

Partial Synopsis of a Work on How We Can Do Science Nowadays

Julio Pinto

Abstract: The present essay / paper proposes a discussion on undecidability, indetermination, and the tension between the logical-semiotic attributes *breadth* and *depth* inasmuch as they are applicable to scientific and artistic endeavors.

Key words: art and science, permediation, synechism.

And doubtlessly our time prefers the
image to the thing, the copy to the
original, representation to reality,
appearance to Being.
Ludwig Feuerbach¹

¹ This quotation from Feuerbach is in the Foreword to his *The Essence of Christianity*, as cited by Guy Débord in *La Societé du Spectacle*.

It is worthy of note that, in the 19th. century, Feuerbach had already noticed a phenomenon which we often refer to in order to characterize contemporary times: the fondness for non-things, i.e. , for the signs of objects rather than the objects themselves:

If this is the case, then, it might be necessary to rewrite the old saying in order to propose that “Two birds in the bush are worth one in hand”. Such a prophetic sentence is strongly pertinent to any description of the contemporary experience, which seems to gather the apocalyptic forces of the cognitive world into a vortex of simulacra whose only meaning is their face value, if we are to acknowledge what many voices have been crying out of late.

Underlying those cries is a postulate, very often accepted in a dogmatic manner: technology --- prosthesis *par excellence* --- is making us see the world differently. By technology, broadly speaking, I mean a medium, a system of representations that is able to describe an object and, as it portrays the object, it makes possible to modify it, and when it modifies the object, it undergoes transformation itself.

Indeed, the 20th. century generously produces manifestations in favor of technological advances or militantly against it. We are immediately reminded of McLuhan, with his speculations about the relationship between technology and worldviews and of poets and artists who, even before McLuhan, and faithful to their mission as heralds of the race and of their times, exalted the virtues of technology, machines, and progress. Irene Machado points out, for example, the feelings of wonder to which electricity gave rise in the minds of the Russian poet Mayakovsky

and the Canadian professor of literature Marshall McLuhan. For these two, she says, “electricity was the beginning of an era of mediations able to realign material and symbolic productive processes” (Machado, 2004, 46).²

Such a realignment of symbolic productive processes hinges on thought and suggests the notion of novelty or at least renewal. Built in such a view is the idea that technology produces an impact on the way we see the world, as well as on the language we use to talk about this worldview. Implicitly, we envision the possibility of “another history of culture founded on the constant realignments of cultural codes processed by technological mediations” (Machado, 2004, 47)

Forcibly, this continuous process of realigning cultural codes under constant technological processing generates cultural phenomena that are difficult to capture by any attempt to make them fit this or that genre. Technological mediations may in general be grouped under the comprehensive epithet of *means of communication* or *media*, which range from writing on paper to (almost) synchronous interactions on the Internet. An interesting feature of such media --- one which will be useful to our argument --- is their mutability. In a preface to the Brazilian translation of a book by Nicklas Luhmann, Ciro Marcondes Filho states:

There is a constant making and remaking, and any metaphysical trait of communicational continuity, permanence, or transcendence is abandoned. Thus, to talk about the media amounts to talking only of a generic physical basis which makes communication possible. Those are the colorful pieces of a kaleidoscope which make possible the production of ever new figures without any ontological basis and in constant mutation. ² (2005,9)

² All translations from Portuguese quotes by Machado, Marcondes, and Sodr  into English are mine.

Hence, communication is not the mere transmission or transfer of information from one pole to another. In the broadcasting type of communication, be it oral or written (the printed newspaper is also, in a way, a type of broadcast product, information issued unilaterally by a source), information was merely represented; that is, it was presented to a receiver in a linear, direct way, in the shape given it by the *Homo Typographicus* of Gutenberg's galaxy. This form is now being rapidly absorbed so that an apparently shapeless mosaic of disparate data is constructed in hybrid media which may be confused with their objects or which may be the objects themselves.

It is not surprising that McLuhan deemed technology a swiftly decentralizing but integrating force. No wonder he practically anticipated the replacement of a linear mode of transmission with a decentralizing simultaneous model (Machado, 2004, 50). Long before him, Mayakovsky proposed "poetry in different spaces, in semiotic regimes other than the word: that is, film and advertising". For him poetry expands well beyond the voice "to become a visual graphism, a slogan, performance, photography, moving image" (Machado, 2004, 47)

As a matter of fact, a plunge into the contemporary condition reveals this convergence and confirms the prophecies and projects of McLuhan and Mayakovsky. In the beginning of the 21st. century what becomes apparent is the progress of telecommunications and the growing emphasis --- voraciously adopted by society in general --- on interactivity and multimedialism, as Muniz Sodré (2004, 11) notes.

It is observable that the telecommunicational movement does not take place along a single line of advances, but through the constant rearrangement of media and simultaneous and often competitive improvements. Sodr  argues that

It is no longer a matter of linearly innovative discoveries, but the technological maturation of scientific advance, resulting in hybridization and routinization of work processes and technical resources already existent under other guises (telephone, television, computers) for some time. The old discursive formations (text, sound, images) also become hybrid and give rise to the appearance of what has been termed hypertext or hypermedia.² (Sodr , 2004, 13).

The constant ebb and tide, flux and reflux, arrangement and rearrangement, with an occasional novelty here and there disqualifies the pompous term *Information Revolution* which defenders of globalization use so rhetorically. It is, rather, a mutating flow of technology that did not presuppose and has not been processed on top of the collapse of a previous system --- which is what one would expect of a revolution. It is, on the contrary, a swiftly sliding process, a remarkable increment in the speed of displacement and distribution of people and goods in space which is indifferent to anything that is not the speed of its own process of distributing capital and messages, as Sodr  argues (2004, 13). Here is one possible definition of globalization, this new feature that characterizes the new times.

The emphasis is, therefore, on circulation, multimediatization, multicultural, multiart, multimessages. With audiovisual technologies, the world is not the previous object of a sign which represented it in some Griffithian narrative arrangement. Our experience is, rather, faced with free-floating non-representing images, images without

objects, pure simulacra. The world is now literally caught red-handed, as it were, and it is re-presented (iteratively presented) in a simulation of live experiences, whether in analog or digital mode. In the digital world, the simulacrum / simulation leads to what Sodr  dubs *presentative representation*, a process whereby “knowing and feeling enter a new realm, that of the possibility of its objectifying externalization, of its delegation to a machine” (2004, 17). Moreover, the borderline between what Paul Virilio calls potent and impotent images seems to become more and more blurred (Virilio, 1993). A potent image would be that photograph or drawing or what-have-you that refers the viewer to the actuality of the moment in which the image was captured. Newspaper photographs, vacation snapshots, and the like, are all potent images in that they recover a “real” referent, their object is/was something belonging to the realm of actuality. Such is the domain of Peirce’s second trichotomy of signs (icon, index, symbol), which seems to construe the object as being temporally positioned before its sign. By the same token, an impotent image would be something whose object is not prior to it. An advertisement, for example, will feature photographs of models and its construction is such that the viewer is not concerned with how that photograph was taken or when the shooting process took place. Its what-it-is-about is different: it is not reenacting the past. It is, on the contrary, telling you to do something because of them. Those pictures are truly prospective, rather than retrospective, in their causation: they point at the future realization of that which the picture’s seduction is alluding to; that is, the purchase of that garment or that automobile. Their future import is much more luring than their reference to a past event. They are impotent in the sense that they talk about the actualization of the presently non-actual. They are a kind of simulation: the man in the street sees himself driving that Bentley. The woman thinks of herself

as that stunning supermodel in those jeans. Impotency becomes the possibility of the impossible, instead of the impossibility of the possible.

Lastly,

All of this, associated with a kind of power that could be named *cybercracy* confirms the not-so-new hypothesis that contemporary (post-industrial) society is driven by mediatization, i.e., the tendency towards virtualization or telerealization of human relationships that is present in the articulation of multiple institutional functions and individual behavioral agendas with communication technologies. (Sodré, 2004, 21).

This is the backdrop of our contemporary times such as painted by many thinkers. Seen in this light, our representations are no longer purely symbolic, indexical, or iconic. Everything is hybrid, everything is an admixture of (im)possibilities. Given that much theoretical thinking takes place from within a paradigm which involves a notion of representation solidly rooted in the anteriority of the object vis-à-vis its sign(s), the question then arises whether semiotic can account for such a state of affairs as has been described herein.

What follows now is an attempt to respond to this challenge. However, rather than discussing the potential of semiotic theory from the standpoint of scientific or philosophical rigor by using a carefully sorted-out set of analytical categories, the rest of this paper will follow a poetic, maybe hybrid mode of thinking (by trying to suggest notions, rather than discoursing on them) and plunge into a highly personalized semiotic view – rather than a doctrine or organized *corpus* of rigorously organized knowledge – of what kind of language might be suitable to act as go-between, or a *permediator* , if you will, able to (partially, thank goodness) bridge the gaps of

information and knowledge that abound in these our times.³ For behind all the diagnosis in the previous pages lie the mechanisms of meaning production and the strategies of participation in the precariousness of communicational processes: the semiotic production of interpretant signs based on sign interpretants. More than to objects of signs, signs refer to other signs. This means that we cannot think without them. This means that we cannot know without signs either of objects or of simulations, either representations of other signs or self-representations.

At the risk of sounding simplistic, it must be remembered that science itself is linguistic, because knowing is thinking and to think is to use signs. To know is not merely to have information. More than thinking about *how to*, to know is to understand, to deal with causes, to agitate effects, to absorb objects. But, more than merely to understand, to know is to comprehend, comprise, embrace, to go into a phenomenon, to feel it, to leave it and look at it from afar, estrange it and look at it as a renewed being, *to produce a new object*, a peculiar being so that one may re-know it in a new cycle in order to find it strange again. This is science, but this is also art. I might add, in all actuality, that this seems to be the gist of firstness, secondness, and thirdness in their comprehensiveness.

Semiotic knowledge – which thinks about significant and communicating relationships between objects/subjects and subjects/objects – cannot be severed from a project in which *aesthesia* is marked as that which constitutes the first bridge between perceiving/perceived objects/subjects.⁴ The sensorial impact (I propose to call it *aesthetic*), the brute force of things and ideas of things --- which take their place in front of us, posing for us --- reaches us and makes us lose any semblance of

impartiality or distance, of immeasurable accuracy and unfailing trustworthiness that science likes to boast of.

Aesthesis is what art is all about. By the way, maybe *aesthesis* is what communication is all about. It presides over artistic/communicative endeavors and it does so strongly and rigorously. This means that the artistic gaze is as trustworthy as the scientific one, even though it may stress other, more diaphanous, objects. It may even bring about and create objects that had not been previously referred to. This underscores in the phenomena with which we deal a certain ineffability, something entirely new, a beauty, an end in and of itself, and not a means. This underlines the primacy of indetermination in any human activity. Hence, comprehension: that which takes understanding off its feet, the impact of the phenomenon and the indescribable that runs through its cracks in a single constellation of proximities that would never appear if the simple cerebral understanding were our only goal.

This is probably why some sociologists have stated that our era is one in which the aesthetization of experience is so prominent. Indeed, in most media products (if not all) the aesthetic element is first and foremost, as in advertisement and in journalism.

At any rate, here is, as Brazilian novelist Guimarães Rosa would have put it, the good description. Based on this traffic along the crossing pathways of technology, science, philosophy, communication, and the arts, new propositions, comprehensions, interfaces, contacts, tangents, beauties may crop up.

It is, therefore, no longer a matter of challenging this or that knowledge, nor the rapid discarding of the old and the known in an attitude in which a single direction would be the only option. It is, rather, a matter of unraveling threads to make them

visible and then reweave them into a new textual / textile design under a strangely familiar light in which everything, the actual, the virtual, distance, what is online and what is not, the audiovisual and the textual, everything converges into the experience of the diverse and the converse: art and science, science and art and the sign in between. Underlying this discussion one can readily perceive the idea of *synechism*, as advanced by Charles S. Peirce – the realm of uncertainty and indetermination, the very fabric of the Logic of Discovery. By way of *synechism* one may, who knows, postulate that Art is the Eros of Science.

References

DEBORD, Guy (1992). *La Societé du Spectacle*. Paris: Gallimard.

MACHADO, Irene (2004). Mídias como expansão dos códigos culturais: a história da cultura segundo McLuhan. *Contracampo: Revista do Programa de Pós-graduação em Comunicação, UFF*, v. 10 -11, 45-56.

MARCONDES FILHO, Ciro (2005). Prefácio. In: LUHMANN, Niklas. *A realidade dos meios de comunicação*. Trad. Ciro Marcondes Filho. São Paulo: Paulus.

PINTO, Julio (1989). *The reading of time*. Berlin: Mouton de Gruyter.

PINTO, Julio (2002) . *O Ruído e Outras Inutilidades*. Belo Horizonte: Autêntica.

SODRÉ, Muniz (2002). *Antropológica do espelho: uma teoria da comunicação linear e em rede*. Petrópolis, RJ: Vozes.

VIRILIO, Paul (1993). A imagem virtual mental e instrumental. In: PARENTE, André (org.). *Imagem-máquina: a era das tecnologias do virtual*. Rio de Janeiro: Editora 34, p. 127-132.

Julio Pinto

Ph.D., University of North Carolina (1985), post-doctoral work at the Portuguese Catholic University , Lisbon, 1992. Former Professor of Semiotics at the University of North Carolina at Chapel Hill, former chairman of the Graduate Program in Language and Literature of the Federal University of Minas Gerais, Brazil. Implemented the Graduate Program in Communication of the Federal University of Minas Gerais. At present is Chairman of the Graduate Program in Communication of the Pontifical Catholic University of Minas Gerais. Author of *The Reading of Time* (Berlin: Mouton de Gruyter), *1, 2, 3 da Semiótica* (Belo Horizonte: UFMG), *O Ruído e Outras Inutilidades* (Belo Horizonte: Autêntica). Has published widely in books and journals in Brazil and abroad. Areas of interest: philosophy of language, image theory, film and television, audiovisual poetics, and intersemiotic translation.