Where Is Semiotics When You Need It Most?

Open any of today's publications on semiotics and you will wonder: Is semiotics an exercise in futility? I know, the authors—some of whom I know and even respect—will probably argue that what they write is so essential that the world literally come to an end without their semiotic genius. Well, let's take a look at the *Proceedings* of the conferences on semiotics and at the Program of the last International Association for Semiotic Studies (IASS) Congress (July 7-12, 2004 in Lyon). The founding members of the IASS (Greimas, Jakobson, Kristeva, Beneviste, Sebeok) had in mind the promotion of semiotic research in a scientific "esprit"! They intended …"promouvoir les recherches sémiotiques dans un esprit scientifique." This important function is specifically mentioned on the IASS website, which the "new" edition, maintained in Lund, Sweden, took over piecemeal. Even in its new form, the website, seen from the perspective of semiotics, is a rather telling example of how limited the contribution of semiotics is in providing new means and methods of communication and interaction. In the spirit of the dedication to a scientific agenda, Eco, Solomon Marcus, Pelc, Segre—to name a few— brought contributions that led to a better reputation of semiotic research. They, and a few others (Deledalle, Marty, the followers of the Stuttgart School, etc.) succeeded in producing works worthy of respect.

The hope of ascertaining semiotics as a vital component of thinking, communication, and scientific foundation of our age was high from congress to congress, from one meeting to another, from one publication to the many available today. But a closer look at what is produced under the guise of semiotics does not justify the initial optimism. The only significant aspect is that, despite their irrelevance, such events (and publication of the associated Proceedings) continue to take place!

Obviously, the statements made above require substantiation. Especially the appearance of a generational conflict or idealizing the past (the romantic notion of heroic beginnings) deserves to be discussed. (I shall return to this.) Allow me to proceed on three fronts:

1. A short presentation of today's major themes in the humanities, the sciences, and technology
2. A short historic account of developments in semiotics
3. A methodological perspective.

My intention is not to cast aspersion upon the work produced in the field in recent years, but rather to show that this is probably the time of the most interesting subjects for semiotics. This is the time of new opportunity for semiotics to make its case and to confirm its necessity. I am not writing reviews of the many articles I indirectly refer to; neither am I writing letters of evaluation for one or another author. My sole intention is to stimulate a discussion on the sad state of semiotics today.

Why is semiotics, with very few exceptions, in such a lamentable condition today? I do not promise solutions. This text is an expression of the love and passion I have for semiotics. That it comes from and "outsider" (i.e., a semiotician who remains unaffiliated) should not be seen as an attack against the semiotic establishment. I've no ax to grind (and no time to do so), and aspire to no glory and to no office (national or international). My respect to those who are dedicated to such work, although I am not sure that what semiotics needs most is an association or, rather, a different perspective. Now to the subject.

Major themes in the humanities, sciences, and technology

The most captivating mathematics (a subject I place in the humanities), the most brilliant attempts to understand language, the most dedicated effort to understand the human condition—these are themes impossible to even conceive of without acknowledging their semiotic foundation. Take only the most recent attempt to prove Fermat's Theorem. Fundamentally, the entire approach extends deep into the notion of representation. The very elaborate mathematical apparatus, at a level of abstraction that mathematics never reached before, makes the whole enterprise semiotically very relevant. The entire discussion that accompanied the presentation of the proof, expressions of doubt, commentaries, and attempts to explain the proof are all subjects for semiotics *par excellence*. The question that begs the attention of semioticians is, "How far from the initial mathematical statement (Fermat's Theorem) can the proof take place?" That is, how far can the representation of representation of representation *ad infinitum* extend the sign process before this becomes incoherent or incomprehensible? Fermat's short message in Latin ("*Cubem autem in duos cubos, etc.*") on his copy of a translation of Diophantes' *Arithmetica* is a theorem represented in words, i.e., in a "natural" language. Later (1637), this theorem was "translated" into mathematical formulae. And now, 370 years later, after computation changed the way we think, mathematicians say that in order to prove Fermat's theorem, we would have to prove a conjecture (Taniyama-Shinura) that deals with elliptic curves. Mathematicians are still not united in fully accepting the proof produced by Andrew Wiles (1995). No other discipline besides semiotics can help in this case. Would Charles Sanders Peirce have missed the opportunity to approach the subject? I doubt it.

My suggestion is that specialization (such as in the mathematics required to produce the proof) is a necessary condition for the progress o science. But not sufficient! Specialists ought to relate their discoveries to other fields, to build bridges. For this they need semiotics as an integral part of their way of thinking, and as a communication guide. We are enjoying a splendid attempt to integrate computation, genetics, anthropology, philosophy, and more into understanding how language emerged and diversified. Never before has language—in its general sense, not as in the language we speak—been as central to research as it is today. And since semiotics has, more often than not, been understood as the semiotics of language, it would be only natural to expect semioticians of all stripes to get involved in it. Genetics is, after all, the study of DNA "expression." The "sentences" of a genetic nature identify not only criminals in a court of law, but also genetic mechanisms related to our health. Would Ferdinand de

Saussure have missed the chance to collaborate with researchers who uncover the first "language genes"? Would Hjelmslev?

As speculative as the notion of the human condition is, we have finally arrived at the juncture where very good models of the human condition understood in its dynamics can be conceived, constructed, and tested. The underlying element here is actually what Hausdorff defined as the *zoon semiotikon*. Felix Hausdorff was a mathematician. Before him, many other scholars in the humanities considered the qualifier "semiotic" as co-extensive of being human. I will not extend my rhetorical question to a Leibniz, but I would definitely involve in my argumentation the active role of the Russian and Czech semioticians, as I would definitely argue that Roland Barthes, whom many of us had the chance to meet, would not have failed to be in the forefront of the semiotic research associated with the current attempts to define the human condition.

The major themes in the sciences beg no less for the contribution of semiotics

Computation is, for all practical purposes, semiotics at work. Artificial intelligence cannot be conceived without integrating semiotic concepts in its concrete implementations. The new forms of computation—genetic, quantum, DNA, etc.—are all forms of sign processes. The entire focus on the living, which affects the academic landscape, is ultimately a focus on the semiotic processes implicit in mechanisms of life. Check out the major research directions and you will discover that we are getting farther and farther away from the object level and heading towards a representational level. Despite this peculiarity, semioticians are so removed from the major scientific themes of the day that they don't even know that this is their last chance—ever!

I will finish this short exposition by stating that technology is shaped by questions that at first glance are semiotic in nature. Technological artifacts of all kind—from games to virtual reality labs in which new materials are conceived—rely upon various types of signs. They make sense only as new "languages of interaction." The global scale of life made an integrative approach necessary, but not in the sense discussed at the last Congress. Today we need a semiotic theory based on acknowledging diversity, while simultaneously providing means of expression, communication, and signification that pertain to the new scale. The GPS facility, accessible world wide, is the first global embodiment of semiotics in action. I do not, of course, expect semioticians to start writing articles on what kind of a sign a GPS indicator is, but rather to contribute semiotic concepts that will make the language of the system so much easier to understand and use.

As technology evolves, more and more automated systems guide our navigation—in libraries, on the worldwide web, on highways, etc. If Google had been the invention of semioticians, I could not reproach today's state of semiotics. And if the worldwide web, through which this publication (*SemiotiX*) is presented, had involved the least participation of semiotics, we would have had a web that is not syntactically driven. The inventor of the web (Tim Berners-Lee, awarded with knighthood for his work) is still

dreaming of a semantic stage. (For me, personally, only a pragmatically driven web makes real sense. But this is a different subject.)

Obviously, my short account is not exhaustive. The intention is only to indicate that semiotics has a very fertile ground to cultivate, if semioticians care to work at it. It is not too late! Allow me to submit to you a very recent example of what can be done: *The Semiotic Engineering of Human – Computer Interaction* is a book written by a computer science professor, Clarisse Sieckenius de Souza, published by MIT Press in 2005. We have here an example of a broad understanding of semiotics and of advanced issues of interaction. It is the proof, if anyone needed more proof, that so much can be done, provided that semiotics competence guides the effort.

A short historic account of developments in semiotics

The second point I want to bring up is that semiotics has had more than one chance in history to make its case and to make useful and sensible contributions. Semiotic seeds were planted early in all known cultures. Before the Greek word *simeiotika* was acknowledged, there was the Hebrew for sign: the Hebrew Torah makes reference to the lights in the firmament, Shabbat, the mark of Cain, the rainbow, the token of the covenant, all covering a broad understanding of the sign ("And this shall be a sign . . ."). The intention underlying these signs is pragmatic, guiding human activities that aided in establishing a stable body of knowledge. The same pragmatic propensity is obvious in the Chinese, the Indian, and the Arabic infatuation with the sign. In Western Europe, the sign emerged also in a context of an applied understanding: means of orientation, symptomatology, diagnosis/diagnostics. It was only very late—probably after Locke (1690)—that questions related to the way in which the mind operates prompted a focus on the sign as a means for understanding and sharing. With Lambert (1764), questions concerning the connection between thinking and things were articulated (questions of representation pertinent to cognition).

Preoccupation with what we call natural language rendered the notion of sign captive to an ideology that dominated semiotics for almost 200 years. Simply stated, this ideology is *logocratic*; i.e., it ascertains that every sign can be reduced to a language sign. Since language is the medium of formalization and abstraction, one can understand why this ideology went unchallenged until Charles Sanders Peirce. Roland Barthes thematized the totalitarian nature of this language. But only those who realize that totalitarian regimes rely upon the authority of language in order to consolidate their power will accept that even the sciences (physics, mathematics, chemistry, etc.) can at times consolidate their "power" through the "languages" they cultivate, to the detriment of alternative understandings in their object domain. Here again, semiotics could help debunk quite a number of dogmatic positions, or at least offer a guide for maintaining meaningful dialog. The entire stem cell debate could have taken a different path had competent semioticians brought their contribution to an understanding of stem cell "semiosis."

I'm not trying to rewrite the history of semiotics and associate its moments with the currency of a particular subject. After all, we are not so short of histories as we are short of better semiotics. What I attempt here is to point to a development that explains the linguistic bent of even some of the best works produced at the end of the last century. The brilliant literary accomplishments of the French School, as well as the powerful arguments of the Russian-Prague formalists and the Soviet school, and even the German and American elaborations of the 1980s and 1990s are pretty much driven by the same implicit understanding that natural language is paradigmatic. We will not be able to escape the deadly embrace of this limited understanding unless and until semioticians establish a fresh perspective. They should at least acknowledge that language is not always language. Let me explain: French and Japanese are of a different condition. And so is the phonetic writing of many western languages different from the synthetic Korean alphabet. Let's face it: the most interesting semiotics today seems to evolve in China, Korea, Japan, and India (the recipient of most of our outsourcing, which, by the way, is semiotic work: translations, word processing, scanning, record keeping, etc.).

These lines are an argument not only in favor of more semiotics of the visual or of multimedia, but also in favor of learning from the differences in various languages. What I do state is that, whether we like it or not, language ceased being the dominant means of knowledge acquisition, just as it ceased being the exclusive means of knowledge dissemination. Moreover, representation, in its broad sense, shapes human interaction to the extent that the semiotics of natural language ends up as an exercise in speculative rhetoric.

The fact that means of representation are simultaneously constitutive of our own thinking and acting is not yet reflected in the semiotic elaborations off our time. Some researchers rushed to establish a computational semiotics, not realizing that the fashionable qualifier "computational" means, after all, a semiotics of semiotics. What semiotics does not need is a new way of packaging the old, worn speculations.

A methodological perspective

This brings up the third and last aspect I listed above: What defines the semiotic method? Our concepts, whether semiotic or not, are a projection of our own reality. Therefore not to realize that concepts help us both to describe and to constitute the world is epistemologically suicidal. We look at the world empowered by our thinking and supported by our perceptions. But in the end, we never escape the epistemological circularity of our perspectives. A sign definition is as adequate as we can make it adequate. Something else is at stake: not the adequacy of semiotic concepts, but the ability to support, to guide practical experiences. The first integrated VLSI (i.e., integrated circuits), celebrated as one of the major accomplishments in the technology of the last 50 years, were projects in applied physics. Today, as we integrate millions of transistors in a chip, the entire effort is focused on REPRESENTATIONS. The most fascinating semiotic applications of recent years came not from semioticians, but from the people who intuitively practice it. Not only Nike and MacDonald's, but the whole

branding craze is semiotic in nature. Politics got involved in semiotics, and elections are won (or lost) on account of the appropriate (or inappropriate) semiotics.

What are semioticians doing? The old soup of psychoanalytic extraction is warmed up again and again; literary criticism is disguised as semiotic analysis; structuralist considerations are rewritten in semiotic jargon. To forever analyze popular culture (after Eco exhausted the theme), film, music, and new media might lead to texts published by editors as clueless as the writers, but not to the knowledge one has the legitimate right to expect from semiotics. Let us open a "story lab" instead of continuing the impotent discourse on narrativity. And let us provide semiotic methods for the human interactions of the future, not attempts to explain what these human actions were, which, due to the syntactic perspective assumed by most semioticians, are conjectures at best. (But if they insist on continuing, I suggest they try the pragmatic perspective.)

Have I given the impression that conditions were ideal in the "good old days" of the semiotic revival of the early 1970s? I hope not. Have I incited a conflict between succeeding generations of semioticians? Probably, in the sense that I still hold to the notion (Peircean, by the way) that without an ethics of terminology, each of us will be talking about and understanding something else. For this ethics to emerge, we also need an encompassing semiotic culture, more people who read primary sources, not approximate derivations, and more people with "original" ideas who read what has already been written on the topic. And give credit where credit is due. Yes, there was more scholarship before, and without the realization of the need for scholarship, some well-intended newcomers will rediscover "continents" that were already explored, and consequently miss their chance to contribute fresh thoughts.

The day when scholars and students of semiotics become the hottest commodity in the labor market and are traded like neurosurgeons, high-performance programmers, footballs players, movie stars, or animators, we will all know that semiotics finally made it. I am convinced that this can happen. But for this to come about, everyone involved in semiotics will have to think in a different way. Especially, we need to conceive of semiotic education in a different way. And we need to define a research agenda for semiotics above and beyond the speculative. Are we prepared for this?

Writing for a web publication, I expect to hear from you. This would be semiotics in action (if you know what I mean)!