Toward the development of a semiotic culture at the interface of philosophy and science

(Working paper)

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Like many intellectual traditions and scientific disciplines, semiotics is represented by two types of discourse: the esoteric and the exoteric. The former is addressed to the restricted audience of those who are conversant with the history and theoretical subtleties of the various semiotic schools of thought; the latter is destined to inform a much wider audience of what we consider to be the basics of semiotics and to justify the legitimacy of its institutions and the usefulness of the results of the research it inspires. The gap between these two kinds of discourse must be kept in mind when addressing the issue of the development of semiotics. We have on the one hand what could be called "folk semiotics" and, on the other hand, a reflexive endeavor that may imply a great deal of epistemological uncertainty and anxiety, a discourse that can be characterized as "meta-semiotics". The following tentative points are to be understood from this latter perspective. It is suggested that semiotics should undergo a profound, radical transformation if it is to sustain its relevance in today's epistemological landscape.

- By their own admission, Saussure and Peirce failed to create what they conceived as a "science of signs". They did not use the term "science" in a metaphoric way. Their nineteenth century notion of science was distinct from mere philosophical speculations. They saw themselves as epistemological pioneers. Saussure, for instance, was keenly aware that there existed a neurological frontier still to be explored, which was relevant to what he called "sémiologie". He was conversant with Paul Broca's discoveries on aphasia and agraphia. He also made repeated allusions to the most sophisticated mathematics of his time as the proper tool for linguistic research (Hamilton's *quaternions*), insisting that the science of signs would eventually be based on algebra or on geometry. Both Peirce and Saussure were heirs to the Enlightenment and believed in scientific progress. They had also inherited some notions from a deeper philosophical past, which they attempted to

reinvent in view of their own visions through redefinitions and neologisms. Irrespective of their differences, they both believed that human could reach truth by following rational methods of inquiry and that scientific truths were ultimately established through the consensus of minds equally driven by reason. They belonged to two different intellectual traditions and cultures but their foresights merged in the horizon as bears witness the emergence of semiotics in the course of the twentieth century. Most contemporary semioticians tend to see themselves as continuators of either Peirce or Saussure while some eclectically claim to be heirs to this double legacy.

- Although it is difficult for a participant-observer to form a clear picture of the dynamic of the paradigms and institutions that map the epistemological territory within which he or she is located – historical and theoretical GPS do not yet exist – it could be claimed that within our lifetime the generalizing power of early semiotic discourses seduced some philosophers who saw there an opportunity to either escape the boundaries of their historical traditions or revitalize these traditions. Combining the notions of structure and *semiosis* provided the ground for new grand narratives which were inspired more by natural philosophy than evolutionary thinking. The impressive conceptual constructions derived from Viggo Brondal and Louis Hjelmslev in the wake of Saussure's seminal ideas, are essentially universalistic endeavors. Similarly, the epistemological ambition of Charles Morris's vision which was further orchestrated by Thomas Sebeok's organizational genius, led to the powerful biosemiotics movement of today. This is, of course, a gross simplification of very complex socio-epistemological processes. But such schematic mappings are convenient first steps toward the elaboration of an accurate representation of where we are today with respect to our remote and immediate intellectual pasts, and where we can go from where we are. It is also useful to reflect in this context on the kind of cognitive strategies that characterize today's semiotic research. What all the cognitive endeavors which have been mentioned above seem to have in common is that they promote a top-down approach. Models appear to be axiomatic and apodictic rather than truly hypothetical and heuristic. These models provide categories through which the

products of the various scientific disciplines are interpreted and recombined into conceptually unified rhapsodies. As such, this is neither useless nor detrimental as long as these interpretive processes are based upon the (necessarily selective) meta-analysis of the results of contemporary scientific knowledge. Scattered information is thus brought together and communicated among wider constituencies of scholars and students through the *lingua franca* of semiotics, even if this is done in the anecdotal form of ad hoc examples. Even if the discourse of semiotics could be proved to be merely a kind of mythical epic, a sort of saga of the Sign in its quest for a final *interpretant*, this discourse like all myths would nevertheless achieve a cognitive synthesis and convey vital information. This discourse could even have a higher function if, as Claude Lévi-Strauss claimed, the fundamental function of myths is to mediate contradictions, and, we could add, to reconcile disparate points of view and the apparently incompatible data they generate. The notion of sign appears sometimes as a convenient invention designed to bridge various levels of analysis which generate irreconcilable worldviews such as the quantum world of physics and the phenomenological world of human psychology and consciousness. However, in spite of its merits, semiotics understood and practiced in this manner cannot produce new knowledge because it does not create a horizon of ignorance. It redundantly tends to confirm what is already known because it has already been discovered through scientific methods of investigation.

- Can semiotics be conceived (and practiced) as an epistemological strategy able to produce new knowledge? Could a new semiotics emerge that would open new ways of inquiry and lead to counter-intuitive knowledge? Could this knowledge bring forth innovative applications? Could this be achieved by continuing "business as usual" and keeping exploiting century-old concepts and models at a time when the very notion of what a concept is becomes problematic for the cognitive sciences? Or is semiotics in need of redefining its basic notions and epistemological strategies in view of the contemporary knowledge transformations? Perhaps it would make sense to switch from a top-down to a bottom-up approach which would start from actual problems to be solved

analytically rather than follow the principle of authority to elaborate and classify from above the data constructed by a variety of heteroclite disciplines. The purpose of this paper is to build a case for a redefinition of the semiotic agenda and to advocate not only a radical questioning of the fundamental concepts that were inherited from pre-scientific philosophical traditions, but also to investigate the possibility of a re-founding of semiotics (possibly under any other name). Such a proactive (and provocative) approach would require a paradigmatic shift that probably only semioticians could accomplish because their interests are by nature bridging several disciplines and they are not, in principle, "kept hostage or prisoner", so to speak, of any paradigm. It is indeed conceptually difficult to freely move from one disciplinary culture to another or even from one school of thought to another within a single discipline without experiencing the trauma of a scientific revolution. Semioticians are trained to look over the fences, to raid data banks wherever they can be found, and use their currencies to feed their own discourse. The result is that interesting new perspectives are thus opened. The issue, though, is whether these new perspectives have any consequences beyond providing an esthetic feeling of harmonious but fallacious unity.

- Even if we ignore the long-standing debate concerning whether semiotics is a discipline, a science, a philosophy, a doctrine, a fashion, a cult, or a club, we must recognize that, in spite of its ambiguities and fuzziness, it is an epistemological endeavor of sort, a kind of distributed institution or organization that produces an abundant discourse which has some relevance among academics globally. It obviously involves a powerful intellectual motivation factor. But what is not clear is what kind of knowledge it delivers and what kind of horizon it creates. A reflection on semiotics as it stands today should lead to the following questions: is semiotics epistemologically sustainable? Could semiotics collapse both intellectually and institutionally? Under what conditions can semiotics preserve its social and epistemological relevance? There seem to be at least four conditions for semiotics to fulfill a vital cognitive and social function in the future: (i) a candid critical evaluation of the notion of sign or at least a serious reconsideration of its standard definitions; (ii) a refocusing of the analytical level from direct to

mediated phenomenological evidence with a view to accommodate a much wider range of scales; (iii) an expansion of its explanatory frame of reference to include evolutionary time; (iv) a deliberate agenda toward building a third culture between the humanities and the sciences through undertaking to solve actual problems rather than merely interpreting successes or failures "after the fact". This would require engaging the sciences at their cutting edge, exploiting new observation and experimentation technologies, and, most importantly, devising a new curriculum for the students who will embrace the new semiotics both as a cause and as a career.

- Redefinition or abandonment of the notion of sign. The source of this notion is located in religious thinking, probably in the over-extension of the adaptive so-called "theory of mind" as it evolved in very early humanity. The "stand-for" formula of the standard definition is trivial and does not adequately describe the greatest part of what we consider as specific semiotic behavior. In terms of the cognitive neurosciences it is difficult to show that a sign, whatever it may be, stands for something else in some capacity for someone. This sounds like philosophy or even literature to those who struggle to retrace and map micro, if not nano, neuro-chemical processes that semioticians indiscriminately label *semiosic* phenomena. It is not clear to them what kind of advantage there may be in such gross characterizations. Similarly, cultural "epidemiologists" have no use for the metaphors implied in the definitions of the sign that semiotics offers. They deal with dynamic algorithms which spread their sets of instructions from brains to brains and thus mold behavior both vertically and horizontally in vast populations. On the other hand, the Saussurean coupling of signifier and signified constitutes a problem rather than the beginning of a solution in any domain in which it is applied, including prominently in linguistics. Semioticians are perhaps the only minds who have the time and resources necessary for rethinking from the ground up the basic notions of semiotics in view of a serious, collective meta-analysis of the scientific literature as it develops in real time. It is urgent that semioticians create a terminology that enables them to bridge the communication gap between the two cultures.

- Emancipation from direct phenomenological evidence. Consciousness cannot be considered as a reliable source of prime evidence. No scientific knowledge can be based upon what we are directly aware of, if only because the focus of consciousness is very narrow (and limited) or very diffused (and imprecise). It is probably adaptive within a limited range of situations which allow for delayed decision making although it has been shown that decisions are made independently from conscious deliberations and often in spite of them. All scientific discoveries are counter-intuitive and occur by chance or method that pursues a blind calculus. Knowledge cannot be equated with understanding. Gut feelings consistently override rationality, then, decisions become rationalized retroactively. Semiotics should be able to conceptualize in a coherent manner such processes which are described across many disciplines in different technical languages.
- Providing explanations leading to prediction and control. Nothing is more crucial to human existence, and probably to any form of life, than the capacity to assign meanings (or comparative values) to contexts and events, and to act appropriately, that is, in an adaptive manner. Evolution, development, socialization, acculturation play their part in meaning-making. Understanding how these various factors relate to each other in real time and how they translate into actual individual and social existence, is a challenge that requires more than the knowledge resources provided by a single discipline. Actually, there is not a single problem that can be solved by a single discipline – except, of course, the artificial problems which are created by the disciplines themselves for the purpose of self-perpetuation. Most semioticians are well equipped to intellectually deal with complex situations because of their multi-disciplinary training or interests. But more importantly, the validity of explanations and their capacity of control depend on the time frame within which they are set. Semiotics cannot afford to ignore evolutionary time as an essential part of its frame of reference.
- Building a third culture. During the last two hundred years, philosophy and science have drifted away from each other. This phenomenon has been amply described and documented by sociologists and historians. C.P. Snow has

famously coined the "Two Cultures" slogan. Expectedly, the idea of a third culture through which our schizophrenic civilization could adapt to the new environment that it has created has emerged and semiotics might be one of the symptoms of the new cognitive adaptation that is called for. Epistemological movements and organizations have a dynamic of their own. They are ultimately selected by our cognitive environment. The resilience of semiotics and its polymorphous proliferation over the last century might indicate that, independently from the point of view that individuals may take on the academic and media sub-cultures it has spawned, semiotics has an evolutionary significance of its own that transcends individual commitments to it.

- In conclusion, these few critical remarks should not be construed as a brash and insensitive indictment of semiotics as it stands now. The last point should make it clear that there are enough ambiguities in the situation that has been tentatively described and probed in this working paper for keeping open a wide array of strategies in response to the problems which have been identified. Beyond the criticisms, what is suggested is an epistemologically optimist agenda.

Some references:

These are some of the works which stand in the background of this working paper. They are listed here rather than inserted within the text in order not to clutter the brief points I tried to make within the time of a symposium presentation.

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