Pragmatics in the Semiotic Frame

Much has been written about the various meanings of the term *pragmatism,* and there is reason to believe that more pragmatic concepts will be advanced and applied in years to come. While some commend the multi-dimensionality of the term, others complain that the name itself is far from uniformly used. (As a matter of fact, it is frequently abused.) Peirce's well-known re-baptism of the term – as the indeed ugly *pragmaticism* – was definitely based on arguments of the ethics of terminology pertinent to his philosophy. But it did not prevent new and subtler ways of misunderstanding and/or manipulating a concept that introduced one of the most influential and challenging doctrines of our times. This makes the attempt to examine pragmatism in the semiotic framework (its *proper* framework), if not easy, at least all the more necessary.

The reader must have already noticed a first difficulty peculiar to this endeavor: Which pragmatism, i.e., which *species* of this strange philosophical (if it is philosophical or only philosophical) movement/doctrine should we consider? And if the answer is *"all"* (which is easier said than done), then to which effect, since merely distinguishing within the set of various meanings and uses of the term constitutes a subject in itself (on which a number of books and studies have already been written). A second difficulty concerns the relation between the historical perspective and the methodological aspects of the subject. While aware of the date when pragmatism received its "birth certificate" (plus or minus the years stated in some reports), there remains the question of whether pragmatism *en avant la lettre* (i.e., implicit pragmatism) can/should be considered. If yes, then *how,* since every retrospective of this kind is influenced by the epistemological premise from which it originates. The case of semiotics is relatively clearer, since the name entered philosophic terminology quite early and has easily identifiable roots in ancient Greek. But this is not the case of the conditions under which the relation pragmatism-semiotics (or *semiotic* or *semeiotic* or *semeiology* or *semiology* or whatever other label has been used to identify sign theories) was established, since throughout time the doctrine of signs has fulfilled quite different functions: organon, propaedeutic, hermeneutic, etc. This description of the many and various complexities and of the ambiguous coordinates (in the "time" and the "space" of theories) involved in the reciprocal positioning of pragmatism and semiotics (one as a frame for the other, and each a conceptual frame in itself) is meant not as an argument for the impossibility of the task but for explaining the method to be used and the means I chose to explain some of the representations I arrived at. Accordingly, I shall consider the following sequence:

1. *What difference semiotics makes* (if any), in which two of Peirce's definitions, marking the change from the use of the term *pragmatism* to *pragmaticism* are compared and the result applied to the history of the implicit pragmatic notion in semiotic thinking and models.
2. *Pragmatism: from band to Klein-bottle,* in which the relation pragmatism-semiotics is discussed by using a topological concept of theory, i.e., is presented as resembling a bottle pulled into itself (the "bottle" being semiotics).
3. *Boundaries of pragmatism,* dealing with the semiosis of pragmatism; in which meanings of pragmatism different from those of Peirce are semiotically considered.
4. *Closing abduction,* or the crisis of dualism, in which the structural limitation of pragmatism/semiotics/semiology is discussed against the background of directly or indirectly/dualistically influenced/determined contemporary thinking and praxis. While predominantly discursive, the method involves some non-verbal representations and a minimum of formalism (presented in the *Appendix* to suggest a methodology for evaluating pragmatic models and their semiotic compatibility).

1. What Difference does Semiotics Make?

1.1 Underlying Concepts

Various scholars (influenced by Ogden and Richards's, or Frege's, diagram) used the following simple but instructive representation of Peirce's sign definition (figure 1).
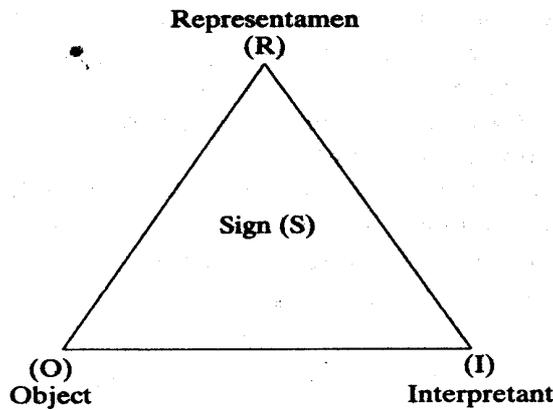
Figure 1. *Diagrammatic representation of Peirce's sign definition.*

Any time representations are used, a certain simplification is introduced; and consequently some characteristics intrinsic in the model get in our way of thinking. (The dogmatism of the triad is a notorious example.) However, an acceptable (simplified) image of some rather difficult concepts and processes can result in their simpler presentation and encourage future investigations well beyond the initial representation. (Peirce, among others, used visual representations for very complex issues with much success.) In order to present (in an educational environment, or even to colleagues at early stages of their semiotic education) the distinction of the three semiotic levels, as introduced by Morris, a representation such as figure 2 is "intuitive" (sic!) enough to help show how these levels are defined, and in
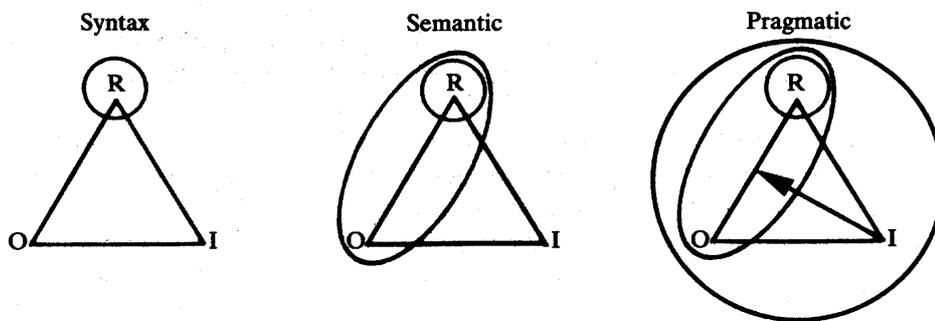

Figure 2. *Semiotic levels,* as *distinguished by Morris, but identified in connection with the sign definition* (cf. fig. 1).

which respect this approach actually betrayed Peirce's semiotic conception, as well as the fundamental aspect of his pragmatism. In the mentioned diagram, the triadic-trichotomic structure of Peirce's semiotic is reduced to a representation of the sign that is gnoseologically flat because it lacks the dynamics of the sign relation. Morris [1] launched the use of *icon, index,* and *symbol* as *types of signs,* not as particular ways of representation, as Peirce repeatedly defined them. Today there is almost no way to stop this terminological abuse. However, the need to place pragmatism in a semiotic frame implies the reassessment of Peirce's semiotic systems--Peirce's sign conception, first of all, since this necessarily relates to pragmatism. Within the limits of this study, the entire approach will be condensed, starting with some necessary definitions to which the study will frequently refer:

Semiotic: "Logic, in its general sense, is, as I believe I have shown, only another name for *semiotic* (Greek *simeiotiki),* the quasi-necessary, or formal, doctrine of signs;" 2.227 [2].

Sign: "Anything which determines something else (its *interpretant)* to refer to an object to which itself refers (its *object)* in the same way, the interpretant becoming in turn a sign, and so on *ad infinitum";* 2.303.

"A Sign (q.v.) which is constituted a sign merely or mainly by the fact that it is used and understood as such, whether the habit is natural or conventional, and without regard to the motives which originally governed its selection"; 2.307.

"[...] something which stands to somebody in some respect or capacity"; 2.228.

Representamen: "A [...] *Representamen* is a First which stands in such a genuine triadic relation to a Second, called its *Object,* as to be capable of determining a Third, called its *Interpretant,* to assume the same triadic relation to its Object in which it stands itself to the same Object [...]"; 2.274.

"Anything which determines something else (its interpretant) to refer to an object to which itself refers (its *object)* in the same way, the interpretant becoming in turn a sign, and so on *ad infinitum,"* 2.303.

A *Representamen* is the First Correlate of a triadic relation, the Second Correlate being termed its *Object,* and the possible Third Correlate being termed its *Interpretant,* by which triadic relation the possible Interpretant is determined to be the First Correlate of the same triadic relation to the same Object, and for some possible Interpretant. A *Sign* is a Representamen of which some interpretant is a cognition of a mind. Signs are the only representamina that have been much studied, 2.242.

Object: [immediate, mediated] "It is usual and proper to distinguish two Objects of a Sign, the Mediate without, and the Immediate within the Sign. Its Interpretant is all that the Sign conveys: acquaintance with its Object must be gained by collateral experience. The Mediate Object is the Object outside the Sign; I call it the *Dynamoid* Object. The Sign must indicate it by a hint; and this hint, or its substance, is the *Immediate* Object." *(Letter to Lady Welby,* December 23, 1908 [3]).

Interpretant: [dynamical, final, and immediate] "My Dynamical interpretant consists in direct effect actually produced by Sign upon an Interpreter of it [...] My Final Interpretant is [...] the effect the Sign *would* produce upon any mind upon which circumstances should permit it to work out its full effect [...] My Immediate Interpretant is [...] the total unanalyzed effect that the Sign is calculated to produce, or naturally might be expected to produce [...] I have been accustomed to identify this with the effect the sign first produces or may produce upon a mind, without any reflection upon it" *(Letter to Lady Welby,* March 14, 1909 [4]).

In order to improve the initial representation, a new one can be suggested, *based on these definitions* (see fig. 3a, b).
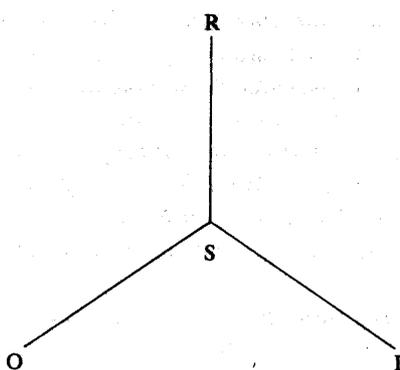
a) the functional and relational aspects of the definition of syntax (R), semantics (R, O), pragmatics (R, O, I);
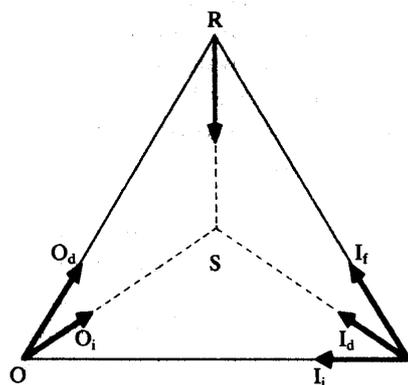
b) demonstrating the pyramidal structure of semiosis, and in particular the active (I_d, R, S), sensational (O, R, S), practical (I_d, S, Oi), theoretic (I_f, R, O_i) forms of belief distinguished in Peirce's pragmatic system.

Figure 3. Improved diagrammatic representation of the sign definition.

Through graphs, we can mark the object and the interpretant levels of this representation, and thus understand the interrelation among the semiotic levels (syntactic, semantic, pragmatic) according to the type of semiosis.

Pragmati(ci)sm is supposed to be an experimental conceptual process. The experiment reconstitutes the ideality of the intellectual purport of the symbol and thus makes habit possible (ends in a habit). It is easy to. show that William James or F.S.C. Schiller, even Dewey, together with Royce (the closest to Peirce's logical pragmatic thought), for that matter, considered teleological issues (ethical, humanistic). That is, they dealt with sign processes in which the pragmatic level of Thirdness (level of the logical interpretant) is no longer reached. If, for the sake of illustration, one would interpret the four planes of the pyramidal structure (see Fig. 3b) as related to the four kinds of beliefs that Peirce distinguished-- active, sensational, practical, theoretic--it would be easy to infer from the elements involved--object, representamen, interpretant (cf. definitions given above) that the semiosis might be affected by over- specifying one of the elements mentioned (primarily the object). Switching from meaning to truth, W. James's *pragmatism,* for instance, over-specified the *Will to Believe* (to use the title of his book published in 1896). Over-specifying one or more of the elements of the semiosis and its pragmatic consequences will be considered later in this text.

1.2 The Pragmatic Maxim in Context

Enough (but surely not the last words) has been said and written [5] about the circumstances under which Peirce stated the *Pragmatic Maxim.* Among those that, to the best of my knowledge, are not yet clarified are some regarding the "difference" between various formulations. Here is one I would like to use:

> "Consider what effects, that might *conceivably* have practical bearings you *conceive* the objects of your *conception* to have. Then, your conception of those effects is the whole of your *conception* of the object,"(I).
> "I will restate this in other words, since oft times one can thus eliminate some unsuspected source of perplexity to the reader. This time it shall be in the indicative mood, as follows: The entire intellectual purport of any symbol consists in the total of all general modes of rational conduct which, conditionally upon all the possible different circumstances and desires, would ensue upon acceptance of the symbol,"(II).

To start with, let us notice that the first part (I) is almost identical with the text published in 1878[6], which is the presumable birthdate of Peirce's pragmatism. The second part (II) already makes clear what happened in those almost 30 years that passed, and especially why Peirce decided that he had to distinguish his pragmatism from that of W. James and his followers, choosing the denomination "pragmaticism". Let us compare the two parts of his Pragmatic Maxim:

1878	1905
object of our conception	total of all general modes of rational conduct
effects	symbol
?	conditionally, upon all the possible different circumstances and desires

The semiotic foundation of the Maxim becomes obvious. The equivocal implicit in the use of effects is remedied while the contextual dimension is plainly stated. Morris was not aware of (or not willing to

consider) the fact that Peirce conceived pragmatics from a non-behaviorist perspective. Morris read and quoted Peirce (forgetting to add quotation marks) while wearing "glasses" through which everything looked behaviorist or supported a behaviorist interpretation. In the long list of the many injustices Morris caused to Peirce's legacy [7] this can be placed at the very beginning. Peirce's pragmati(ci)sm, despite some of its psychological sources--identifiable in early foundations (in the first place, Bain's influence is somehow tangently acknowledged)--is anti-psychological and definitely non-behaviorist. The second element compared ("object of our conception" and "symbol") testifies to the effect that Peirce's pragmati(ci)sm and his semiotic doctrine are intrinsically related. (More about the characteristics of this relation later.) Actually, the symbol is introduced in the concept of pragmati(ci)sm with embedded dynamism—that of the interpretant--ahead of any known mentalist theory, much along the line of current functionalist-cognitive theories.

Here is how Peirce considered the symbol:

"[. . .] a sign which would lose the character which renders it a sign if there were no interpretant. Such is any utterance of speech which signifies what it does only by virtue of its being understood to have that signification," 2.304.

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," 2.301.

"A *Symbol* is a sign which refers to the Object that it denotes by virtue of a law, usually an association of general ideas, which operates to cause the Symbol to be interpreted as referring to that Object," 2.249.

"Symbols grow. They come into being by development out of other signs [. . .]. We think only in signs. These mental signs are of mixed nature; the symbol parts of them are called concepts. If a man makes a new symbol, it is by thoughts involving concepts. So it is only out of symbols that a new symbol can grow. *Omne symbolum de symbolo".* 2.302.

With the notion of the symbol (as a distinctive way signs are used to *represent* or are interpreted as representing an object), Peirce established several important epistemological aspects of pragmati(ci)sm:
a) The level at which it becomes possible is that of "Thirdness" ("Firstness" and "Secondness" are the other levels corresponding to the phaneroscopic categories), i.e., the final logical interpretant (cf. the definitions given above and Figure 3).
b) It is, as he made clear over and over, a "method of ascertaining the meanings of words and of concepts" (5.465), a rational and experimental method, i.e., bound to be used/tested in the mental/functional laboratory of semiotic processes (semiosis).
c) And it is a prospective method, extended to "would acts" or, to resume the comparison we just went through, conditional "upon all the different possible circumstances and desires" in which semiotic activity takes place.

It would be appropriate here to backtrack, i.e., to look at Peirce's philosophic program as it works, through a procedure so dear to computer scientists and programmers in our days, and which, I submit to the reader, leads to line §5, Man, A Sign[E] (5.310) and to the formulation of the anti-Cartesian principle: "Since the meaning of a word is the conception it conveys, the absolutely incognizable has no meaning because no conception is attached to it." This is, undoubtedly, a first, indirect, and still negative formulation of the Pragmatic Maxim (in 1868). This formulation comes in the context in which reasons are given that

"[. . .] the word or sign which man uses is the man himself. For, as the fact that every thought is a sign, taken in conjunction with the fact that life is a train of thoughts, proves that man is a sign; so that every thought is an *external* sign, proves that man is an external sign. That is to say, the man, and the external sign are identical [. . .] Thus my language is the sum total of myself; for the man is the thought" (5.314).

The long quote given above should not discourage discussion over the type of pragmatism (later called "pragmaticism" for the sake of distinction) thus constituted. It is anthropocentric, panlogical, realistic, and instrumental. To the question of whether the semiotic framework is a prerequisite or a product of pragmatism, one can submit a hypothesis based on this minute examination of constitutive arguments (as well as on others to follow) that: *Pragmatic thought is inherent in any and every semiotic conception.*

Peirce was aware of this. On several occasions he discussed not only its architecture (pleased to suggest comparisons to Kant's architectonic philosophic system), but also its fields of application and its ancestry. There is no doubt that "[. . .] the rivulets at the head of the river of pragmatism are easily traced back to almost any desired antiquity" (5.11); Socrates, Aristotle, Spinoza, Berkeley, Kant, and Comte are the names he mentioned. Others can be added. What becomes important here is the understanding of the way pragmati(ci)sm was slowly identified in Peirce's system of thought, as well as why even today some would credit him only with the name (actually suggested through his readings in Kant), seeing little significance in the conception as such. Rorty, 1980, is the spokesman of this tendency [8]. The Pragmatic Maxim did not allow for distinction between theory and observation. Its universe is that of the experiment-- quite vaguely defined--and its validity is logical in nature. If we try to apply the diagram of semiosis in order to suggest how nominalistic-teleologic attempts are structured, we notice that either the object is under-specified (the generality of humanism) [9] or the interpretant or, as in Dewey's logical approach, the representamen. No sign can be constituted; no semiosis takes place. (fig. 4)
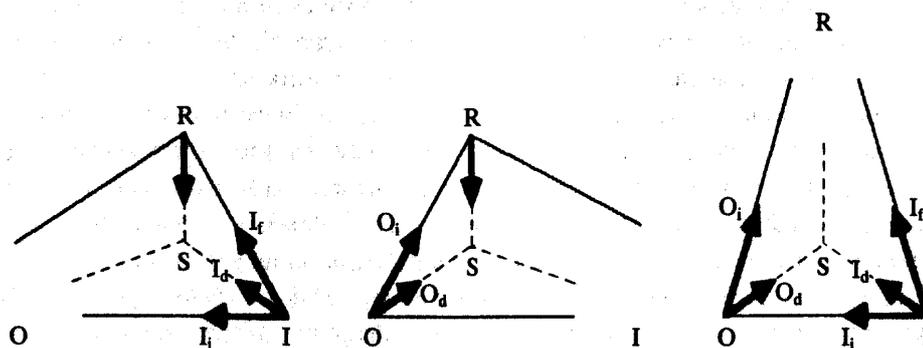

Figure 4. Underspecified relates of the semiotic relation make a consistent constitution of the sign, i. e., consistent interpretation impossible.

The premise involved in the definition of the sign is reproduced in the body of the *Pragmatic Maxim.* Accordingly, it comes as no surprise that an epistemological circle is constituted, uniting belief (relative) and habit (degree of). Apparently trying to escape this circle, James (1909) brought the *Maxim* to its antithesis in a typically nominalist procedure (denying the generality of meaning): "The true is only the expedient in the way of thinking, just as the right is only the expedient in the way of our behaving." Taking distance from James, Dewey thought that truth can be understood as warranted assertability. Schiller attempted to revitalize the generality of an essentially realistic conception by inserting humanism in the conception of truth.

The foregoing instances are given here mainly because Peirce himself thought that he had to distinguish his semiotically based view from that of the philosophers just mentioned. Each time the sign process is actually predetermined, an end is built into the semiosis, and accordingly the final interpretant is allowed to relate only to one very precise object: (1) what works (source of a utilitarian belief); (2) confirmation (source of truth); and particularly (3) humanity. It should be pointed out how Peirce's initial semiotic concept of infinite semiosis is abandoned or contradicted in each of these, or similar, cases. Pragmati(ci)sm requires interpretation as a "method of thinking" (8.206), not as a system of philosophy. The attempt to place it in the context of more or less relevant "radical proposals for making a new human

future" [11] reflects a basic misunderstanding of its original purport. Although understanding the affinities between the pragmatic method and the works of Heidegger and Nietzsche is an interesting exercise in intertextual analysis, it follows the same line, associating metaphysical conceptions to a method supposed to express a fundamental anti-metaphysical attitude, and therefore deeply rooted in semiotic thought.

2. Pragmatism: From Möbiüs Band to Klein Bottle

Aristotle, defining the sign as "anything which involves in its being the being of something else" [12], suggested that the sign has a *cohabitational* nature *per se* (maybe even a parasitic condition). Not too many scholars since have volunteered to determine *what* a sign is. It was repeatedly merely suggested *how* it could be interpreted or used, or whether any relation(s) between signs and language (not always nor by everyone considered a particular system of signs) could be established. Inspired by the promising model presented by Karl-Otto Apel [13], some recent studies (evidently influenced by Kuhn's shift-of-paradigms idea) suggest the sequence Metaphysics-Epistemology Semiotics as the "[...] three types of *Proté Philosphia* (First Philosophy) that have been realized within the history of human thought"[14]. In addition, a so-called "[...] logical order of the paradigmatical categories: being, knowing, signifying/communicating," [15] is given. No matter how attractive this presentation is, one has to carefully evaluate its premises and the possible conclusions before adhering to its letter or to its principle(s). History is dealt with at a taxonomic level; method, as much as it is reflected in the three definable entities that succeed each other, derives from a change of the object of philosophic interest, a change expressed in the sequence of the dominating (dominant) category. In the sequence being-knowing-signifying-communicating, it seems that historic sequence and logical order are identical. This means that a transcendental, inner logic is brought to expression in historic law. Pragmati(ci)sm applied to this explanatory attempt proves that the assumption of such a process is unacceptable. As the *whole* of our conception of the object, i.e., as the semiosis leading to the constitution of the interpreted sign, it implies that semiotics is both *inside* and *outside* the evolution of philosophy. In fact, semiotics, in Peirce's conception, cannot be conceived as independent of his philosophic system (based on the phaneroscopic categories and on the principle of synechism), nor thought of as identical/equivalent to that philosophic system or to any other philosophy. This distinction is important not only for understanding its specific functions, but also for a precise assessment of its *particular condition.*

As the logic of vagueness, semiotics can be placed in the history of logic, although its boundaries, as defined through the characteristics of sign processes, exceed the traditional boundaries of logic. Established on the premises of the logic of relations--a foundation too often ignored in our dealings with Peirce's semiotic--and claiming a gnoseological status for phenomena of a vague/fuzzy nature[16], it reaches its climax in Pragmati(ci)sm. A careful reading of the *Pragmatic Maxim* leads to the unsurprising conclusion that Pragmati(ci)sm is but the complete (WHOLE) semiosis. In order to avoid those difficulties that Gödel later uncovered in the *undecidability theorem* [17], Peirce established the *experiment* (to be specified for each particular pragmatic inference) as the non-self-referential but complete context in which consistency can and should be achieved. The *effects of the object* as *representative* for the *conception of the object* cannot be reduced to some psychological entities, mental states or to particular biographical, sociological, economic, or linguistic phenomena (to name only a few). They are semiotic in nature, i.e., pertaining to the logic of vagueness or, more precisely, to abduction (in which case, implicit vagueness is given by definition). This being the case, it comes as almost no surprise that while pragmatic thought (in Peirce's sense) is inherent in every semiotic conception, we cannot extract and apply it outside its source.

After all, pragmatism questions whether there is a *relation* between the represented and the representation, and if awareness of this relation has any consequence for the *aware subject.* Different semiotic theories advance different hypotheses regarding human ways of representing. In other words, just as many pragmatism are possible as semiotic and semiological theories; and none can be more effective or appropriate than the semiotic or semiological framework in which it is designed to be applied [18]. Those who hoped and still hope for a universal method might feel disappointed. I shall abstain from discussing whether this is a limitation or a challenge (from an epistemological viewpoint).

This leads me to a second thesis: *Pragmatism* is *the conception that governs the applied dimension of a given semiotic (semiological) system.* The solidarity between the semiotic

constitutive frame and pragmatics, as its necessary corollary, makes the question of how pragmatism can be formulated, other than in terms peculiar to semiotics, critical. As I formulate these thoughts, I know of no better way to represent their relation than to suggest an analogy to the topological changes through which a Möbius band can be turned into a Klein bottle. A few introductory remarks might prove useful.

While ordinary surfaces have two sides, a Möbius band is defined as a one-sided surface. Cut along the centerline of the band, it remains one piece. A Klein bottle is a closed surface, which has no inside or outside, and resembles a bottle pulled into itself. With the help of computers (or for that matter, of imagination), it is possible to visualize a Möbius band growing into a Klein bottle (the strip grows round until it joins itself).
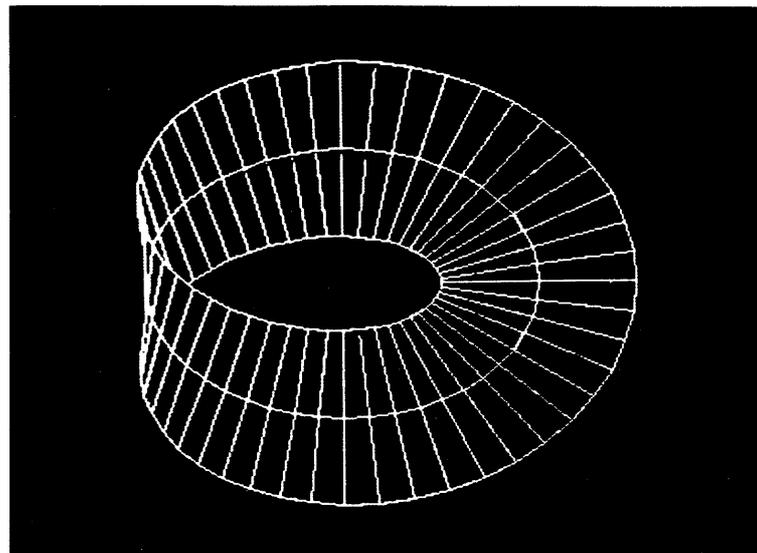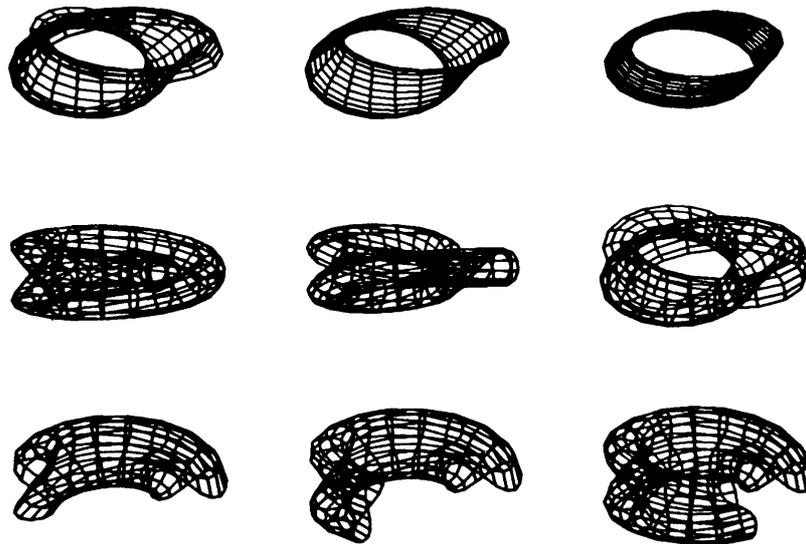
Figure 5. Pragmatism as the "inside" of semiotics: the transformation of a Möbius band (a) into a Klein bottle; as an explanatory model of the interrelation pragmatism-semiotics (b).

The reason I submit this image to the reader is related to the subject: Pragmatism is the "inside" of semiotics brought out as a result of an operation very similar to *topological transformations* [19]. Constitutive elements of the semiotic "configuration" (theory) correspond to elements characteristic of the pragmatic method. *What kind* of correspondence is established (univocal, bi-univocal, continuous, etc.) remains to be seen from one case to the other. Pragmatisms (i.e., different pragmatic methods) are not necessarily topologically equivalent. Peirce wanted to mark his conception of the effects of the object by a particular name. Saussure, making synchronism not only a method of research but almost a constitutive characteristic of the sign of language, did not even think of defining a pragmatic dimension of his semiological system. Hjelmslev's *immanentism* leads to the same result. Parret--a member of the post-Hjelmslevian, so called "Paris School" centered around Greimas--ascertains: "I suggest that the pragmatist mark is truly foundational in Peircean semiotics, but that this is far from true for Saussure-Hjelmslevian semiotics," [20].

The superimposition of psychologism and sociologism in such sign conceptions permits explanations regarding psychological or sociological aspects of semiosis, but prevents the *semiotic,* i.e., the specific, from being applied to practice. The Sausurrean metaphor of paper is illustrative of the point I am making:

Le signe est double:

Signfication :
  syllables

c'est (là le point le plus) difficile de la sémiologie. [...] On pourrait (représenter
cette correspondance) par (la) comparaison (que voici: on ne peut) découper le
recto d'une feuille [de papier] sans le verso. [...] On ne peut prendre l'un des deux
que par l'abstraction," [21].

Semiology allows no way for the unity of the sign to be broken. It is, to return to the topological comments, a two-sided surface. The lack of Thirdness as a structural component (Rossi-Landi [22] speculates that the unity of the two terms configures a third!) that can "report" about the two sides, i.e., that is actively involved in the sign process, maintains the system as an explanatory model adequate to semiology's static condition. Twisting it, like so many in the semiologically oriented French school have done, i.e., making it a transformational topological entity while taking it away from Saussure's original thought, ends in a pragmatic opening. Barthes stated the goal of all structuralist activity:

"[...] qu'elle soit réflexive ou poétique, est de reconstituer un *objet,* de façon à
manifester dans cette reconstitution les règles du fonctionnement *(le fonctions)*
de cet objet. La structure est donc en fait un simulacre de l'objet, mais un
simulacre dirigé, intéressé, puisque l'objet imité fait apparaître quelque chose qui
restait invisible ou, si l'on préfère, inintelligible dans l'objet naturel," [23].

A reader juxtaposing this statement to Peirce's *Maxim* will notice that Barthes "talks" Peircean semiotics here (with some additional teleological notes). An essayist, i.e., a *sémiologue* involved in the critical discourse about culture [24], Barthes had to delineate the conditions for the applied component of a sign theory that was born without a pragmatic dimension. The opening he suggested--in the meanwhile considered by Todorov, Baudrillard, and Kristeva--involves introducing the semiotic function, evidently a *third dimension.* Buyssens, Martinet, Mounin, and perhaps primarily Prieto anticipated this evolution. Their studies in semiotics, though not necessarily concerned with pragmatic aspects as such, are of a particular relevance to the subject due to the way they question our relation to language. Prieto advanced a definition: "Nous appellerons 'idéologie' tout discours se référant à une connaissance de la réalité matérielle visant à 'naturaliser' cette connaissance," [25]--which again raises the pragmatic issue of *objectivity* in a semiotic conception where this seemed impossible.

3. The Boundaries of Pragmatism

Semiotics is too frequently confused with semantics. The results obtained in various semantic schools, especially the Warsaw School, explain this confusion. Or it is associated with higher and lower levels of utilitarianism or some form of practical philosophy. Since the time Lovejoy [26] wrote about some of the possible meanings of pragmatism, and since Thayer [27] put together his history of pragmatism, the number of acknowledged forms has rapidly increased. (Every conference on semiotics gives rise to a new record!) Pragmatics, too, has gone through an impressive semiosis. Today almost everything is of a pragmatic nature, pragmatically oriented, or involved in some sort of pragmatic discussion. The concept is more frequently than not associated with the concept of meaning. It escaped from the rarefied air of theory and was appropriated by everyday language. It still serves as the hallmark for the American spirit, but not necessarily as the compliment it used to be shortly after its public career started. Anyone interested in how sign processes take place can notice that the concept we celebrate (through reification or *Versachlichung,* we could say) in this series of volumes is a kind of living body on which all kinds of operations are performed.

What I have attempted up to this point is only a resuscitation of the *core method,* of its "heart," to use a way of speaking. Others have already performed "transplants" from related or foreign bodies of knowledge. Austin's theory of speech acts, continued in Searle's "study of the specific meanings of utterances in use by actual speakers in concrete context" [28], axiomatic functionalism (Mulder, Hervey), intertextuality (Bureau, Riffaterre), recent developments in iconology (pursuing Panofsky's generous working hypothesis) are all examples that come to mind. In the last few years, even artificial substitutes have been devised (I refer here to artificial intelligence) and partially applied, with encouraging success. I can mention the importance given to the functional reorganization of language in the systemic grammar theory (Halliday) and the important computational implications of transformational generative grammar (as developed by Chomsky).

In a study for a future volume in this series, I shall have the privilege of examining such operations in more detail. The goal pursued here is to define the semiosis of pragmatism in the semiotic framework. And to do so, I must consider the various ways in which semiotic issues are raised and semiotic themes approached; and, more important, whether a certain pragmatic awareness can consequently be identified each time a sign theory is applied. Up to this point in the argument, Peirce's triadic-trichotomic semiotics, in which pragmatism was formulated, has served as a *conceptual* reference. The dyadic semiological project has proved to lack a pragmatic dimension/opening, in the sense in which Peirce defined pragmatics. Its psychological opening explains all those affinities with Freud's theory that impregnate semiological discourse (and make it rather suspect, at least to those familiar with post-Freudian speculative psychoanalytic theories and techniques). From here on, and while keeping in mind the determinant aspects discussed, an attempt will be made to show how far the concept of pragmatics can be stretched in referring to systems previous to the formal establishment of pragmati(ci)sm.

Reconstituting the history of the conceptual context in which the pragmatic opening becomes possible goes beyond the scope of this text. In order to avoid discriminating among various pragmatic methods, I prefer to define the context in which the pragmatic opening is intrinsic to the theoretic framework as one in which applied semiotics is sought, possible, and actually necessary. Thirdness, as the level of necessity where the final interpretant infers from symbol to object, is the "house" of pragmati(ci)sm. The doctrine of the stoics, Heraclitus's dialectic thought, several Far Eastern doctrines of language, and Avicenna's logic are examples of *possible* pragmatics. Aristotle, with his conception of interpretation, the Christian semiology of St. Augustine, St. Anselme--among others discussed extensively in a context less pertinent to semiotics--Occam, Condillac, Whitney, and W. von Humboldt are names related to a set of works that contain examples of semioses from the real (Secondness) to the pragmatic via some form of sign representation that they described or alluded to. Giordano Bruno and Leibniz (together with so many scholars influenced by his work) contributed conceptual models that either conclude the necessity of some form of pragmatism or simply made use of it.

Bruno is probably the most elaborate writer on semiotic codes (which constitute complex pragmatic issue). In the pragmatic conception, the symbolic experience of the object goes through the intermediary of the code without which no sign system provides for the adaptation of the representamen to the medium. The Preface to Bruno's (1591) De *imaginum, signorum, et idearum compositione* (still untranslated)

states: "[...] hoc facere est facere omnia, hoc dicere est dicere omnia, hoc imaginari, significare et retinere, omnia facit obiecta apprehendise, apprehensa intellexise, intellecta meminise," [29]. This actually presents the inference from semiotic analysis to the conception of a generic entirety *(omnia).* Explaining different modes of signifying in the three parts of the book, and how signs are stored in memory, how codes affect meaning, and how particular sign systems are used in their proper context, Bruno intended to be of use to "poets, orators, philosophers, astrologers, theologians, students of mechanics, theoreticians...." Bruno seems to have defined the human species not far from what centuries later would become Felix Hausdorf's formula of *Zoon semiotikon.* Those unable to follow a semiotic procedure are considered "[...] among brute animals [...] deficient in human reason, rather than among those discerning the title 'human'," (cf. Bruno, 1591). The basic concept of the sign is consonant with the definition *aliquid stat pro aliquo,* known to have permeated a vast part of the history of semiotics. (Peirce's definition is itself a sort of paraphrase.) It is needless to add that memory and the use of signs are also a core issue in the pragmatic method.

Leibniz is in a different position. Like Bruno, who commented on Raimundo Lullus's *Ars Magna* (which deals with *ars combinatoria),* Leibniz gave his attention to things involved in sign operations following two ideals of the philosophy of his time: a *lingua universalis* against the background of Descartes's conception of a *sapienta universalis.* The dualism intrinsic in Descartes's conception affected, as I have already pointed out, all known pragmatic procedures connected to or derived from dualistic semiological models. However, Leibniz's work deserves far more than simply being catalogued Cartesian, as many have done. Differences between both method and conception, especially evident in the semiotic framework, outweigh the similarities that one might overestimate when considering only some of the concepts he used. According to Leibniz (1875-1890), thinking is done in signs: "Omnis humana ratiocinato signis quibusdam sine characteribus perficitur," [30]. Taking distance from nominalism (especially by appropriating Hobbes's inference from the arbitrariness of signs to the arbitrariness of truth), Leibniz understood the relational nature of the sign: "Et hace proportio sine relatio est fundamentum veritatis," [31]. He thus rehabilitated logic, in contrast to Descartes's dismissal of it, and involved *experience* in sign processes. This is the fundamental point since, as we already know, pragmati(ci)sm is the conception according to which the semiotic experience of the object is whatever the object is. While Burkhardt (1980) is correct in pointing to the pragmatic aspect of a universal language, he fails to identify the authentic pragmatic dimension of the system: "Die *pragmatische* Dimension betrifft die Characteristik in ihrer *kommunikativen* Funktion, so als internationale Hilfssprache und als Instrument zur Verbreitung des Glaubens," [32]. Symbolic knowledge, as defined by Leibniz, (in opposition to intuitive knowledge) is logical in nature. And as such, it is constitutive of his *Encyclopaedia,* i.e., of his comprehensive pragmatism.

Three centuries separate this thought from Eco's [33] Model Q (of linguistic creativity) in which infinite semantic recursivity makes possible a *sui generis* concept of pragmatics. The Leibnizian idea becomes more evident in the observation that "The dictionary thus becomes an encyclopedia, because it was in fact a disguised encyclopedia," [34]. Finally, Lotman's understanding of semiotics as a generalized theory of a generalized concept of the text seems also related to Leibniz, especially through its pragmatic implications (successfully applied to various components of culture).

4. Closing Abduction

In the end, the issue comes down to the meaning and use of semiotics, in which case to act according to the Pragmatic Maxim, we have to "...consider what practical consequences might conceivably result by necessity from the truth of that conception; and the sum of these consequences will constitute the entire meaning of the conception," (5.9). While semiotics is supposed to involve "precise, necessary reasoning," it was also defined as the logic of vagueness [35], which means that its object is the precise consideration of vagueness, i.e., of all sorts of imprecisions as they occur in the use of language or of other sign systems. The subject has been dealt with on several occasions [36,]but not yet with pragmatic implications.

Pragmati(ci)sm, as a "method of reflexion having for its purpose to render ideas clear" (5.13) implies

the vagueness of the sign, stating that the final logical interpretant ensures, through abduction, a relative (since semiosis is infinite) closure of the signification process [37]. Practical consequences, i.e., habits (via belief), are those experimentally tested or testable. In Peirce's own words: "[...] it [pragmatism] is nothing else than the question of the logic of abduction," since "Any hypothesis [...] may be admissible, in the absence of any special reasons to the contrary, provided it be capable of experimental verification, and only insofar as it is capable of such verification," [38]. Semiotics is supposed to support the effort to *clarify* ideas, while the logic of relations was meant to "help render ideas that are difficult to apprehend" [39] (the type of difficulty was not specified). Thought (cognition would be the name today) becomes the pragmatic instance, and to discover how thought processes, which are semiotic by nature, take place means to better apprehend what thought is about and how. Dewey, understanding the semiotic foundation of pragmatism, correctly considered Bacon as "[...] the prophet of a pragmatic conception of knowledge," [40]. Truth, as conformity to something independent of thinking, can be approached only in its unity to human inquiry, i.e., seen as a process rather than an end in itself. Semiotic inquiry, whether formalized or developed in some kind of discursive fashion, reconstitutes the semiosis of its object of inquiry at the meta-level (a conception shared by Buhler and Jakobson) or in language.

By adding *sigmatic,* a more restricted *referential* aspect of semiotics, to syntax, semantics, and pragmatics, Klaus adopts a gnoseological perspective to pragmatism. He argues that language signs--and accordingly the semiotics of language--require special treatment, submitting that "Die Pragmatik untersucht die Beziehungen zwischen den Zeichen Z und den Menschen M, die die sprachlichen Zeichen produzieren, senden, und e m p f a n g e n," [41]. Psychological and sociological components are accordingly its object of research. Klaus's sigmatic (identifying a semiotic approach that attempts to integrate Marxist concepts) actually gained little attention from the semiotic community, despite some of its challenging hypotheses. The main limitation--its obvious and sometimes disappointing ideological bias-- results in a very limiting semiosis.

It should be mentioned that the claim to a privileged consideration of language was expressed in other semiotic studies as well. The result of adopting such a premise is reflected in the logocracy of the peculiar pragmatic method that corresponds to such a semiotics [42]. However, whether the object is poetry, law, music, or political institutions (the list is limitless), semiotics does not rewrite the verse, the paragraph of the law, the bar of music, or a party agenda. But it does provide the means to define the characteristics of the (potential) infinite sign process.

In an attempt to explain how various tools of logic, especially of new logical theories, can be used in pragmatics, Stalnaker advances the suggestion that implying semiotics, the theory of possible worlds is an "...appropriate framework for pragmatic theory," [43]. His remarks concerning Montague's "attempt to develop a rigorous formal pragmatic theory" were well taken and led to a hypothesis worth pursuing: "Pragmatism was viewed by Montague as a generalization of modal logic," [44]. To those familiar with the complexities of the interpretant, it should come as no surprise that the field of the interpretant is indeed structurally equivalent to modal logic. Neither should it come as any surprise that abduction is the main inferential mechanism. Finally, it should also become clear that beneath this cognitive model a much more challenging idea is thus ascertained: the need to overcome the limitations of dual thinking, of dualism in general. While this idea goes well beyond the attempt of positioning pragmatics in a semiotic framework, it originates in the questions involved in positioning operations (which I would like to specify in case the reader has not identified them in this study: historical-methodological reconstruction, epistemological understanding, semiotic observation, inference to the necessity for a conceptual change, i.e., the attempt to reach the Thirdness of a logical interpretant as a precondition of the experiment).

Deconstruction, the provocative thought that made Derrida the prophet of a movement in search of an adequate organon, is also a positioning procedure. While I am still uneasy about the distinction between the pragmatics of deconstruction and the deconstruction of pragmatics (What goal is there, if any?), I notice the legitimate attempt for "initialize all our registers and declare new pointers" (this is computer jargon) so that our semiotic programs not run against the "garbage" accumulated in our previous cultural functioning.

This brings us to the last hypothesis, by no accident placed at the end: *Code invention, no matter what type* (cultural, theoretic, software, ideological, scientific, etc.) *always takes the path of abduction.* If

Eco's [45] distinction of three types of abduction--undercoded, overcoded, and creative--has any merit to it, and if--this second "if" is evidently determinant--after my reading of the characteristics of the relation semiotics-pragmati(ci)sm will prove, along the semiosis considered, to have the nature of a final logical interpretant, the abduction I submitted above may be credited as creative.

APPENDIX

A category-theoretic approach to the various pragmatic theories developed in linguistics (Searle, Chomsky, etc. [46]) can prove a useful way to define the specific perspective of each such theory and to compare such theories at a structural level. Given the vague nature of signs in general, and especially the vagueness of language, the approach should take place in a *world of vagueness,* maybe along the line of similar attempts made for a *fuzzy world,* [47]. Moreover, building on the notion of a theory (semiotics in this case and its algebra [48]), an analysis of the *dynamics* of various pragmatic models can be undertaken. Sooner or later this will have to be tried, if we are really concerned about the interaction between theories and the object of research, i.e., about the semiotic implications of the knowledge or cognition we assume we have acquired. The remarks of Feyerabend *et al* in this sense are sufficiently known in order not to require extra comment here.

We define by R~ the set of fuzzy/vague relations $r_1, r_2,. . . r_m$, established between the elements involved in the pragmatic procedure (Peirce's or any other). Accordingly
$$M\sim = (R\sim; r_1, r_2,...r_m)$$
is called a pragmatic model. Critical here is the determination of the fuzzy/vague relations $r_1, r_2,... r_m$. If we adopt the following representation:

<   represents a total strict order relation (tree order relation)
$\Rightarrow$ a strict order relation,
$\cup$ intersection,
$\subset$ contained in,

then an ordered set is defined as a model *(A, <)*, with a single (binary) order relation. If two binary relations, i.e. *(A, < $\Rightarrow$)* are given; the model can be applied to semiological concepts (signifiant-signifié; langue-parole, etc.). If we are given (M, $\subset$, <)--which is representative for an ordered tree--the model can be applied to Mukarovsky's functional conception.

Properties of sets with three fuzzy/vague order relations (triadic)--and sign sets defined within Peircean semiotic have such three order relations--can be modeled as well, while higher order relations are reducible to triadic order relations (cf. Peirce, 1.292). Assuming <, $\subset$, $\Rightarrow$ as three strict order in the fuzzy/vague set R~ as three strict order relations, and that some conditions can be imposed (according to the consequences of the sequence Firstness-Secondness-Thirdness), i.e.:

1. the fuzzy/vague set R~ and the relations $\subset$ and < constitute an ordered tree;
2. the relation $\Rightarrow$ is defined in the set $R_k \subset R$ of terminal vertices of the above tree, and forms a tree order in M_k;
3. the set $I^S \subset R_k$ of terminal vertices *t,* for which $t \subset s$ is a tree in respect to the relation $\Rightarrow$;
4. if $I(s) \cup , I(s_1) = \Phi, t \in I(s), u \in I(s_1)$, and $t \to > u,$ then *t* is the root of the tree $I(s)$ (obviously, *u* is the root of the tree $I(s_1)$) ;
5. if there exists a *v,* such that $t < v < u,$ then there exists ans and an s_1, such that $t \in I(s_1), u \in I(s_1)$, and there exists no w, for which $s < w < s_1$ (in this case, $I(s) \cup , I(s_1) = \Phi$).

The formalism given above assumes *finite* sets, which actually is a simplification of Peirce's general concept of semiosis. However, it has one important quality: It deals with the *Pragmatic Maxim* as an instrument of *sequencing* the semiosis, for stopping the search at one moment (that of the experiment) while preserving the possibility to continue the investigation. In fact, $M = (R\sim; r_1, r_2, r_3)$ as defined describes the finite model of the pragmatic procedure as it results from the Pragmatic Maxim. For any other semiotically framed semiotic conception, or for which a semiotic background can be established, a similar

model can be devised. Once such different models, $M_1, M_2, M_3...$ etc. are formally determined, the question of compatibility can be raised. This would be a matter of pragmatics applied to figure/ground theories, and of great importance for understanding the relation between fundamental and applied aspects of our theories.

NOTES

1. Morris, 1938 (1971), pp. 17-70.
2. In reference to Peirce' writings, the author will follow the standard procedure of giving volume and paragraph as they appear in *The Collected Papers* of *Charles Sanders Peirce.*
3. Hardwick, 1977, p. 83.
4. Hardwick, 1977, p. 110.
5. It is impossible not to mention Max Fisch's article "Alexander Bain and the Geneology of Pragmatism," *Journal of History of Ideas,* vol. XV, no. 3, June 1954, pp. 413-444. Professor Fisch was again generous and provided me with an annotated copy of his article. Needless to say that, while respecting the private nature of those notes, I felt privileged by the insight of the intellectual "laboratory" in which Professor Fisch meticulously distilled some of Peirce's finest spirits.
6. "Consider what effects, that might conceivably have practical bearings, we conceive the object of our conception to have. Then, our conception of these effects is the whole of our conception of the object," (5.402). Actually it reads: "Considerer quels sont les effets pratiques que nous pensons pouvoir être reproduits par l'objet de notre conception. La conception de tous ces effets est la conception complète de l'objet." Peirce completed the original statement of pragmatism in September 1877 aboard a steamer "a day or two before reaching Plymouth, nothing remaining to be done except to translate it to English," (5.526). It was published in *Revue Philosophique,* vol. VII (cf. 5.18).
7. Dewey was the first to notice Morris's aberrant use of Peirce's semiotic terms and his total misunderstanding of pragmaticism. "The misrepresentation in question consists in converting *Interpretant,* as used by Peirce, into a personal user or interpreter, etc.," Dewey, 43:4, p. 87. Morris's reply does not merit attention.
8. Rorty, 1980, pp. 719-738. Rorty actually changed his mind. Almost 20 years before the abovementioned address, he wrote the opposite about Peirce's foundation of pragmati(ci)sm; cf. R. Rorty, 1961, pp. 197-223.
9. Schiller, 1903.
10. James, 1901, p. VIII.
11. Brodsky, 1982, p. 311.
12. Aristoteles 1964, II.2770a7.
13. Ape1, 1980.
14. Parret, 1983, p. 6.
15. Parret, 1983, p. 7.
16. Nadin, 1980 (1983).
17. Gödel, 1931, p. 173-198.
18. I have to admit that it sounds like paraphrasing Schiller's remark, "[...] as many pragmatisms as there were pragmatists," Schiller 1927, p. 92. Actually, it contradicts a position of extreme relativity that proved non-productive from the very beginning. Here I introduce an identifying element: the characteristics of the semiotic/semiological theory to which the particular pragmatic thought considered relates.
19. For reasons that the analogy herein submitted should make quite evident, I would like to develop a topological approach to theories. Topological correspondence between theories might prove a very efficient means for the philosophy and the theory of science.
20. Parret, 1983, p. 89.
21. Saussure, 1968, pp. 253-254 (II R 22).
22. Rossi-Landi, 1968.
23. Barthes, 1964, pp. 213-220.
24. George Landow calls such essayists "elegant Jeremiahs" (which is also the title of his book on social criticism in the 19th and 20th centuries).
25. Prieto, 1979, p. 61.

26. Lovejoy, 1963.
27. Thayer, 1968.
28. Searle, 1980, p. 7.
29. Bruno, 1591, p. 90 (lines 14-17).
30. Leibniz, 1965, p. 204.
31. Leibniz, 1965, p. 192.
32. Burkhardt, 1980, p. 190.
33. Eco, 1976, pp. 121-125.
34. Eco 1984, p. 68.
35. "The present writer has done his best to work out the Stechiology, [...] Critic, and Methodeutik of the subject," (5.446) as a tripartite semiotic of the vague. The vague "[...] is the antithetical analogue of generality. [...] A sign [...] is objectively general in so far as it extends to the interpreter the privilege of carrying its determination further," (5.447). "A sign is objectively *vague* in so far as leaving its interpretation more or less indeterminate, it reserves for some other possible sign or experience the function of completing the determination," (5.505). A detailed study of Peirce's logic of the vague can be found in Nadin, 1980.
36. Nadin, 1981.
37. Gallie, 1952, p. 172, correctly observed the way in which "the activity of Inquiry" is defined in relation to the intrinsic nature of beliefs. "The thought to which Peirce returns again and again in his late *Pragmaticism* papers is that our beliefs, unless and until they are taken up--doubted, questioned, logically rearranged, tested and systematized--by the activity of Inquiry, are *inherently vague.*"
38. Gallie, 1952, p. 195.
39. Gallie, 1952, p. 197.
40. Dewey, 1920, p. 38.
41. Klaus, 1964, p. 20.
42. Within language-centered theories, many have attempted to provide methods to describe the relation between meaning (of words, sentences, texts) and use. It was in this context that some (e.g., Asa Kasher) warned: "Any sharp distinction between meaning and use in natural language is a grand illusion," (cf. Lange-Seidl, 1981, p. 53).
43. Stalnaker, 1981, p. 441. Wilfred Sellar's early work (1980), while not distinguishing sharply between pragmatics and semantics, makes a special case for the indecidability of languages. The relation *meaning-experience,* analyzed from an epistemological viewpoint, is far from being as uniform as logically based pragmatic theories assume.
44. Stalnaker, 1981, p. 447.
45. Eco 1984, pp. 41-42.
46. The two names are not brought together by accident. In "Chomsky's Revolution in Linguistics," 1974, pp. 2-33, Searle considers that Chomsky's conception of language does not pay attention to (actually does not make possible) communication aspects. In reply, Chomsky explained that connections between the structure of language and "its purpose" are not excluded from his conception. Obviously, the pragmatic dimensions in their respective conceptions are quite different.
47. Arbib and E. G. Manes, 1975, pp. 381-406.
48. Lawvere, 1963, pp. 869-872.

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