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THE INTERPRETIVE ROUTE FROM SIGN TO ANSWERABILITY*

Signs of Research on Signs **is more than a research report on ongoing studies conducted at the Institute of Philosophy of Language (IFL), founded in 1980 by Augusto Ponzio at the University of Bari, Italy. It is a rich resource for further study, offering as it does a very large number of references to semiotic literature both inside and outside of Italy. The authors, Susan Petrilli and Augusto Ponzio, have also managed to present in this volume a series of themes from within and related to semiotics that challenge existing positions and invite further investigation. Because the volume has been published in the series *Semiotische Berichte* in Vienna under the editorship of the Austrian Society for Semiotics, I would also like to mention the untiring dedication given to semiotic research by this group and especially by Jeff Bernard and Gloria Withalm.**

Although Susan Petrilli and Augusto Ponzio are responsible for specific chapters in the book, for simplicity's sake I will refer throughout to Petrilli and Ponzio as authors. I take my cue here from Ponzio's Preface and his Bakhtinian assurance that 'the word is never one's own but rings with the word of the other' (p.6) This kind of review is always in danger of turning into a mere meta-commentary on the researchers' multi-faceted observations. To minimize this risk, I have combined sections into larger themes and shrunk the apparatus of references to its bare bones. At the same time, I want to emphasize that a review article is no substitute for the real thing and refer the reader to consult *Signs on Research on Signs* for the plethora of details missing in this overview. The book consists of four sections: authors, confrontations, surveys, and perspectives. But rather than following this order and its many subdivisions, I want to crystallize a number of recurring themes which, I believe, best characterize the kind of research conducted by Petrilli and Ponzio.

Before I do so, a few minor critical remarks. It is inevitable in this kind of collection of essays that the reader will encounter repetitions and comments which do not all exactly reenforce the same argument. There are also some minor typographical errors that could have

been avoided, which however do not detract from the considerable value of the publication and its overall message. For in spite of the staggering variety of the research projects brought together in this volume, there is an underlying conviction, a kind of semiotic ethics, that informs both the commentary on other research and the substantive arguments put forward by Petrilli and Ponzio themselves. The common thread linking the sections of this research report seems to me to be a post-Marxian, humanistic stance against global, social programming, from the perspective of what Ponzio calls the 'interpretive route', with an emphasis on otherness, the polylogic and iconic nature of semiosis, and the infinite web of signs, including those of silence and taciturnity.

To guide the reader (as much as myself) through the rich materials of *Signs of Research on Signs* I suggest a number of major and minor themes that seem to me to capture quite well the flavour of the book. Petrilli and Ponzio address such questions as linguistic meaning and translation; the underrated role of iconicity in semiosis; creativity in relation to Peircean abduction, literary language, silence and taciturnity; otherness in polylogism, carnival and automatism; ideology from the perspective of semiotics; and global communication as a threat to community and answerability. In grouping the book's observations in this manner I acknowledge my willful, if not whimsical, style of my procedure. I also want to declare at the outset the specific research bias that will characterize both my selection and argument. This could most appropriately be flagged by reversing Roland Barthes' claim that nonverbal social signs are parasitic with respect to verbal language.

(p.140) As I suggested elsewhere, I believe that the reverse is the case. In spite of the indisputable fact that language is by far our most powerful semiotic system, language only ever becomes semantic, that is, 'meaningful', if it is parasitic on our nonverbal readings of our environment. In this sense, nonverbal semiosis is the deep structure of language (Ruthrof 2000:152).

One theme that looms large throughout *Signs of Research on Signs* is the question of linguistic meaning in relation to other sign systems. Early in the book the topic is approached with reference to the work of Victoria Welby and her theory of 'significs', an attempt to escape the limits of logic, allowing for 'ethical, esthetic and pragmatic dimensions' of semiosis
(p.9) The choice of author here is deliberate since one of the declared interests of Petrilli and Ponzio is a rich description of language and semiosis in general. In this respect, Welby's search for an adequate vocabulary for the description of natural language is a persuasive starting point. For example, she invented the signifier 'sensal' to describe meaning 'in its prevalently instinctive aspect' and in contradistinction to the term '"verbal" for specifically linguistic' signs. (p.12) Petrilli and Ponzio highlight her preference for 'such problems as the value of the "ambiguity" of words' (p.13) and her critical stance in relation to 'the role of "definition" in the determination of meaning' (p.13) In particular, Welby rejected the notion of definition of linguistic expressions as a 'panacea for the reduction of linguistic equivocation' (p.14) while conceding the usefulness of definition for technical languages, 'because it eliminates the expressive ductility of words'. (p.14) Not surprisingly, she is fascinated by such features of natural language as metaphor, analogy, polysemy, and other figurative and expressive devices.

Intriguing also is Welby's terminology of '"mother-sense" or "primal-sense"' as the source of our capacity to signify and interpret as well as of 'inventiveness, creativity, innovation' and 'critique' (p.15) This includes our pragmatic survival strategies. As she writes, 'it is sheer mothersense – instinct of intellectual danger – which in you, as in Dewey, Peirce and James, calls out for pragmatic reaction!' (p.15) Welby's broad focus on language in which definition is legitimate and on language which requires intricate interpretive

procedures leads her to stipulate a rising scale of meaning making acts from 'sense' to 'meaning' to 'significance'. What is persuasive about these distinctions is that she does not erect any logical barriers between them, at least not for natural language; what remains unsatisfactory, nor is addressed by Petrilli and Ponzio, is that she fails to elaborate an argument for the distinction of sense in natural language and sense in formal languages, such as logic or mathematics. For it precisely at the level of sense that what happens when we use English, Chinese or Russian is entirely different from what we do when we follow for instance Carnap's instructions in formal semantics. (Ruthrof 1997: 53-76) Similar observations can be made concerning her spectrum of degrees of 'similarity' in natural language from 'casual likeness' to 'correspondence in each point and in mass or whole'; (p.17) Here definitional certitude for natural language terms is made impossible, though we approach formal identity criteria at the end of her scale.

The discussion of linguistic signs is brought up to date a little later with reference to Adam Schaff's ordinary concepts and stereotypes. These are part of his picture of speech always being 'more or less ideological, since it is connected to social praxis'. (p.48) This looks right, except that he assumes as a fact that 'there is no meaning outside natural language or independent of linguistic signs'. We need to be clear at this point that this is a stipulation of meaning by Schaff rather than a description. Moreover, it is a stipulation that eliminates nonlanguaging beings such as primates from a meaningful world, which makes it difficult for us to explain how they can function consistently and learn routines of survival that clearly require conceptual shortcuts. At the same time, the assumption of 'grasp' being restricted to linguistic signs has a certain theological ring to it, leaving humans prior to linguistic signification in a muddled universe. This is a most unlikely story. Indeed, only an already semiotically well organised social group would ever be likely to proceed to the economizing matrix of language on top of existing, socially regulated nonverbal readings of the world as well as nonverbal communication. It would seem that Schaff, as so many theorists of the last century sacrificed their thinking too readily on the altar of the 'linguistic turn'.

The next theorist of the linguistic sign addressed by the authors is Ferruccio Rossi-Landi in whose writing we find a useful reminder of Morris' concept of '"universe of discourse"' as '(1) delimitation of an area of the Universe which is to be talked about; (2) delimitation of the language to be used; (3) a combination of the above two.' (1998:65; p.92) Rossi-Landi is also shown to have revived the discussion of the relationship between semiotics and semantics, rejecting as does Morris the collapse of semiotics into the field of semantics. Such a 'reductive identification with semantics' (p.93) opens up yet another sleeping worry, the question of the possibility of separating the semantics of natural language from pragmatics. This is of course at the heart of Morris' time-sanctioned triple distinction of syntax, semantics and pragmatics. I have tried to show elsewhere that formal semantics, as in Carnap for example, is no semantics at all, but always a secondary syntax. (Ruthrof 1997:76106) Assuming this is the case, it follows that if semantics is seen in a rich sense, as it should for the purposes of describing natural languages, then its separation from pragmatics becomes impossible. Indeed, I have never seen any demonstration of semantics as independent from pragmatics outside the domain of formal languages. Or, when natural language examples are used in a formal argument, their essential referential and deictic opacities are typically occluded. To look at language semantically means no more or less than applying linguistic sign sequences, or syntax, to non-linguistic phenomena; that is, we anchor them in social praxis. The stipulated isolation of semantics from pragmatics, non-linguistic ground of language (certainly not merely a Searlean *back–ground*) rests on the treatment of natural language phenomena as a formal sign system. But once we have taken the formal step, we

have turned semantics into syntax. An entire system of scholarship has inherited this fallacious procedure.

This means that formal languages and natural languages require different theoretical approaches. Morris's tripartition when applied to formal languages turns into the schema of syntax – secondary syntax (illegitimately termed semantics) – pragmatics. This means that two systematically aligned forms of syntax can be applied to another order of signs, such as the phenomenal world in the form of nonverbal signs. Importantly, for natural language the Morris formula looks different: syntax – semantics (which is always already a pragmatics).

A valuable contribution of the volume is the account of how French structuralist *semiologie* has during the last decades been replaced by a Peircean inspired semiotics in Italy, a trend that can be observed also world wide, as nonverbal forms of communication are beginning to take centre stage. There appear to be two reasons why the Peircean tradition should be re-emerging so powerfully, not only in the writings of Italian theorists such as Umberto Eco, Petrilli and Ponzio. One has to do with the central importance of iconicity in Peirce's writings, a feature that meets a pressing demand in the age of computer generated imagery; the other reason strikes me to go deeper to the philosophical principles underlying Peirce's semiotics. At the same time, one of the effects of the linguistic imperialism exerted on cultural description by French structuralism has been a certain impoverishment of philosophical inquiry into signs. The exception here is of course the poststructuralist work of Deleuze and Guattari and of Derrida. Handing over language philosophy largely to post-Fregean analytical philosophy departments certainly has left semiotics without sharp weapons to defend its best insights. So the return to Peirce makes very good sense.

Petrilli and Ponzio offer several pathways out of the post-Saussurean gridlock. One is the route via iconicity, which has no place in the structuralist system of intersyntactic differential relations or intergrammaticality. There is no iconic outside to the structuralist fortress of linguistic signs, a picture that in recent writings has been further reduced to the solitary rule of the signifier. In the face of such philosophical and semiological reductionism, it is timely that Petrilli and Ponzio should grant iconicity a significant role in their book. I will address this theme in some detail below. The other way out of the syntactic maze is via the pragmatics of social reality, which is more than yet another set of linguistic signs, a domain perhaps well described by Foucault's *exteriority*. A third pathway is offered by reference to Bakhtin, dialogism, 'plurivocality, polylogism, and multivoicedness' opening up 'new and different situational contexts' with the promise of allowing for a high degree of 'semantic flexibility'. (p.97)

At the same time, Petrilli and Ponzio draw the reader's attention to the important difference between the kind of 'unlimited semiosis' we find in Peirce and, in a somewhat more restricted form, in Eco, on the one hand, and the 'infinite deferral' and hence infinite semantic drift advocated by Jacques Derrida, on the other. (p.99) What controls unlimited semiosis in both Peirce and Eco is the set of constraints indirectly exerted on individual sign performance by the community via 'habit', giving signification 'the intersubjective character of interpretation'. Petrilli and Ponzio further qualify the notion of 'unlimited semiosis' by the Bakhtinian emphasis on the dialogic nature of all language. Hence 'the relationship between all interpretants is essentially dialogic' and 'an interpretant sign cannot impose itself arbitrarily on the interpreted sign'. (p.100)

What is often forgotten in all this is that Peirce and Derrida have both reworked a theme that Kant addresses at the end of the *Critique of Pure Reason* and in much of the

Critique of Judgment. The reason for recollecting this here is twofold. On the one hand we can observe an unnecessary tendency in semiotics to understate Peirce's debt to Kant, on the other, there is the rarely mentioned fact that Derrida's entire critique of conceptuality rests squarely on the following Kantian principles: 'the limits of the concept are never assured' and 'the completeness of the analysis of my concept is always in doubt'. (CPR:A728) If our conceptual boundaries are negotiatory rather than fixed, as they are in stipulated or formal concepts, then semantic drift is a necessary consequence laterally, so to speak; and if, as Kant points out, our analyses of our concepts have no end, then infinite semiosis is likewise a necessary consequence in the direction of more and more textual exploration. The third *Critique* adds to this fundamental insight the macrostructural, interpretive consequences of changing stipulated frames (Kant's teleological dynamics vs Aristotle's telos) that characterize judgments as a complex process as well as a procedure in need of constant revision (reflective reason) and his insistence on the involvement of the community in individual acts of judging. Clearly, Peirce and Eco are closer to the Kantian picture, since they acknowledge the role of *sensus communis*, without which Kant's subjective universality collapses into the merely subjective, where interpretation loses its social validity. Having abandoned the social frame in his presentation of 'infinite deferral', Derrida by contrast struggles to recover an ethical dimension for deconstructive textuality.

One of the motivations for Petrilli and Ponzio to highlight the notion of community guided form of infinite semiosis is that they want to argue against any reductive approach to the description of natural language without inviting semiotic chaos. This theme is resumed once more under the general heading of the richness of language or, as they put it, the importance of the 'unsaid, its capacity for vagueness, ambiguity, inscrutability, concealment, reticence, allusion, illusion, implication, simulation, imitation, pretence, semantic pliancy, polysemy, polylogism, plurilingualism, alterity.' (p.133-134) Here the reader feels that we are getting close to the heart of the authors' convictions of what makes natural language tick. No doubt, they are right in insisting that these issues demand an approach via language philosophy. This is especially so when what they mean by the richness of language is shored up by arguing 'the verbal sign' to be a 'historico-social event'. (p.135) Quoting Rossi-Landi, Petrilli and Ponzio want to invoke 'the sum total of economic, social and cultural conditions' such that 'what we describe as linguistic is, if anything, a part of their phenomenology'. (Rossi-Landi 1973:70; p.135)

One could pursue further the problem that if 'semantico-ideological pliancy' can function as a summary formula for the significatory richness of natural language, then how are we to address the basic definition of *linguistic sense*. For only a rich description of this troublesome signifier will be able to account for all the complexities heaped so far on the linguistic sign. Nor is it persuasive to argue that complexity emerges from the simple starting point of sense by way of a vast network of combinations. The combinatory complexity of chess will never amount to anything like the level of linguistic complexity celebrated by Petrilli and Ponzio. What then of *sense*? Throughout the book sense turns up in different guises, from the sense of words to the 'actual sense' of an entire utterance. (p.134) What is missing is an argument demonstrating that and why the definitional sense of formal signs cannot carry the cultural weight shouldered by the sense of expressions of natural languages. If this is correct, as I have argued in detail elsewhere, then the signifier 'sense' stands in for at least two incompatible signs, one that is entirely controlled and 'conceptually exhausted' by its definition (such as the sense 'x' in the equation 'x = yx4'); the other, in which the process of meaning making or meaning endowment is an imaginative verbal and nonverbal exploration within constraints sanctioned by a semiotic community (such as the sense of *human rights*). It is at this point that Peirce's insights of the necessary translation of every sign into a more

developed sign, infinite semiosis, and iconicity provide us with tools for the distinction. Although the definition of the formal example is a sign translation, the translation process is terminated within the definition itself. The opposite holds for the linguistic sign. While iconicity is a possible addition to but not a necessary feature of formal sense, in the linguistic sign, as I shall argue later in support of Petrilli and Ponzio, it is an essential ingredient. There are of course other procedures to bring out the distinction. Whichever path we choose, without a clear and carefully argued differentiation between these two kinds of sense, we cannot persuasively articulate the complexity of the linguistic sign.

Nowhere is the richness of natural language better demonstrated than in the domain of translation. So it does not come as much of a surprise that translation should occupy a significant place in Petrilli and Ponzio's book, as well as in some of their more recent publications. Translation is understood by the authors in the general Peircean sense of meaning as translation into another sign. Translations between natural languages then are special instances of the general principle of translation as semiotic transformation. 'Semiosis *is* a translation-interpretation process' (p.127) whereby any sign 'subsists only in relations of reciprocal translation and substitution among signs with respect to which the original sign is never given autonomously and antecedently'. (p.128) Ponzio reformulates the Peircean position in terms of 'replaceability as a necessary condition of signness'. (p.128)

From this perspective, the authors review the compatible thinking of Victoria Welby who links the principle of translation to the acquisition of empirical knowledge: 'The more varied and rich our employment of signs ... the greater our power of inter-relating, intertranslating, various phases of thought, and thus of coming closer and closer to the nature of things in the sense of starting-points for the acquisition of fresh knowledge, new truth'. (Welby 1983:150; p.127) This reminds the reader of Peirce's definition of truth as a limiting case, restricted to the unattainable grasp of the universe as a whole. A less compatible theorist is Roman Jakobson whose differentiation of three kinds of translation has been highly influential to this day. (e.g. Banting 1992:240) To abbreviate, intralingual translation or rewording is distinguished from interlingual translation or translation proper, both of which are separated from intersemiotic translation or translation from one sign system into another. Petrilli and Ponzio emphasize the fact that Jakobson's three categories are always interrelated in practice and that symbolicity, indexicality and iconicity play a part in all three. What they fail to observe is something that separates their approach from the Jakobsonian, structuralist position and that is the fact that for Jakobson the different sign domains mean by themselves. Although a poem can be translated into a statue, a novel into film, a painting into language, these intersemiotic translations are *can* rules rather than *must* rules. Language in Jakobson does not have to be translated into a painting to achieve meaning. If translated in this way we have produced *additional* meanings, a further enrichment of what we already understand by dealing with language itself. This is part of the Saussurean intersyntactic heritage, which we should not fudge. If we draw the radical insights from Peirce, then we should say that language on its own has no meaning at all; it requires other sign systems to be semantic-pragmatic, such as iconic signs, as a *sine qua non*. (Ruthrof 1997;2000)

Perhaps Petrilli and Ponzio understate their case when they say that 'in interlingual translation, iconicity, or the iconic relation between a sign and its interpretant, is present as well', only to sharpen their position by qualifying that 'this relation is fundamental for without it the sense of discourse could not be rendered'. (p.132) Having said this, the authors might also have suggested that the consequences of this claim are considerable. At the very least it requires an iconic, quasi-perceptual approach to the description of natural language, which would qualify symbolicity and indexicality as secondary, even if vital, functions. It

seems that the authors are not prepared at this point to radicalize the Peircean paradigm, in the face of their own arguments that invite precisely such a move.

This criticism finds support in an illustration drawn from Marx's sixth thesis on Feuerbach. Marx uses the expression *'das menschliche Wesen'* rather than *'das Wesen des Menschen'*. Petrilli and Ponzio show the havoc this has caused in translations into various languages only to conclude that it is German grammar that allows us to get it right. The correct translation is achieved by 'appealing to the rules of German syntax'. The adjectival construction *'menschliche Wesen'* tells us that we are dealing with the human being, while the genitive construction *'das Wesen des Menschen'* indicates that what is meant is 'the essence of the human being', the latter suggesting an illegitimate idealist reading. However, such an appeal to the syntax of similar phrasings does no more than to repeat the initial problem, itself not resolved by syntax, that is, how to understand, that is interpret, *das menschliche Wesen* in German. It is not the linguistic sense, defined for us in the dictionary, another syntax, that guides us, but rather the habitual way we have learned to imagine 'the appropriate world' in relation to a linguistic expression. Native speakers would not make the mistakes listed, not primarily because of their superior grasp of syntax, but of their naturalised way of imagining a certain kind of iconicity rather than another one, e.g. the one they have learned to activate in response to the signifiers *das Wesen des Menschen*. It is this process of naturalization, which we abbreviate by pointing to syntax. Yet the syntax of a natural language is the effect of this process rather than its cause. (p.136-138)

Petrilli and Ponzio, however, have another motive for pursuing the question of translation in relation to the chosen quotation. They want to show how crucial the question of ideology is to translation theory and to the relation between meaning and 'ideological sense'. The authors formulate this as the double problem of 'correctly interpreting the ideology expressed in the text' and 'the ideological stance that the interpreter-translator chooses to take toward the text', a problem that highlights the need for a theorisation of translation and ideology in semiotic terms, (p.139) including iconic signs.

What has become clear so far is that no matter which topic the book addresses, iconicity looms large, and for good reasons. From references to Welby's notion of 'sensifying', which strongly recalls 'the world of the senses' and her 'abundant use of images' (p.13) to the idea of 'encounter' in storytelling on the concluding page (p.158) Petrilli and Ponzi return the reader to the theme of the Peircean icon. Why do they share Peirce's conviction that ultimately human understanding requires the translations of signs into iconicity?

A number of explanations offer themselves as we peruse the book. One is the authors' preference for a rich description of linguistic meaning over definitional and propositional certitude. Though icons can be translated into a set of propositions and we can construe icons to suit propositions, iconicity and propositionality belong to two entirely different sign systems. However, if a case can be made for natural language requiring iconicity to become semantic (in the pragmatic sense) then the authors are right in giving icons the prevalence they are. It seems to me that behind the ongoing research by Petrilli and Ponzio, which continues to address questions of the philosophy of language, there lurks an iconic theory of language and meaning worth expounding in its own right. A second reason for their return to iconicity is a liking for those rich areas of language that are largely concealed in the dominant theories of metaphor and other figures of speech, although the book does not spend much time on such issues. Lastly, there is the importance the authors place on social context, ideology, and community, all of which demand nonverbal realisations on the part of the language user to become meaningful beyond linguistic abstraction.

For Petrilli and Ponzio 'iconicity implies that the relation between a sign and its object is not wholly established by rules and a code, as in the case of symbols, does not pre-exist with respect to the code, as in the case of indexes, but rather is invented freely and creatively by the interpretant'. (p.133) While they say this in the context of translation, this will also do as a general schema. Perhaps one could query the assumption that the main characteristic of iconicity is freedom of invention. My suspicion is that the vast majority of iconic constructions, from the felt presence of the mother in early infancy to the most elaborate social phenomena and computer generated images, are channeled by the semiotic community of which we are a part. Even our fantasy extensions of ordinary representations are by no means as free as we tend to believe. Why else is it so hard for artists to break through to new forms? What is it they have to *break through* if not the social constraints that delimit our iconic configurations?

Petrilli and Ponzi are of course right when they foreground iconicity as essential to translation. For, as I have suggested before, the all-important thing in interlingual translation is to be able to *imagine* the appropriate situation, including a suitable *deictic* picture, of which the text is a linguistic summary. Their discussion of icons, however, is not entirely without hitches. At one point Petrilli and Ponzio introduce Welby's seminal insight that 'while language itself is a symbolic system its method is mainly pictorial'. (Welby 1983:38; p.128) This is not pursued in terms of the description of linguistic meaning but rather with reference to Wittgenstein's *Tractatus* and the relationship between proposition and representation. What is missing is the observation that the *Tractatus*, as Wittgenstein himself conceded later on, is not a good analogy of natural language. While propositions in their formal character are made to signify within a network of strictly defined terms, thus forming a syntactic web much like a game of chess, natural language cannot function at the syntactic level *as language*. This is a crucial and often neglected difference. While the minimal or formal propositions Wittgenstein pursued during the 'picture theory' stage of his career can be embellished by representative functions, natural language representations are anything but embellishments: they are their main purpose. To simplify, Frege's *Abendstern* always already has a representative function quite apart from its specific reference to Venus. Without our iconic grasp of typical evenings and planets in the sky we could not even begin to understand the term. What Searle understates as the 'background' of natural language is in reality its massive nonverbal deep structure, without which meaning could not occur. (Searle 1983:145146)

Another path of pointing to the same problem is to analyse Wittgenstein's observation that 'to know a proposition' is 'to know the situation it represents.' (p.129) Applied to natural language, this turns into a crucially deficient description. Instead, it should read 'to know a sentence of a natural language is to be able to imagine the situation it represents *and* the utterance situation of which it is a part'. What is forgotten here is that iconicity has a double directionality in natural language, towards the represented situation and the implied world of the speaker, a feature absent in formal sign systems (which is the very reason why they were invented in the first place, namely to reduce reference to a controllable minimum and eliminate cultural deixis altogether).

Let me illustrate the claim that when deictic iconicity is left out you tend to get an inappropriate picture. Take for example the signifier IMF (International Monetary Fund). Depending whether the speaker is a politician from Japan, an investing country, or from Thailand, a borrowing country, makes all the difference to the meaning of the term. While both direct us to the same numerical phenomenon of the IMF, its meaning changes from a benevolent, economically sound, and ultimately beneficial institution to one that is

authoritative, causes economic and political dependency, and ultimately prevents the receiving country from establishing itself as an equal partner. Depending on the size of the dictionary such meanings tend to be either short or elaborate texts. What cannot be established, contrary to the analytical tradition of meaning, is that there is a denotative, logical line where the definition of meaning terminates and the elaboration of 'significance' sets in.

Another one of Wittgenstein's formulations which highlights the difference between propositions and natural language sentences is that while 'a proposition shows its sense'
(4.022) a sentence typically reveals its sense after we have invested interpretive labour.

The reason for this is I suggest once more that we are dealing here with different kinds of sense, definitional sense in the *Tractatus*, and natural language sense requiring iconic elaboration as a necessary condition of meaning. Ironically, many of the sentences in the *Tractatus* fall foul of Wittgenstein's own requirement. What his reassessment in the *Philosophical Investigations* amounts to in the end is not merely a critique of the early picture theory of language, but the radical and largely unexplored provision of the missing iconic bedrock of natural language: *Lebensform.* (Wittgenstein 1953:par.19,23)

Iconicity, as Petrilli and Ponzio show persuasively is of course no more than shorthand for nonverbal signs in general. With reference to Sebeok and the tradition of biosemiotics, the authors quote the work of Giorgio Prodi and his assertion that nonverbal meaning construction 'is at the very root of all biological machines'. (p.105) 'Biology is pure natural semiotics' for Prodi, a claim that is compatible with the insistence in recent cognitivist research on 'mapping' as the primary way by which both human and non-human organisms relate to the environment. But what is 'mapping' if not a general form of iconic sign production? And even though such current research overemphasizes in my view the role of the visual, there is no obvious reason why the principle of mapping should not be a fitting metaphor for gustatory, olfactory and other nonvisual readings.

Iconicity also informs the distinction between semiotics and semiology, or between the Peircean sign systems and structuralist semiotics. While Saussure's early semiologie understood language as part of the wider field of signs and at the same time granted the signified the important status of iconic image and concept, his successors gradually allowed the signified to shrivel and reversed the relation between language and signification at large. In Lacan's hands, the demise of the icon appears in the equation of the signified with desire, something forever outside our reach (a theory that makes it very difficult for engineers to build an air craft); in the hands of a more recent writer electronic monitors have turned signifieds into 'flickering signifiers', a claim easily falsified with the help of the word processor. (Hayles 1993:76) It remains puzzling that structuralist semiotics should have so readily sacrificed to syntactic independence the iconic relation by which we link language and world. This is how structuralism has lost reference in principle and not only in its positivist guise. Yet without reference, we have also lost the phenomenal world, while language has turned into a prison without windows.

This is why Roland Barthes is so wrong when he claims that with respect to verbal language nonverbal signs are parasitical. (p.140) It only appears this way because we are so deeply embedded in language and because language is such a powerful sign system in its competition with nonverbal signification as well as in its unique power of hierarchization. Moreover, we have been brainwashed over the last century by the concerted onslaught of theorists addicted to extreme versions of the 'linguistic turn'. If anything, the opposite of

Barthes' position seems likely. Both ontogenetically and phylogenetically, humans acquire language gradually after they have already been 'in touch' with the world. Contrary to Levi-Strauss, language most likely emerged in graded leaps as yet another evolutionary phenomenon and as an effective summary system increasingly imposed on nonverbal signification.

Long before the infant is able to recognize her mother's linguistic pleadings is she able, with the help of her primeval limbic system and its olfactory readings, to orient herself towards the breast. When the word 'mummy' (or its equivalents) is finally and consistently read by the child, tactile, gustatory, nonlinguistic auditory and other nonverbal readings have already successfully established a small world. 'We think because we *smelled*', observes Diane Ackerman adroitly in *A Natural History of the Senses* (1991:20)

Are the colour shades of green parasitic on the term? An iconic reversal of structuralist fantasies is overdue. And if nonverbal signs are first, then (*pace* Barthes) language is parasitic on the nonverbal. Petrilli and Ponzio make a significant contribution to redress the structuralist imbalance by reminding us of Peirce's insight that language, though the most powerful semiotic system, 'plays the role of third party', it mediates between a language user and the object world. (p.141) To take the view that all three, language user, object, as well as language are no more than linguistic phenomena is not only logically untenable but founders in interpretive practice on the rock of iconicity.

Once we acknowledge the importance of iconicity we have opened the door to nonverbal signs in general. Throughout *Signs of Research on Signs* the authors point to the advantages of such a broad view of semiotics. They draw our attention to the early theorisation of nonverbal signs by Peirce for whom "some feeling, image, conception, or other representation" constituted a sign. (CP 5.314; p.69) For Peirce, they remind us,

**the body with the totality of its nonverbal forms of signification 'is a condition for the full development of consciousness, such that the human mind is 'incarnated consciousness'. (p.70) They discuss at length the work of Thomas Sebeok, one of the gatekeepers of the field, whose writings have consistently offered the view of a universe 'perfused with signs' such that '"the imperium of Nature, or *Weltbuch*, over Culture, or *Buecherwelt*, has always been unmistakable"'. (p.59) However, the nonverbal signs of nature are by now means presented by Sebeok as a barrier to the dominance of the verbal signs of culture; rather, the latter is regarded as a biosemiotic continuum of the former. Human semiosis has grown out of biosemiosis. Hence Sebeok's revival of Uexkuell's *Umweltlehre* and his own brand of zoosemiotics as part of an all-encompassing 'doctrine of signs'. (p.60) As Petrilli and Ponzio put it succinctly, for Sebeok 'the activity of interpreting coincides with the activity of life'.
(p.63)**

I seems to me that Sebeok is right to advocate the 'autonomy of non-verbal sign systems with respect to the verbal'. (p.61) To argue the inverse, as does Barthes, looks like a secular form of a theological commitment to *higher* forms of signification. Petrilli and Ponzio likewise appear to endorse Sebeok's stance. Where I suggest we need to go further than Sebeok is on the question as to how precisely verbal meanings are dependent on our nonverbal grasp of the world. (Ruthrof 1997;2000) Sebeok is also shown to be making a significant contribution to the semiotics of deception (made famous by Umberto Eco, though there are Italian precursors) by extending the argument for the capacity of lying in the animal world. Anyone who has ever had a smart pet agrees with him, of course. Deception, it turns out, is not restricted to the domain of the verbal. This once again tells us that it is foolish to

insist on drawing lines between the capacities of humans and those of other organisms and instead think in terms of evolutionary scales on which we can map specific characteristics. Here and in related fields, the more inclusive our speculative projections it seems the more likely they are to be supported by future research.

The authors of *Signs of Research on Signs* part company with Sebeok when he turns to the vision of a machinic future. What Sebeok believes will be a transformation of semiosis as we know it into a new "life of signs", they regard as a dystopia, a threatening 'nonlife' and hence 'an absence of signs'. (p.68) I think Petrilli and Ponzio are blinkered here by a humanistic ideology that unnecessarily sharpens the distinction between human and machine. Consider the very gradual transition, which we are already beginning to witness right now, from machines and organic life toward biorobotic assemblages; where the notion of 'machine' is as gradually transformed just as is the conception of what is human; where a multitude of synthetic body parts, digital implants and pharmaceutical substitutes increasingly turn humans into biomachines while at the same time electronic machines are being transformed into bioelectronic organisms. In such a biorobotic future, Sebeok's speculations look far more likely than Petrilli and Ponzio would have us believe.

According to Petrilli and Ponzio, iconicity is also an important ingredient of the process of creativity, which in turn plays a central role in signification. At the centre of the creative 'mechanism' of Peirce's semiotics stands the interpretant sign (defined as a sign in which other signs are more fully developed). As Petrilli and Ponzio put it, interpretants result from 'open-ended interpretive processes constituting the semiotic material of the universe'. This is what Dewey is shown to get fundamentally wrong when he regards 'the relation between sign and interpretant as internal to the sign system' (p.84) a mistake oddly reminiscent of the structuralist fallacy of the intersyntactical nature of linguistic meaning. Petrilli and Ponzio rightly insist that 'there is no such thing as a sign without an interpretant or an interpreter, given that the interpretant is the effect of the sign on the interpreter'. (p.84) They go on to explain Peirce's puzzling idea of the human being as a sign by saying that 'since the interpreter cannot exist as such if not as a modification caused by the sign in an open chain of interpretation, the interpreter is also and interpretant and therefore a sign'. (CP 5.264-317;p.84)

The authors have also discovered a rudimentary theory of creativity in the writings of Victoria Welby whose vision they characterize as 'fundamentally organismic' (p.16) since for her sign and sense are inextricably related to 'an organism's immediate, spontaneous reaction to environmental stimuli'. (p.16) Furthermore, she introduced a certain creative randomness to semiotics by drawing our attention to 'the expressive plasticity and potential of signs and verbal language in particular as their fundamental characteristics'. (p.16) What she repeatedly calls 'the "plasticity" of language' (p.77) includes the observation that 'words and their contexts adapt to each other reciprocally, similarly to the relationship between organisms and their environment'. (p.16) This reminds us not only of Uexkuell's revolutionary *Umweltlehre* and Sebeok's long-standing interest in creativity in biosemiotics, but also of the more recent research into creativity from the perspective of Maturana and Varela's autopoesis. (Maturana and Varela 1980)

In Welby's theory creativity is firmly linked with our 'mother-sense' which, according to Petrilli and Ponzio, 'corresponds to the capacity for knowing in a broad and creative sense through sentiment, perception, intuition, and cognitive leaps'. (p.73) This creative ferment in our psychological and intellectual make-up is reminiscent of Julia Kristeva's arguments for what she calls the semiotic, creative part of our subjectivity, not yet controlled by the symbolic

order (Kristeva 1986:120-121) explored more freely in her small, but insightful book *In the Beginning was Love: Psychoanalysis and Faith* (Kristeva 1987:4-8) Love plays a part also in Petrilli and Ponzio's research where it is seen as 'directed to the concrete, and not to abstractions, to persons', where 'love is a driving force' linked with 'iconicity, abduction and creativity'. (p.74-75). This leads the authors to the kind of cosmic speculation presented by Peirce in 'The Law of Mind' (1892) in which he suggests that the entire cosmos, including the human mind, has evolved 'through the power of love understood as orientation to the other'.

(p.75)

A less convincing cosmic perspective can be found in Welby's three levels of consciousness, '"planetary", "solar", and "cosmic" ' (p.17), which she relates to three levels of 'meaning': sense, meaning, significance. Unfortunately, such partitions have a superficial attraction only. The scheme works quite well for strictly definitional sign systems: sense as defined; meaning as applied; significance as what it amounts to socially. Take a measuring tape for example. Its 'sense' could be pegged at the level of 56 mm compared to 62mm; 'meaning' could be the application of sense so that the table length is measured say at 1m and 120 mm; while 'significance' could be argued to be the value of such measurements in the order of a given culture. And superficially it may appear that natural language behaves likewise. The crucial difference however is that the procedure here is reversed. What constitutes the sense or meaning of a term such as 'democracy' is not determined *a priori* as for the measuring tape, but *a posteriori*. First a culture speaks, and only then can we write the grammars and dictionaries of its language. Furthermore, as I pointed out earlier, sense here is always already both *referential* and *deictic* in a general sense, a feature absent in the formal aspect of the measuring tape.

Petrilli and Ponzio relate Welby and Bakhtin on several occasions. In one case because 'Bakhtin, similarly to Welby, conceived the flux of life as a polyphonic interrelation of differences in continual transformation;' (p.77) in another because of the attitude they take towards 'the specificity of human culture' which for the Russian theorist 'lies in its linguisticideological value' and for Welby in its 'linguistic-psychological value' (p.77) For Bakhtin words themselves have an innate creative aspect, 'their own ideological consistency and capacity for elaboration,' (p.78) while '"the inner psyche … can only be understood and interpreted as a sign"'. (Voloshinov 1973: 25-26; p.79) Lastly, Welby is interested in the creative potential for 'cultural regeneration' (p.80) not just in art but also in 'slang and popular talk', which she regards as '"reservoirs from which valuable currents might be drawn into the main stream of language"' (Welby 1985:38-39; p.80) One might add here that this is precisely what is happening now without guidance by the traditional monitors of language.

Creativity is discussed once more by Petrilli and Ponzio, now from the perspective of Peirce's powerful tool of *abduction*. Contrary to recent claims by some semioticians, Peirce was an astute and in many respects faithful student of Kant's *Critiques,* and not the least in his reworking of Kant's 'reflective reason' into 'abduction'. As far as reasoning procedures go, this is the one that occupies centre stage when it comes to creative judgments. Just as Kant's reflective reason and dynamic interpretive frame, his non-Aristotelian *telos*, open the door for the entire hermeneutic tradition, so too does 'abduction' introduce a revolutionary interpretive principle to semiotics. Abductive interpretants produce creative leaps. Petrilli and Ponzio rightly refer to abduction in the context of the creativity of interpretation. Abduction, they observe, 'is fundamental to play and fantasy' as well as to the 'practices of simulation'. (p.67) As such, abduction functions as an 'inferential mechanism allowing for the

qualitative development of knowledge'. (p.67) Abduction, then is a special series of interpretants, which we could say maximise interpretive freedom to produce new signs.

Ponzio applies these principles to a critique of Chomsky by showing that 'the relation between abduction and language learning … is a relation of reciprocal support'. (Ponzio 1991:97;p.118). This he develops into an 'interpretive linguistic theory', generalized to include nonverbal signification, in which utterances interact to form a web of interpretants. In this perspective, the category of 'identifying interpretant' is juxtaposed to that of the 'answering comprehension interpretant' to cater for linguistic recognition, on the one hand, and creative, pragmatic application and abductive extension, on the other. (p.119) Yet it is in literary language that interpretation can be exercised most richly for reasons that Petrilli and Ponzio explore mainly with reference to Bakhtin's theories of polyphony and the carnivalesque, where they identify a 'philosophico-moral ideal: responsibility as a participative-responsive attitude to the truth of others' as well as a dialogue with oneself. (p.27) Their re-examination of the well-canvassed Bakhtinian notion of dialogism focuses on 'the fact that one's own word alludes always, despite itself, whether it knows it or not, to the word of the other'. Rather than seeing dialogue as a 'synthesis of multiple viewpoints' the authors emphasize the ethical function of dialogue as 'grounded in the responsibility without alibis for the other'. (p.27) This leads them to explore the theme of 'otherness'.

It is only towards the end of Signs *of Research on Signs* that the reader fully appreciates the reasons why Petrilli and Ponzio make so much of the concept of the 'other'. There is a deep conviction that 'otherness', in conjunction with such notions as 'polylogics' and 'answerability', it is an essential part of human semiosis now threatened by digitally driven, capitalist, global communication. What characterises the way otherness is argued in this book is the special combination of a number of contributions from various fields of inquiry, in particular the Peircean semiotic tradition, the philosophy of Levinas and the language theory of Bakhtin. Emphasizing the other in their reading of Bakhtin, Petrilli and Ponzio suggest that the language we employ is always already 'dialogic because of its *passive involvement* with the word of the other'. (p.27) As a result, dialogue is not to be seen as creating equality or symmetry, but rather as an ethical negotiation of otherness, asymmetry, and refraction. If this is the case, the authors contend, such influential readers of Bakhtin as Holquist, Todorov, or Wellek 'have fundamentally misunderstood the Bakhtinian concept of dialogue' by presenting it in terms of 'agreement, convergence, compromise [and] synthesis'.
(p.27) By contrast, Petrilli and Ponzio foreground the ethical task of "answering comprehension" in Bakhtin's texts. Central to this claim is their observation of the effect on the reader of the '*impossibility of indifference* toward the other' in the Dostoyevsky's dialogue.
(p.28) This they link with Bakhtin's version of the endless chain of signs in the "unfinalizability of polyphonic dialogue" and his idea of deliberately incomplete fictive personae. (p.30)

This theme is resumed in a section on Lévinas to show once more that otherness is best theorized as 'located inside the subject', a feature of the ego itself. At the level of language the close relationship that Petrilli and Ponzio forge between Bakhtin and Lévinas allows them to highlight the '*internal dialogization of the word'* and the doubling of concept and reality, while from a moral perspective it allows them to remind us once more of the challenge of 'answerability'. (p.51) While technical aspects of signification are important to their research, it becomes increasingly clear to the reader of *Signs of Research on Signs* that the ethical-moral dimension of semiotics is at the heart of the authors' concerns. For them, 'the self/other relation irreducibly supercedes the realm of knowledge, of the concept, of abstract thought', indeed 'the latter are possible' only as an effect of that relation. (p.52) The 'humanism of

otherness' that we find in the work of Lévinas is closely linked with the production of art. It is here that the relation between the engaged artist and the inevitable disengagement resulting from the publication of art play out, in a special way, the relation between self and other. Art, Petrilli and Ponzio point out, demonstrates our 'irreversible movement toward the other' and ultimately the theme of 'answerability'. (p.53) By this they do not mean any legal or moral standard but rather the subject's task of answering for the self in 'individual answerability' and the higher achievement of 'answerability for the other' in artistic production. (p.54)

There are a number of minor references to otherness later in the book, of which the following are noteworthy. Linking the motif of the 'other' with Peirce and Welby, Petrilli and Ponzio suggest 'that the logic of otherness is an agapastic logic and that otherness, dialogicality, love and abduction together constitute the generating nucleus of signs, sense and worlds that are real, possible, or only imaginary'. (p.75) In the concluding attack on globalized communication Ponzio is quoted to the effect that 'a critique of such a system presupposes *the viewpoint of another*, which in turn presupposes recognition of the other, or better still: recognition of the inevitable imposition and compulsoriness of recognition of the other.' (Ponzio 1991:17; p.125) This reminds us of Kant's second principle of judgement, the rule of the enlarged horizon, itself thoroughly dialogical, according to which we should always anticipate imaginatively the possible objections that could be raised by our fellow citizens before we proceed to judge.

Towards the end of the book the authors dedicate a few pages to the discussion of silence and taciturnity. Silence is presented not merely in terms of '*ordinary modes of word suspension*' but as a special set of nonverbal signs embedded in language. (p.140) Following the Peircean scheme of symbolic, indexical and iconic signs, Petrilli and Ponzio elaborate silence as sign clusters in each of the three types. Symbolic signs of silence include military silence, the silence of mourning, silence of protest; indexical examples would be 'silence as the effect of fright, surprise, suffocated anger, resentment'; while iconic signs of silence tend to be an 'expression of individual intentionality' (p.143) It is this latter group that the authors also describe under the term 'taciturnity' as a sign with powerful meaning potential and individualized engagement with the other. In this sense, silence is 'dialogic, a response, expresses a viewpoint, a standpoint with respect to the word of another'. (p.144)

We have already had occasion to touch on ideology in several contexts. However, ideology deserves a discussion in its own right, given the space reserved for it by the authors. Instead of looking at ideology in terms of the negative description of false consciousness, Petrilli and Ponzio sympathize with Rossi-Landi's post-Gramscian reading of ideology as '*social programming*'. (p.35) Another approach to the question of ideology discussed is that by Adam Schaff who distinguishes three types of definition: a genetic one addressing the evolution of the concept; a structural definition which distinguishes between ideological and other discourses; and a functional definition which looks at the work that ideology performs in society. His functional definition describes ideology as 'a system of opinions related to social development founded on a system of values'. (p.49) This allows, somewhat naively, for his distinction between 'true ideologies' and 'ideologies as distortions of reality'. (p.51)

Rossi-Landi's perspective on ideology looks a little more sophisticated and it is therefore not surprising that Petrilli and Ponzio's sympathies lie with his research, which combines the doctrine of ideology with semiotics as a necessary mediation. Vice versa, he relegates semiotics 'unsupported by a doctrine of ideologies' to a 'specialised science, detached from praxis'. (Rossi-Landi 1971; p.35) Semiotics without a theory of social praxis, according to Rossi-Landi, lacks a number of important fields of inquiry, without which social

reality as a totality cannot be analysed. One such field is the description of the 'class that owns the control of the emission and circulation of verbal and non-verbal messages constituting a given community'; (p.36) another is the exteriority of material production in relation to 'semiological glottocentrism'. (p.37) A description of the totality of social reality which he defines in Marxian terms as 'the alienated human condition' and as such a 'malfunction in the formation and the unfolding of history' (p.39) requires an 'antiseparatist and reconstructive' approach, a 'homological method' by which we can identify 'resemblances of a structural and genetic order between objects considered as separate and associated with different fields of knowledge'. (p.38) For Rossi-Landi the two crucial components of the totality of the social are thought and praxis. They produce the double face of ideology as false 'discursive rationalization' (p.39) and 'false praxis' (p.40), which together constitute social programming, the task of humanistic critique.

Such a critique is spelled out clearly towards the end of the book where global communication and its special European variety are the focus. What Heidegger regarded as essential for leading a poetically thoughtful life within the constraints of our Being-towards-Death appears to stand in radical opposition to the mechanisms of global communication today. Although Petrilli and Ponzio do not refer to Heidegger and while their vocabulary and style of reasoning belongs to a different order, the motivation for sharing the unease towards a 'reinforced unity in the European Community' (p.145) based on a mainly economic rationale and digital communication principles is not entirely incompatible with older principles of humanism. In particular, they warn against such features as the new stereotype of the 'extra-communitarian' (p.145) that works as a rule of exclusion covering 'Algerians, Philippine house maids, black street vendors, and most non-European people' who try in vain to be integrated into the new world of Europe. (p.145)

In the European Union global communication, the authors suggest, has created a new ideology of 'social planning' on the basis of three factors: a social program defined as 'the development of capital'; the 'European Commission' as capitalist control centre; and the absence of any effective opposition. (p.147) As a result, Europe is now faced with 'the monotony of a single viewpoint' summed up ambivalently under the 'order word' (as Deleuze and Guattari would put it) of 'democracy'. (p.147) Further effects of this new unitary constellation are such phenomena as politicians turned 'technicians'; voters clustered into 'clientelism'; and corporativism; 'indifferent difference'; 'migration'; the promotion of technical progress not only by science and technology but increasingly also by the 'human sciences'. What Petrilli and Ponzi deplore in all this is that the loss of what it means to be human, 'the sense of man'. (p.148-149)

***Signs of Research on Signs* concludes with an analysis of the deep grammar of global communication and the possibility of critique. Rather than investigating the logical mechanisms of the digital that makes the entire monitoring mechanism function at high speed and unprecedented efficiency, the authors reintroduce an older style of analysis with the emphasis on ideology and the nature of capital. At the centre of global communication Petrilli and Ponzio observe a certain transformation of the way capital is owned. 'Capital must now be specified in terms of *communication control*'. (p.151) Today *'production is communication'* such that all communication programs fit within a 'single global project'. (p.151) Combined with 'monologic communication oriented toward a single, dominant viewpoint' this results in the 'reproduction of the Same'. (p.151) Both the tendency towards monolingualism and linguistic imperialism are argued to follow from the ideal of high-speed communication, which ultimately threatens the *'human semiosic universe'*. (p.152)**

How can we defend ourselves against what Calvino terms the 'loss of cognitive force and immediacy' in the use of language? (Calvino 1988:59; p152) The authors' reference to Calvino is anything but gratuitous in this context since their own recipe for resistance is in agreement with his sentiment that 'literature (and perhaps literature alone) can create antibodies' against cultural homogenization. (Calvino 1988:58; p.153) Literature with its 'allusive, parodic, ironic silence, this form of laughter', the place where we find the 'free "play of musement"' is offered as an escape from digitized communication control. (p.156) Especially literary writing in the form of 'story telling', another one of Petrilli and Ponzio's ongoing research projects, is presented as an effective critical, global tradition, 'a sort of connective tissue throughout the centuries allowing for the circulation of common themes, subjects, values, and discourse genres' and providing 'a space for reflection, critical rethinking, dialogue, encounter, hospitality'. (p.156-157)

Certainly, *Signs of Research on Signs* itself offers such hospitality and a rich palette of argument and bibliographic materials not only for those interested in the development of semiotics in Italy but generally as a useful and challenging addition to the tradition of Peircean thought.

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