn't this as if I were to say "The carbon atoms in benzene seem to lie at the corners of a hexagon"? But this is not something that seems to be so; it is a picture.

> The evolution of the higher animals and of man, and the awakening of consciousness at a particular level. The picture is something like this: Though the ether is filled with vibrations the world is dark. But one day man opens his seeing eye, and there is light.
>
> What this language primarily describes is a picture. What is to be done with the picture, how it is to be used, is still obscure. Quite clearly, however, it must be explored if we want to understand the sense of what we are saying. But the picture seems to spare us this work: [it seems to us that] it already points to a particular use. This is how it takes us in.[74]

Wittgenstein is most concerned about the picture of infinity in mathematics and the picture of human consciousness in psychology:

> A picture is conjured up which seems to fix the sense unambiguously [seems to have a clear use]. The actual use, compared with that suggested by the picture, seems something muddied. Here again we get the same thing as in set theory: the form of expression we use seems to have been designed for a god, who knows what we cannot know; he sees the whole of each of those infinite series and he sees into human consciousness. For us, of course, these forms of expression are like Pontificals, which we put on perhaps, but with which we cannot do much, since we lack the effective power which would give this clothing meaning and purpose.
>
> In the actual use of expressions we make detours, we go by sideroads. We see the straight highway before us, but of course we cannot use it, because it is permanently closed.[75]

> It seems clear that we understand the meaning of the question: "Does the sequence 7777 occur in the development of [pi]?" It is an English sentence; it can be shewn what it means for 415 to occur in the development of [pi]; and similar things. Well, our understanding of that question reaches just so far, one may say, as such explanations reach.
>
> The question arises: Can't we be mistaken in thinking that we understand a question?
>
> For many mathematical proofs do lead us to say that we cannot imagine something which we believed we could imagine.[76]

The danger in a picture is that it can beg the question by making us think that one only need worry about whether

something is so or not, but that the question about what the character of the thing would be if it were found is suppressed. The law of excluded middle--"Either p or not-p"--is obviously true if both p and not-p have clear meanings, but the law of excluded middle is on shakier ground when one cannot tell what p or not-p would mean in a given case:

> Here it happens that our thinking plays us a queer trick. We want, that is, to quote the law of excluded middle and to say: "Either such an image is in his mind, or it is not; there is no third possibility!"--We encounter this queer argument also in other regions of philosophy. "In the decimal expansion of [pi] either the group "7777" occurs, or it does not--there is no third possibility." That is to say: "God sees--but we don't know." But what does that mean?--We use a picture; the picture of a visible series which one person sees the whole of and another not. The law of excluded middle says here: It must either look like this, or like that. So it really--and this is a truism--says nothing at all, but gives us a picture. And the problem ought now to be: does reality accord with the picture or not? And this picture <u>seems</u> to determine what we have to do, what to look for, and how--but it does not do so, just because we do not know how it is to be applied. Here saying "There is no third possibility" or "But there can't be a third possibility!"--expresses our inability to turn our eyes away from this picture: a picture which looks as if it must already contain both the problem and its solution, while all the time we <u>feel</u> that it is not so.
>
> Similarly when it is said "Either he has this experience, or not"--what primarily occurs to us is a picture which by itself seems to make the sense of the expressions <u>unmistakable</u>: "Now you know what is in question"--we should like to say. And that is precisely what it does not tell him.

Wittgenstein does not reject such pictures, but to beware of assuming one understands how they are used:

> . . . the best that I can propose is that we should yield to the temptation to use this picture, but then investigate how the <u>application</u> of the picture goes.[77]

> The picture is <u>there</u>; and I do not dispute its <u>correctness</u>. But <u>what</u> is its application? Think of the picture of blindness as a darkness in the soul or in the head of the blind man.[78]

Pictures such as those in the above examples have an important use, but it is different from what one might imagine. The picture of blindness as a darkness in the head of the blind man serves a poetic purpose--it may, for instance, convey the idea of permanent sightlessness more powerfully than would be possible by the words "permanent sightlessness" by implicitly comparing the sightlessness of blindness to the sightlessness everyone has experienced when in a dark room. In general, talk of things happening in the soul is often more vivid and memorable than equivalent statements that try to avoid such imagery. In mathematics, the picture of the whole expansion of pi being visible to a god serves to establish some mathematical conventions. Because of the practical value of simplicity in a theory, it could be the case (though it need not be) that mathematics as a whole becomes more useful when some things with which mathematics is concerned are allowed to suffer under a somewhat unjustified picture so that the ideas that picture involves can be more easily maintained in other areas of mathematics. It might also be true that infinity deserves some dramatization by being represented as a length beyond all other lengths, even though that does not accurately describe the true nature of infinity, which is simply <u>continuation without end</u>. Thus, Wittgenstein's questioning of <u>how</u> pictures are actually used serves mainly

to show that we use pictures as often for poetic, evocative reasons as for immediately utilitarian reasons.

# Chapter Six

## Identity and Context as Springs of Meaning

### Formal Identity as a Source of Meaning

The last chapter offered illustrations of how similarities of grammar can cause different language-games to be assimilated to one another in conception despite great dissimilarity in what actually goes on in the various language-games. One essential thread in "grammar" that deserves more attention is the principle of identity that binds together various tokens of a word. Both Jakobson and Wittgenstein agree that even formal identity of signs is far from a trivial matter. But formal identity is a much clearer notion than semantic identity. When faced with the question of how many distinct meanings a given form should be said to have, dictionary makers inevitably come up with different answers, while managing to concur in most instances on questions of when two forms are identical. To this question of how many meanings a form should be said to have, Jakobson gives a clear answer: that except in isolated instances where previously different forms have fallen together, a single form has only one meaning. Wittgenstein gives no such clear answer, but rejects the

question as too vague. Yet because of his disinterest in "meanings" of words beyond what the overt forms do, Wittgenstein is like Jakobson in his emphasis on form as the determinant of meaning.

The subtlety of the relation of "formal identity"

Jakobson's recognition that even judgments about sameness of form are non-trivial is clear in his criticism of some of the radical partisans of glossematics who thought they could distinguish various phonemes by purely distributional criteria:

> For an artificial language with such formatives as a, pa, ta, and at, this discussant believed he had found a practicable way to extract the vowel a by characterizing this constituent as the only one able to appear by itself. Such an operation, however, presupposes the knowledge that the [a]'s of this whole series implement one and the same entity.[1]

In fact, the knowledge that all of the [a]'s are "the same entity" would require knowledge of the phonemic pattern of the language, for ". . . phonemes draw on sound matter, but readjust this extrinsic matter, selecting, dissecting, and classifying it along their own lines."[2] Corresponding to Jakobson's reminder of the difficulty of establishing sameness of more than one execution of a phoneme, Wittgenstein uses sameness of a written numeral to emphasize that sameness is something that can be called into question even in the simplest cases:

> If you have to have an intuition in order to develop the series 1 2 3 4 . . . you must also have one in order to develop the series 2 2 2 2 . . . .
> But isn't the same at least the same?[3]

## The abstruseness of the relation of identity of meaning

If sameness of a phoneme or grapheme can be in doubt, sameness of sense or meaning is a much greater problem. Wittgenstein indicates some of the difficulties:

> Suppose I were to ask: is it clear to us, while we are uttering the sentences "This rod is one yard long" and "Here is one soldier", that we mean different things by "one", that "one" has different meanings?--Not at all.--Say e.g. such a sentence as "one yard is occupied by one soldier, and so two yards are occupied by two soldiers." Asked "Do you mean the same thing by both 'ones'?" one would perhaps answer: "Of course I mean the same thing: one!" (Perhaps raising one finger.)
>
> Now has "1" a different meaning when it stands for a measure and when it stands for a number? If the question is framed in this way, one will answer in the affirmative. . . .
>
> Imagine a language with two different words for negation, "X" and "Y". Doubling "X" yields an affirmative, doubling "Y" a strengthened negative. For the rest the two words are used alike.--Now have "X" and "Y" the same meaning in sentences where they occur without being repeated?--We could give various answers to this.
>
> (a) The two words have different uses. So they have different meanings. But sentences in which they occur without being repeated and which for the rest are the same make the same sense.
>
> (b) The two words have the same function in language-games, except for this one difference, which is just a trivial convention. The use of the two words is taught in the same way, by means of the same actions, gestures, pictures and so on; and in explanations of the words the difference in the ways they are used is appended as something incidental, as one of the capricious features of the language. For this reason we shall say that "X" and "Y" have the same meaning.
>
> (c) We connect different images with the two negatives. "X" as it were turns the sense through 180°. And that is why two such negatives restore the sense to its former position. "Y" is like a shake of the head. And just as one does not annul a shake of the head by shaking it again, so also one doesn't cancel one "Y" by a second one. And so even if, practically speaking, sentences with the two signs of negation come to the same thing, still "X" and "Y" express different ideas.[4]

Jakobson's equation of formal identity and identity of meaning

Jakobson's answer to these questions is clear. When the form is the same, he considers the essential meaning to be the same and when the form is different, he presumes that the meanings are different. Linda Waugh explains Jakobson's principle of formal determinism in this way:

> For the determination of the meaning categories of a given language, we must go back to the close link between form and meaning in the linguistic sign and the function of language for communication. In other words, meaning should be studied not in isolation from form because this would destroy the essential and fundamental unity of the linguistic sign. Thus, for any semantic analysis one begins the study of meaning by making constant reference to the formal carriers of that meaning within the given linguistic system. . . . It is assumed then that forms exist in language to carry the meaning, that is to constitute a basic part of the linguistic sign. Furthermore, it is assumed that differences of forms exist to differentiate meaning categories while identity of form (normally) implies identity of meaning. This is the principle of Formal Determinism as given by Jakobson in most of his writings. The meaning categories of a language are assumed to be given by the formal categories of that same language. So for every difference in form there is assumed to be a concomitant difference in meaning; for every identity (invariance) of form there is assumed to be an identity (invariance) of meaning. This principle is subject to one constraint: the case of homophony, where it is assumed that the distinctive features used to differentiate the homophonous signs are systematic--that is, they recur elsewhere in the linguistic system and are not created solely to differentiate the signs in question.[5]

When Linda Waugh writes ". . . it is assumed that differences of forms exist to differentiate meaning categories while identity of form (normally) implies identity of meaning, she argues, in effect, that speakers of a language attempt to use the diagrammatic value of the formal identity to the fullest extent possible. Certainly

the effectiveness of a language for communication is enhanced if semantic distinctions are quite closely matched by formal distinctions, just as the effectiveness of an orthographic system for indicating the pronunciation of unfamiliar words in print and the spelling of unfamiliar words in speech is enhanced if phonemic distinctions are closely matched by orthographic distinctions. When differences and samenesses of form and meaning are mismatched, the diagrammatic value of identity and difference of forms is wasted, which runs contrary to the communicative teleology of language.

An argument for formal determinism on the basis of the psycho-linguistic salience of formal identity

A psychological argument for formal determinism of meaning can be made on the basis of the conspicuousness of formal identity and difference. Despite the difficulty of establishing sameness of phonemes or rightly hearing sameness of forms in another language or of establishing that sameness in the abstract, for speakers of a language, sameness and difference of forms is usually quite obvious except in elliptic speech or in bad hearing conditions. One cause of the saliency of formal sameness and identity in language has been discovered in dichotic listening experiments that have indicated speech sounds are processed by a different part of the brain than other sounds and that as a result of the processing to which speech sounds are subjected, they are perceived discretely while other sounds

are perceived continuously. Jakobson quotes Sapir on the discreteness with which speech sounds are perceived as compared to non-speech sounds:

> Sapir . . . . compared the candle-blowing "wh" with the externally similar speech sound [hw] (wh), pointing to the essential difference between the two sounds, the latter of which is "'placed' with reference to other sounds" and to "the relational gaps" between all of them, whereas its candle blowing homonym is "not spaced off from nor related to other sounds--say the sound of humming and the sound of clearing one's throat."[6]

Of course Jakobson interprets Sapir's "relational gaps" in terms of distinctive features. Of "the role of distinctive features in speech perception" Jakobson writes:

> On the plane of psychological reality those features act as percepts which convert the continuum of their physical substratum into discrete polarized attributes. . . . Sapir ([1933] 1949) compared the elementary units of language with "notes, which, in the physical world, flow into each other in an indefinite continuum" but which, in terms of musical scale and composition are tangibly distinct entities "definitely bounded off against each other" . . . .
>
> . . . , the discrimination activities exerted by the central nervous system are generally supposed to involve a digital process, in particular a binary digit, especially for the identification of purely discriminative stimuli . . .[7]

The discrete, "digital" processing of speech sounds has actually made them into an archetype of identity and difference. The Greeks quite explicitly used the differences and relationships among phonemes as a model of basic differences and likenesses in the physical world:

> In the greek philosophical literature indivisible sound units capable of forming meaningful strings were termed STOICHEIA, 'the underlying primes of sounds and letters'. The sound shape of language and correspondingly its alphabet were viewed as a joint coherent system with a limited number of discrete and interconnected formal units. This concept proved to be so persuasive that Democritus (fragment A6; cf. Diels

> and Wilpert) and his adherent Lucretius, in searching for an analogy which might confirm their theory of the atomic structure of the physical universe, cited STOICHEIA as the minimal components of speech. . . .[8]

This use of phonemes, or the letters of the alphabet corresponding to them, as the model for identity and difference appears in Aristotle's dictum "A is A," which established the rule of logic that the same name is always to be used for the same thing. Sameness of essence is thereby linked to sameness of _logos_, and difference of essence to difference of _logos_. The choice of words or other symbols for things is always in part a decision (correct or incorrect) as to what that thing is like, or as Jakobson asserts: "Our concepts are apprehended and delineated by the very fact of being named . . ."[9] Jakobson argues that in ordinary language, just as in philosophy, where "A is A" is the rule, phonemic likeness or difference is the key to signalling semantic likeness or difference:

> One must keep in mind both functions of the distinctive features. The obviously primary function, the sense-discriminative (purely distinctive one, assigns to the feature the capability of signaling--with a probability near to 1.0--the semantic likeness or nonlikeness of two meaningful verbal units.[10]

> The distinctive features . . . differ from all other constituents of language through the lack of their proper, immediate signification. Their only _signatum_ is that of 'mere otherness' . . .[11]

Thus, sameness or difference of form is at least presumptive reason to look for sameness or difference in meaning.

A provisional attempt to define the question of substantial identity in terms of the systemic role and the neurological processing of forms

As his discussion of the meaning of the word "game" makes clear, Wittgenstein would never agree with Jakobson about the existence of general meanings for words--something in common to all the uses of a word. However, Wittgenstein does agree in the emphasis on the outward forms of the language, if only because he is uncomfortable with the idea of "meanings" separate from forms. (Wittgenstein writes at one point: "When I think in language, there aren't 'meanings' going through my mind in addition to the verbal expressions: the language is itself the vehicle of thought."[12]) Wittgenstein emphasizes the tangibility of words by comparing them to chess pieces, which have complex patterns of use while remaining unmysterious physical objects:

> We are talking about the spatial and temporal phenomenon of language, not about some non-spatial, non-temporal phantasm. . . . But we talk about it as we do about the pieces in chess when we are stating the rules of the game, not describing their physical properties.
>
> The question "What is a word really?" is analogous to "What is a piece in chess?"[13]

This view of a word as being like a piece in chess still allows a dispute as to whether all the uses of a word have some distinguishing feature in common. Wittgenstein gives an example of where two different uses of a piece in chess seem to be unrelated to each other:

> Let us say that the meaning of a piece is its role in the game.--Now let it be decided by lot which of the

> players gets white before any game of chess begins. To this end one player holds a king in each closed fist while the other chooses one of the two hands at random. Will it be counted as part of the role of the king in chess that it is used to draw lots in this way? . . .
>
> Why the same word? In the calculus we make no use of this identity!--Why the same piece for both purposes?[14]

For drawing lots, any other piece would work just as well. In fact, it is commonly pawns that are used for this purpose, but the game would not be much altered if kings were used instead. But one might simply reject the concern with whether the identity of a piece that moves in such-and-such a way with the piece used for drawing lots is justified on logical grounds or not, contending that at least the symbolic structure of the drawing of lots before the game is somewhat different according to what piece is actually used for drawing lots. One might even argue that with words in the language, people will always try to find reasons for why the same word is used for both this and for that. In other words, whether there is any important reason for the use of the same word in two different contexts or not, people will try to make sense of the the identity in form both consciously and unconsciously. On this view, a linguist's attempt to explain the connections among the various uses of a word would be seen as a continuation of the human predisposition to try to make sense of formal connections. The great question would be whether it is possible for a linguist or semioticist to reproduce consciously the same inferences about words that are made unconsciously by speakers. In order to reproduce

consciously and represent the unconscious assimilation among various uses of the same form, one would have to know, at a minimum, when two uses of a form were so far apart that no semantic assimilation could take place between those two uses, and when various uses were close enough together that semantic assimilation among them would begin to take place. In other words, when are there effectively two or more habits employing the same form in different contexts and when is there only one habit--perhaps modified in what it does according to context, but effectively doing the same thing in each? Or what if the skill of using a certain form depended on pulling a single example of past usage out of memory partly at random but favoring past examples that are as much like the present situation as possible? In all of these alternative theories about the degree of unity of meaning for a form, the only sure thing, barring a great deal of further empirical research, is that whenever there is an identity of form, there is at least a possibility of semantic linkage and assimilation. To put it another way, merely to say that one has in question a specific form that is taken to be a form in a given language is to say a great deal. The chess piece itself, taken as a chess piece, rather than as a block of wood, is itself very important. Identifying the meaning of a word with what the physical word is as a word in the language (not just as a sound or a scribble) may not be far from Peirce's view of the meaning of a sign

when he writes: "The meaning of a representation . . . . is nothing but the representation itself conceived as stripped of irrelevant clothing."[15]

## Context as a Source of Meaning

Whatever one says about the unity or disunity of the meaning of a word, there is an important question of how single form can be perceived and processed according to its context. How is a particular instance of the form put together with its context into a meaning for that instance of the form? There are two ways that context might interact semantically with a particular instance of a form. There is discrete interaction with context, as for example, when a word has a different sense according to whether it is a noun or a verb in a given sentence--e.g., the word "brook" in "There was a cool brook of water winding through the grove of trees." vs. "brook" in "I will brook no resistance."--and there is relatively continuous interaction with context, such as the difference in the meaning of "eat" when it is the action of different animals or of plants or machines--there is no sudden jump in the meaning of "eat" from one case to the next, but the action involved and the image one would get of the action would be slightly different from case to case.

The workings of the continuous type of interaction between a word and its context are reasonably clear. This influence of verbal context on the meaning of a word simply parallels the influence of a physical context on the

pattern something takes in actual experience. The more difficult problem is to explain the workings of the "discrete" type of interaction of context with a word. Here there seems to be a bigger change in the meaning of the word in context than could come from the visible context alone. One might think of the continuous influence of context as something iconic, images corresponding to various words in a sentence being put together to form a complete, logical picture in an unremarkable way; while the discrete effects of context on the sense of a word could result from differences in context acting symbolically to channel understanding of the word in one direction or another like a railroad switch. In the case of the discontinuous effect of context, a difference in context leads to two different results in a way that could not be explained merely by looking at the immediate context itself, but only by knowing what various contexts are connected to by convention.

## The role of context in visual perception as a model of the role of context in language

Wittgenstein discusses what I have called the discrete effect of context on the sense of a word in relation to optical illusions. Understanding a word as a verb or as a noun can be compared to seeing a figure Wittgenstein uses as a duck or as a rabbit,[16] or an octagon made of alternating white and black triangles as a white cross on a black background or a black cross on a white background.[17]

The difference between the two ways of seeing an optical illusion of this sort has to do with what other pictures one sees the figure as similar to. For instance, as Wittgenstein writes: "Those two aspects of the double cross (I shall call them the aspects A) might be reported simply by pointing alternately to an isolated white and an isolated black cross."[18] Wittgenstein calls this seeing of one thing as being <u>like</u> another "noticing an aspect":

> Two uses of the word "see".
> The one: "What do you see there?"--"I see this" (and then a description, a drawing, a copy). The other: "I see a likeness between these two faces"--let the man I tell this to be seeing the faces as clearly as I do myself. . . .
> I contemplate a face, and then suddenly notice its likeness to another. I <u>see</u> that it has not changed; and yet I see it differently. I call this experience "noticing an aspect".[19]

Whether one sees a figure as similar to one sort of thing or to another might depend on what is surrounding the figure. First seen in a picture full of many rabbits, the duck-rabbit would probably be seen as a rabbit, while in a picture full of duck figures, the duck-rabbit would undoubtedly be seen as a duck.[20] Or a particular phenomena might seem very different according to the "light" it is considered in--that is the other phenomena it is implicitly compared to. Putting things in a different "light" by changing the pictures to which a phenomenon is implicitly compared is much of what Wittgenstein sees himself as trying to do in his discussion of language:

> . . . what am I doing with that proposition? . . . I wanted to put that picture before him, and his <u>acceptance</u> of the picture consists in his now being

> inclined to regard the given case differently: that is, to compare it with this rather than that set of pictures. I have changed his way of looking at things.[21]

All of this influence of context on "seeing," whether literal or metaphorical, is matched by an influence of context on one's "hearing" of the sense of a word. In Wittgenstein's words:

> The importance of this concept lies in the connexion between the concepts of 'seeing an aspect' and 'experiencing the meaning of a word'.[22]

## The seeming congealment of contextual information into a form itself

The curious thing about optical illusions like the duck-rabbit or the double-cross is that even when the way it is seen is governed by context, those different aspects seem to be a part of the figure itself. Similarly, even when the way a word is heard is governed by context, the difference in sense seems to be absorbed into the word itself. Wittgenstein describes this as "The familiar physiognomy of a word, the feeling that it has taken up its meaning into itself, that it is an actual likeness of its meaning . . ."[23] and gives these examples of how a word can seem to take up contextual meanings into itself:

> . . . "What would you be missing if you did not experience the meaning of a word?"
>
> What would you be missing, for instance, if you did not understand the request to pronounce the word "till" and to mean it as a verb,--or if you did not feel that a word lost its meaning and became a mere sound if it was repeated ten times over? . . .
>
> You can say the word "March" to yourself and mean it at one time as an imperative at another as the name

> of a month. And now say "March!"--and then "March no further!"--Does the same experience accompany the word both times--are you sure?[24]

One possible reason that the difference in sense seems to be drawn up into the word itself is that the "difference in aspect" of a word, even though it is signalled by the immediate context is not supported by that immediate context but by other images far removed from that context, except by a conventional symbolic connection. It is like the following descriptions Wittgenstein gives of the "dawning of an aspect":

> The aspects of a triangle: it is as if an image came into contact, and for a time remained in contact, with the visual impression.[25]

> . . . what I perceive in the dawning of an aspect is not a property of the object, but an internal relation between it and other objects.
>
> It is almost as if 'seeing the sign in this context' were an echo of a thought [the echo of images removed from the immediate context].[26]

Even though in hearing an aspect of a form one seems to hear "a property of the object" it is always "an internal relation between it and other objects." For instance, when one hears "round" as a verb, rather than as an adjective, one hears, as it were, an internal relation between the particular token and the category of verb that exists in the language. The ring of the word changes when one hears it as a verb because the context is different than when one hears it as an adjective. It is not just the immediate physical context of the word that affects it meaning, but also the context of whatever linguistic category that immediate context signals.

Discussion of Jakobson's and Peirce's notion of invariant acontextual meaning

Because meaning from a form, from its immediate context, and from the paradigmatic context signalled by that immediate context is all perceived as if contained in the form itself, the feeling that a form has a different meaning in this context as opposed to that context is not a good guide to the degree of essential unity or plurality of a form's meaning. Thus, Jakobson's contention that to each form there is essentially one general meaning modified according to context cannot be rejected out of hand. As Linda Waugh puts it, the "invariant of meaning" associated with each form "is to be differentiated from the range of contextual variations or interpretations that one finds for that particular form."[27] and ". . . to extract such an invariant, one must take a sufficiently abstract view of the meaning of the form in question . . ." that is, one must abstract it from any particular context: " . . . One cannot equate its meaning with any one usage nor with its interpretation in given contexts."[28] Peirce defines the "interpretant" or invariant general meaning of a sign as "all that is explicit in the sign itself apart from its context and circumstances of utterance." In other words, the invariant meaning or "interpretant" of a sign is like a general rule for interpreting the sign in any of the various circumstances in which it might be used. However, in accordance with Peirce's views on the role of habit in

language, the "general rule" that is the interpretant of the sign might often remain unconscious.

Wittgenstein shows his leeriness of such a concept of a general rule for interpreting signs not only in his denial of the existence of a general meaning for "game," but also in the following passage, where, employing his analogy of pieces in chess to words in a language, he calls into question the idea that the use of a sign follows some special logic so that what one is to do with a sign is to be found in looking at the sign:

> But what does it mean here to speak of "making use of the identity"? for isn't it a use, if we do in fact use the same word?
>
> And now it looks as if the use of the same word or the same piece, had a purpose--if the identity is not accidental, inessential. And as if the purpose were that **one should be able to recognize the piece and know how to play.**[29] [boldface added]

Wittgenstein would especially object to Peirce's willingness to reify "meaning" by speaking of an interpretant or general rule for interpreting a sign as if it were either a real object in some Platonic realm or even a set of actual physical connections. It may be that there is some pattern of interconnection in the verbal centers of the brain that effects a general rule for interpreting a given sign; yet even supposing that such a thing exists, Wittgenstein argues that it is likely to have a rather different arrangement than what one would guess by metaphysical speculation about meaning in a previously quoted passage.

> But isn't that [our difficulty in saying when a pupil has first begun to read] because of our too slight acquaintance with what goes on in the brain and the nervous system? If we had a more accurate knowledge of these things we should see what connexions were established by the training, and then we should be able to say when we looked into his brain: "Now he has read this word, now the reading connexion has been set up". ---And it presumably must be like that--for otherwise how could we be so sure that there was such a connexion? That it is so is presumably a priori--or is it only probable? And how probable is it? Now, ask yourself: what do you know about these things?---But if it is a priori, that means that it is a form of account which is very convincing to us.[30]

If there is some kind of change in the pattern of neuronal connections that accompanies learning to read, it is almost surely not the kind of simple thing pictured in a statement like ". . . now the reading connexion has been set up." The actual change in the brain would undoubtably involve much more, simply because reading is a much more complex activity than is fairly represented by the idea that becoming able to read involves merely setting up a single connection or perhaps a series of simple connections in parallel. Similarly, if one supposes the existence of semantic connections in the brain, one must be careful not to assume one already knows all about what they must be like. It is all too easy to make people forget the true richness and complexity of a word's operation by putting forward an inadequate notion of meaning. In relation to the metaphors and terminology used to describe the nature of meaning, this remark of Wittgenstein's should be heeded: "An unsuitable type of expression is a sure means of

remaining in a state of confusion. It as it were bars the way out."[31]

The great value of Peirce's notion of an interpretant is as an advance over the simple notion of meaning modelled on reference. It is very helpful to at least have an idea of meaning that distinguishes between aspects of meaning derived from context and whatever there is to meaning independent of particular contexts. Peirce's notion of an interpretant and Jakobson's notion of invariant and contextual meaning may not yet represent the full range of richness and complexity in language, but they may serve to increase our awareness of many observable facts about what people do with words and what words do to people that would be in the shadow otherwise.

Counterposed to Peirce's and Jakobson's theories, Wittgenstein's investigations into meaning are a warning against too easily thinking one has captured the essence of meaning in the straightjacket of a good theory that still might be insufficient to handle handle all the diverse phenomena in language.

# Chapter Seven

## Conclusion

If this paper is compared to a play, the plot has been one of exposition and comparison of the work of Jakobson and Peirce with that of Wittgenstein. But the message has been one about the nature of language. Four major facets of language have been explored in this paper. The first two were the systemic and the social character of language. The third facet explored was the character of language as a temporal phenomenon--as something that binds together past, present and future by what it does within time. The fourth facet was the contrast in language between transparency of signs due to unconscious processing in language and the opaqueness or palpability of signs that arises from the poetic power of language.

In describing the systemic character of language, both Jakobson and Wittgenstein make an analogy between language and chess. In chess, the role of each piece depends on the role of every other piece as well as on the overall rules of the game. Each piece, by being a part of the game, gains a significance it could never have as a mere block of wood. Similarly, in language, the function

of each word depends on the function of every other word, as well as on certain general characteristics of language. Each word, by being a part of language, gains a significance it could never have as a mere sound. In both chess and language, the whole is greater than the sum of the parts, because the whole can have a kind of structure that would be impossible for an isolated part to have, although as parts of the whole, the parts share in the structure of the whole. One part of the structure of language is opposition. In the writings of Jakobson and of Peirce, the concept of opposition is treated quite explicitly and extensively. In the work of Wittgenstein, opposition as such is never dealt with explicitly at any great length, but Wittgenstein shows in many instances that he understands some of the main implications of the concept of opposition--in particular, that when one half of an opposition is absent, the whole oppositional relationship is neutralized so that a term that ordinarily belongs to a functioning opposition loses most of its meaning when the oppositional relationship is incapacitated.

One of the fundamental oppositions in language is that between outward speech and inward speech, or between social and private language. There is a clear hierarchical, or markedness, relation in this opposition, outward, social speech being primary while inner, private speech is a derivative phenomenon. Wittgenstein goes to great lengths to argue the dependence of "private language"

on social language, which Jakobson also recognizes, partly as a result of his work with child language acquisition. The profoundly social nature of language becomes clear when Wittgenstein contends that even the words for psychological phenomenon--for feelings and emotion--are fundamentally social devices by which we try to understand one another and only secondarily a means for understanding ourselves. A recurring theme in this paper has been Jakobson's contention that "Equivalence in difference is the cardinal problem of language and the pivotal concern of linguistics." Jakobson himself employed the phrase "equivalence in difference" as part of a discussion of inter-lingual, intra-lingual and inter-semiotic translation, but the chief type of "equivalence in difference" taken up in this paper has been the equivalence in all the different situations that call forth the use of the same word. Over-simplifying somewhat, the problem any human being faces in using language in speaking or writing is to find equivalences between some part of the past and present that can justify uttering an equivalent expression now as at that time in the past; while the problem a human being faces in using language in listening or reading is to notice equivalences between an expression heard now and one heard some time in the past and look for corresponding equivalences between something related to the situation then (including the semiotic context) and something related to the situation now. Samenesses of words (equivalences of

signantia) serve as a kind of inter-temporal diagram showing connections among various past, present and future circumstances. This inter-temporal diagram of formal identities is much of what Peirce was referring to when he wrote: "If a diagram cannot do it [identify something], algebra cannot: for algebra is but a sort of diagram; and if algebra cannot do it, language cannot: for language is but a kind of algebra."[1] An inter-temporal algebra of formal identities can act in conjunction with the atemporal signification of iconic images ("atemporal" because having the being of past experience which is past most of the ravages of time) to enable a sentence or utterance to be understood.

One of the problems with an inter-temporal diagram as opposed to other kinds of diagrams, is that it must have some means of subsisting over time. In some places Wittgenstein writes as if what subsists over time is the memory of specific instances of a word's past use, which, while having the advantage of providing a complete diagram of all the uses of the same word would have the disadvantage of leaving too much latitude in how the word might be used in the present instance for a listener to be able to make sense of it. In other places, Wittgenstein shows an awareness of the role of habit and natural disposition in language, which cuts down the range of alternatives to be handled by one human being trying to understand the signs given by another. Disposition and

habit, gradually modified by experience (including linguistic experience) is the sort of thing Jakobson and Peirce look to as what can subsist over time to provide some sort of inter-temporal diagram (albeit an active, rather than a passive diagram) of formal identities as well as providing a solution to the problem of too much latitude in the possible ways of using a sign for one person to understand or be understood by another. Formal identities tend to make us notice similarity between the various situations in which a word is used (where a "situation" is defined by a set of associations of contiguity) and enable us to carry into the future an expectation and readiness for further similarity along the same lines when the same word is used yet again. Past and future are bound together by relations of similarity highlighted by formal identities of words and signs, while the constituents of each successive present are bound together by relations of contiguity, all mediated by the force of natural disposition and habit.

Besides formal identities, two other major factors enter into meaning. One is paradigmatic oppositions, which is part of the systemic aspect of language. The other is context, which forces equivalences between signs and partial equivalences between situations to be equivalences in difference, since the meaning of equivalent signs is differentiated according to specific characteristics of situations. The influence of context on meaning is far

from being completely understood. Wittgenstein investigates the influence of context on the perception of both pictures and words and discusses the phenomenon of semiotic ventriloquism by which contextual information seems to be spoken out of the mouth of the sign itself, but does not try to explain just how context affects meaning. Peirce's theories offer some suggestions about the way context can influence meaning. There has been no chance to develop in detail what Peirce's theories have to say about how context figures into meaning, except to note a division of contextual influence into a continuous influence context can have through the melding of various images evoked directly by parts of an utterance, and a discontinuous influence context can have through symbolically evoking a relation between a sign and some linguistic category or other invisible context to the sign. This is an area where much further research could be done.

The temporal and contextual nature of language is probably the most important aspect of language discussed in this paper, but perhaps the most intriguing aspect of language investigated is that of semiotic transparency and opacity--that is, the varying degrees of prominence taken on by the forms that carry meaning. Semiotic transparency arises from the nature of habit itself, since in the operation of a habit, many of the details of an operation are hidden from conscious awareness. The most striking example of semiotic transparency is in everyday

conversation, in which it is easy to go on with a conversation for long periods of time perfectly understanding everything said, but never noticing any of the individual words spoken. Similar phenomena occur in reading and in auditory, visual and tactile perception, where the details that go to make up an impression are seldom noticed.

Semiotic opaqueness arises from the poetic function of language, which can counteract the natural transparency of signs that comes with the cognitive function. As Jakobson writes: "This function [the poetic function], by promoting the palpability of signs, deepens the fundamental dichotomy of signs and objects."[2] When the signs themselves become noticeable, they can even obscure one's view of the objects behind them. It is possible to become so entranced with the sound of words that one cannot hear what they are saying. But there can also be opaqueness at a deeper level--at the level of the iconic images evoked by words. Wittgenstein is especially concerned with the uncommunicative opaqueness of the images called up by words. He illustrates again and again how an image called up by a phrase can keep one from understanding the thing to which the phrase refers. As Wittgenstein shows, even the grammatical category of a word--noun, verb, adjective, etc.--can prejudice one's comprehension of the word's referent by making one look for a thing, process or state, when in fact the word refers to an intricate spider's web

of things, relations and goings on. Wittgenstein argues that this kind of prejudicing of the issue by our choice of terms even hinders our attempts to understand language itself.

The indexes and icons called up by words are what in large measure constitute the "conceptual world" which both Wittgenstein and Jakobson seem to recognize as an entity distinct from the actual physical world. But within the conceptual world, there are various levels at different distances from the ultimate non-linguistic reality. One can never hope for an understanding of the world apart from language, but one can hope for more and more accurate and transparent conceptions of the world and of language looked at from the outside as part of that world. Peirce is, in part, describing this endless process of groping after the truth by means of the often frustrating instrument of language when he writes:

> The object of representation can be nothing but a representation of which the first representation is the interpretant. But the endless series of representations, each representing the one behind it may be conceived to have an absolute object at its limit. The meaning of a representation can be nothing but a representation. In fact, it is nothing but the representation itself conceived as stripped of irrelevant clothing. But this clothing never can be completely stripped off; it is only changed for something more diaphanous. So there is an infinite regression here. Finally, the interpretant is nothing but another representation to which the torch of truth is handed along . . .[3]

## Notes

### Chapter 1

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16. Ibid., §549, p. 147.
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18. Idem., Blue and Brown, p. 67.
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# LANGUAGE, LINGUISTICS AND PHILOSOPHY: A COMPARISON OF THE WORK OF ROMAN JAKOBSON AND THE LATER WITTGENSTEIN, WITH SOME ATTENTION TO THE PHILOSOPHY OF CHARLES SAUNDERS PEIRCE

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## ABSTRACT

This thesis explores several important aspects of language, including the oppositional structure of language, the social and the temporal nature of language and the phenomenon of unconsciousness and semiotic transparency in language. The relationship of language to the world and the origins of the meaning of signs are also discussed. Throughout the paper, Jakobsonian linguistics and Peircian semiotics are compared to Wittgenstein's philosophy of language.

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