5. Media: The role of the individual versus the power of society. The last question I should like to ask concerns the misinterpretation of the interpretant for the interpreter which the distinction between "hot" and "cool" is bound to convey.

In fact, McLuhan and Peirce are very close to one another here: they both propose a "community": a "community of inquirers" in the case of Peirce, a "community of users" in the case of McLuhan, to which McLuhan gives the name of "Global Village." If there is a difference, it is a difference, not of range, but of place in the semiotic process. Both of them recognize the part played by the individual in semiosis in spite of the predominance of the environment or milieu.

I shall conclude the present chapter by saying that, in spite of many technological discrepancies, Peirce has proposed the best theory of signs which can fit McLuhan's theory of the media, not only because they are both pragmatic, but because they both reconcile continuity and discontinuity: social uniformity and individual creativity.

To the objection that no genius could have a place in the new electronic age, McLuhan answers that, because the media are the extensions of man, they are *ipso facto* the extensions of man's will, although man "never intends the cultural consequences of any extension of himself" (Stearn 1968: 315).

To the objection that the mass media uniformity of the Global Village created by the new technologies kills man's creativity, McLuhan answers that "there is more diversity, less conformity under a single roof in any family than there is with the thousands of families in the same city. The more you create village conditions, the more discontinuity and division and diversity" (Stearn 1968: 314), and, consequently, creativity.

Continuity and discontinuity are not incompatible for Peirce. They are two of Peirce's cosmological categories: synechism, the category of continuity, and tychism, the category of "happening" which is by definition "individual." But no happening can take place out of context: no creativity without continuity (Peirce 1931: 5.402 n. 2). The future of the semiotics of media is still "open."

tion of creative thought processes as they might appear in computer designs. (McLuhan 1964: 15-16)

McLuhan is committing here the same typical mistake of the whole Western philosophical tradition: to think in terms of quantity as if by adding media to media, extending the range of media or accelerating the pace of media, one could change the "pattern" conveyed by the media. Peirce himself worked on this line for a long time and tried hard to help induction to do the job by refining the theory of probabilities, until he gave up induction for abduction—quantity for quality. The choice between the two is not ad libitum. It is the duty of the semiotics of the media, to use abduction as a tool or method, instead of induction, for, as René Thom reminded us, "the theory of probabilities is fundamentally an imposture" (Thom 1995: 14).

4. The media as interpretants, hot and cool. McLuhan seems to avoid part of the consequences of determinism with the concepts of "hot" and "cool" which are obviously qualitative; more so than Peirce would admit, because they give the interpretant a psychological dimension and that Peirce is not ready to accept. According to Peirce, the interpretant is logical. It cannot be expressed in terms of "feeling"; on the contrary, it must be expressed in terms of "rules." The "interpretant" is formally a "sign." Just as the representamen is the sign of the sender, the interpretant is the sign of the receiver.

However, Peirce himself resorted to the concept of "interpretant" in another sense. When a semiosis is concluded, it either creates a new habit or reinforces or modifies an old one. In this case, Peirce says that the interpretant is no longer a sign, but a "logical final interpretant," which is another name for "habit," not as routine, but as incorporated and spontaneous rule.

Peirce would have agreed that this kind of interpretant could be "hot" or "cool," provided those qualities were logically defined. In McLuhan's theory, they depend on the "whimsy" of the author. Which McLuhan recognized in an interview:

Perhaps I should have set up polarities on media rigid and frigid. It's very difficult to have a structure of any sort without polarities, without tension. For example, the triangle is the most economic way of securing an upright object. Without polarities [...] there is no progression, no structure. [...] I must know how media are structured to discover what they are doing to me and my environment. *Media, hot* and *cool* are not classifications. They are structural forms. (Stearn 1968: 332)

Contrary to Peirce, McLuhan is not concerned with "systems," but with "systems development": "'Systems development' is a structural analysis of pressures and strains, the exact opposite of everything that has been meant by 'systems' in the past few centuries [...] It is concerned with the inner dynamics of the form" (Stearn 1968: 333). Is this not a good Peircean definition of the semiotics of the media?

ject of Hamilton). The "representamen" became in Peirce's theory of signs: Qualisign as First, Sinsign as Second, and Legisign as Third. The "legisign" is McLuhan's "structure."

According to McLuhan—in Peircean terms—media are vehicles of sinsigns. Although media may have a short range like the sense of touch and a long range like vision, especially when it is "extended" by television, the sinsign has the same logical nature or rather definition: it is a dyadic image which can only stand for an immediate object.

An image is a sinsign which refers to an immediate object. It is an indecomposable dyad:

·	1	2
R	R1	R2
0	O1	O2

Table 12.1. Image as a dyad

In other words, it has neither legisign nor interpretant. It is a mere happening which obeys no rule whatsoever and cannot be interpreted as such. There is no difference between the typographical world of Gutenberg and the world of the new media.

3. The medium as content. The representamens as sinsigns (or percepts, if one prefers) can only be interpreted, according to Peirce, within another semiosis, which by definition, must be triadic. It is a *sine qua non* condition of the possibility for media to carry any meaning or structure.

Most of the time, McLuhan speaks as if the medium was the content. He does not make any difference between the legisign (or "structure," which is the "type" of the linguists) and the sinsign (or "individual instances" or "occurrences," which is the "token" of the linguists).

Without denying the part played sociologically and psychologically by the media, the media cannot logically in any way be legisigns: ideas, thoughts, "designs or patterns" (McLuhan 1964: 16), or whatever, as McLuhan thinks they can:

The electric light is pure information. It is a medium without a message, as it were, unless it is used to spell out some verbal ad or name. This fact, characteristic of all media, means that the "content" of any medium is always another medium. The content of writing is speech, just as the written word is the content of print, and print is the content of the telegraph. If it is asked "What is the content of speech?," it is necessary to say, "It is an actual process of thought, which is in itself non-verbal." An abstract painting represents direct manifesta-

tling discovery. And consistency is a meaningless term to apply to an explorer. If he wanted to be consistent, he would stay home. (Stearn 1968: 23)

Peirce, on the contrary, as a logician explorer, although also "a scholarly nuisance and agitated protagonist," is consistent. Would he have conceded that Mc-Luhan's theories on the media are worth being semiotically examined? We are not sure, but, when we are back in the Cave, a few things can be said:

1. McLuhan's method is pragmatic. McLuhan can be considered an American pragmatist, be it only of the James tribe, since McLuhan is concerned with media as man's tools in a given context. His method is experimental and like James's more physiological, in the sense of Claude Bernard, than philosophical, in the sense of Charles S. Peirce.

On the contrary, experience implies, according to the same physiologists, the idea of a variation or of a disturbance intentionally introduced by the investigator in the conditions of the natural phenomena. [...] For that purpose, an organ of the living body is suppressed by section or ablation and, according to the disturbance produced in the entire organism or in a special function one can know the use of the suppressed organ. (Bernard 1965: 62-63)

McLuhan states his profession de foi in an interview in the following way:

Literally, Understanding Media is a kit of tools for analysis and perception. It is to begin an operation of discovery. It is not the completed work of discovery. It is intended for practical use. [...] A structural approach to a medium means studying its total operation, the milieu that it creates—the environment that the telephone or radio or movies or the motor car created. One would learn very little about the motor car by looking at it simply as a vehicle that carried people hither and thither. Without understanding the city changes, suburban creations, service changes—the environment it created—one would learn very little about the motor car. The car then has never really been studied structurally, as a form. (Stearn 1968: 316)

2. The medium as representamen. In the last quotation, two words have to be underlined: "perception" and "structural." Peirce would have agreed with McLuhan. Semiotically, the percept is what Peirce calls a "representamen." The representamen has, categorically organized, three ways of being:

l° the act of representing a (mediate) object of the mind, 2° the representation, or, to speak more properly, representamen, itself as an (immediate or vicarious) object exhibited to the mind; 3° the act by which the mind is conscious immediately of the representative object, and, through it, mediately of the remote object represented. (Hamilton 1863: 877)

This was not written by Peirce, but by William Hamilton from whom Peirce borrowed the idea of "representamen," together with the distinction between "immediate object" and "dynamic object" (the mediately conscious remote obtime before he could see things in the world above. At first he would most easily see shadows, then the reflections in water of men and everything else, and, finally, the things themselves. (Plato 1942: 208)

Plato is not satisfied with the things of the Cave and the media thanks to which they are known. He wants his prisoner to experience the world outside the Cave, not through sense data and belief or habit, but through discursive knowledge ( $\epsilon\pi\iota\sigma\tau\dot{\eta}\mu\eta$ ) and contemplation or Pure Thought ( $\nu\circ\hat{\nu}\varsigma$ ). Discursive knowledge whose object is mathematics is a necessary step towards the apprehension of the supreme Object: Pure Ideas.

Of course, McLuhan has nothing to do with the World Above. The ascent toward the World Above was too arduous for him and mathematics was of no help. He was content with metaphorical definitions such as "The spoken word: Flower of evil," "The written word: An eye for an ear," "The printed word: Architect of nationalism," "Photograph: The brothel-without-walls." Peirce, on the contrary, had the courage to get out of the Cave and painfully, step by step, to master mathematics and see the Sun.

However, Peirce was braver than Plato, and was courageous enough to go back to the Cave and liberate his fellow-prisoners, not by helping them to escape. but by introducing into the Cave the freedom of reasoning and of analyzing Being into the categories of the Cave: Possibility (Firstness) of Being "here-now-mine" (Jean Wahl) (Secondness), according to Conditional, i.e., contextuality of the Cave, laws (of inference) (Thirdness). Plato seems to describe Peirce's venture in the following passage of *The Republic*:

[...] suppose that he had again to take part with the prisoners there in the old contest of distinguishing between the shadows, while his sight was confused and before his eyes had got steady (and it might take them quite a considerable time to get used to the darkness), would not men laugh at him, and say that having gone up above he had come back with his sight ruined, so that it was not worthwhile even to try to go up? And do you not think that they would kill him who tried to release them and bear them up, if they could lay hands on him, and slay him? (Plato 1942: 209–210)

They tried and did not succeed. That is why we are here speaking of the "Semiotics of media." Semiotics is the story of Plato back in the Cave. Would he have been on speaking terms with McLuhan? Maybe. But he would have needed a "translator," as McLuhan puts it in another metaphor: "Media as translators." And, of course, the translator would have been Charles S. Peirce.

But the dialogue would not have been easy because McLuhan, although considered "a scholarly nuisance and agitated protagonist" (Stearn 1968: 23), was actually quite mild and modest. To any objection, he would answer:

I am an investigator. I make probes. I have no point of view. [...] The explorer is totally inconsistent. He never knows at what moment he will make some star-

the new media reach the things and bring them as images to any debating community. With the new media, in the "Global Village" which they have created, everything is at hand instantaneously.

Another great advantage proposed by this invention, adds Swift—an advantage which is even greater in McLuhan's system—is "that it would serve as an universal language to be understood in all civilised nations whose goods and utensils are generally of the same kind, or nearly resembling, so that their uses might easily be comprehended" (Swift 1939: 231).

Of course, the new system is more mechanistic and no less nominalistic, because things have been replaced by their images, more so because nobody knows if an image is the image of the thing people mean.

Are we better off with Plato's Cave? Plato describes it in *The Republic*, as follows:

Picture men in an underground cave-dwelling, with a long entrance reaching up towards the light along the whole width of the cave; in this they lie from their childhood, their legs and necks in chains, so that they stay where they are and look only in front of them, as the chain prevents their turning their heads round. Some way off, and higher up, a fire is burning behind them, and between the fire and the prisoners is a road on higher ground. Imagine a wall built along this road, like the screen which showmen have in front of the audience, over which they show the puppets.

Then picture also men carrying along this wall all kinds of articles which overtop it, statues of men and other creatures in stone and wood and other materials; naturally some of the carriers are speaking, others are silent. (Plato 1942: 207-210)

Of course, what they do see is only the shadows "of themselves or of each other" and of the "things carried along the wall," thrown by the fire on the wall of the cave opposite to them, but "they would suppose what they [see] to be the real things" and that the voices they hear, which are mere echoes from the opposite wall, do come from "the shadows passing before them." And "the only truth that such men would conceive would be the shadows of those manufactured articles" and of themselves and their co-prisoners.

In short, Plato's Cave, although far less comfortable than Balnibarbi's debating societies, has a place not only for things, but also for "sense data," with a way of feeling the latter (sensation:  $\alpha i\sigma\theta\eta\sigma\iota\zeta$ ) and believing the former (belief:  $\pi i\sigma\tau\iota\zeta$  or opinion which is a habit of thinking in a certain way:  $\delta\delta\xi\alpha$ ). The three elements being respectively in Peirce's semeiotic: Firstness (sense data), Secondness (things as object or subject matter of belief), and Thirdness (belief). McLuhan would agree, except that he is concerned neither with the "content" nor with any kind of epistemological problems.

Plato does not stop there:

Let us suppose one of them released, and forced suddenly to stand up and turn his head, and walk and look towards the light. [...] I fancy that he would need

the printed types rendered possible the linear development and so the symphony.

In short, typography was not only a technological invention, it was a product of technology. It was in itself a natural wealth, just like cotton, wood, or radio; and like any product, it shaped not only the intersensorial relations of the individuals, but also the collective models of interdependence.

In Understanding Media, McLuhan passes from the Gutenberg revolution to the electronic revolution with the new technologies of communication: radio, television, telephone, computers, which are similarly reshaping the civilization of the twenty-first century. Even reading is affected. We do not read any longer as before: "People don't actually read newspapers. They get into them every morning like a hot bath" (McLuhan 1964).

### The Medium Is the Message

McLuhan's thesis is "societies have been shaped more by the nature of the media by which men communicate than by the content of the communication." Hence the famous slogan "The Medium is the message" which is the title of the first chapter of *Understanding Media*. "The Medium is the message" means three things:

- 1. Each medium creates its own public, a public which is more interested in the medium as such than in the medium as a vehicle of information. Television has a public of what we might call "voyeurs," who look at it for the pleasure of looking, just as there were and—fortunately—still are readers who read for the pleasure of reading and people who talk for the pleasure of talking. New technologies have done no more than afford new instrumentalities; instead of reading for oneself, one can listen to a book read by somebody else on cassettes or compact discs, and instead of talking on the street corner, one can talk on the phone.
- 2. The message of the medium includes everything that the medium has made possible: "The message of the movie medium is that of transition from linear connections to configuration" (McLuhan 1964: 20).
- 3. The medium itself determines its own content. But all media do not possess the same power of communication. One medium is more suited than another to express an experience. Thus football matches come over better on television than on the radio.

### The Media as "Sensory Ratios" or Qualities

While the previous revolution—the Gutenberg revolution—was essentially a social revolution, the new electronic revolution is a human revolution, both "universal" or rather "global" and "individual" or rather "private." The "sensory ratios" have changed. We are passing from the instrumentalities of communication to the qualities of what is communicated, although McLuhan still thinks that the content is far less important than the medium of communication. The traditional media appealed essentially to the separate senses: books and paintings to sight,

and does not give us any direct clue to the question raised. Another section of it—probably the biggest and the only one which attracts the attention of the public—deals with the general problem of the influence (good or bad) of the media. Although more sociological than philosophical, the writings in this section cannot avoid touching the semiotic nature of the media, but most of the time they do it in a very simple and naïve way.

Negatively, the question of the influence of the media has driven most of the commentators in the sixties to the conclusion that, like the tongue of Esop, the media are neither good nor bad. One of them, a French scholar, Francis Balle, gives us the reason why it is so and raises at the same time the very semiotic question which we, as semioticians, are raising:

So-called mass-communication is still interpreted in mechanistic terms, as a simple and direct relation between transmitters and receivers of messages, according to the behavioristic schema stimulus-response or, if one prefers, according to the univocal relation cause-effect. As if, in the present state of knowledge, it were possible to give so summarily a definite explanation concerning the relations instituted by the media. (Balle 1983: 290-291)

### MARSHALL MCLUHAN

That the media are most of the time dealt with in mechanistic terms is exemplified by the writings of their Godfather: Marshall McLuhan Although McLuhan's propositions are very rarely convincingly supported, McLuhan was convincing enough to make of the media a new major scientific subject matter. Everybody knows the main books of McLuhan: The Mechanical Bride: Folklore of Industrial Man (1951), The Gutenberg Galaxy: The Making of Typographic Man (1962), Understanding Media: The Extensions of Man (1964), The Medium is the Massage: an Inventory of Effects (1967), and War and Peace in the Global Village (1968). The main propositions of McLuhan are listed below.

### The Media Are the Extensions of Man

McLuhan's theory is, properly speaking, a "technological determinism." Media are the technological extensions of man, i.e., everything which can extend man's (or woman's) information, action, and power, be it a suit, a car, a newspaper, a radio, or a TV program.

In The Gutenberg Galaxy, McLuhan tells the story of Western civilization in terms of the invention of printing. It is, according to him, the movable types which have made nationalism possible, because the mass production of linear types imposes uniformity and continuity, while handwritten messages encourage distinction or division and individualism. Because each Christian could afford to have his own printed copy, the Bible could be read in isolation and "individual revelation" became possible, and therefore Protestantism. Even music was affected by the invention of printing: while Gregorian music required repetition,

# Semeiotic and Communication: Peirce and McLuhan

MEDIA BETWEEN BALNIBARBI AND PLATO'S CAVE

Objects are unobservable, only relationships among objects are observable.

-McLuhan (in Stearn 1968: 301)

The sign can only represent the Object and tell about it. It cannot furnish acquaintance with or recognition of that Object.

-Peirce (2.231)

In Swift's journey to Balnibarbi, communication is by "things," not by "signs," because "signs" are "things." In Plato's Cave, behind the wall, statues are carried by people whom we do not see nor know. Are they slaves and, in consequence, not human beings? We do not know. What we do know is that we only see images of the statues. Which are the media? The statues or the images? Can we safely say: Images are the media? If we do, what is the nature of a statue? As the answer is outside the Cave, we have to turn away and get out. To find what? Mathematics and, further on, Ideas? What part can they play in helping us to answer the question of the nature of the media? That is the problem we shall try to solve with the help of the doorkeeper of the Cave: Charles S. Peirce.

I shall examine firstly the media in general, secondly Marshall McLuhan's media, thirdly I shall try to locate McLuhan's "Global Village." Where can we find it? In Balnibarbi or in Plato's Cave?

### THE MEDIA

The literature on the media is nowadays considerable. Does it answer the semiotic question of the nature of the media? It is the question we want to examine. A small section of the literature—however great it is—is purely technological point of all the interpretants, either sign-representamens or habits in a sign-process or semiosis. The Receiver or interpreter is the  $\tau o \pi o \varsigma$  of a Peircean semiosis (Representamen  $\rightarrow$  Interpretant  $\rightarrow$  Object), in a situation or context which is both psycho-physiological (Contact), social (Code), and singular (Context of a subject interpreting).

A genuine symbol is a symbol that has a general meaning. There are two kinds of degenerate symbols, the Singular Symbol whose Object is an existent individual, and which signifies only such characters as that individual may realize; and the Abstract Symbol, whose only object is a Character. (2.293)

## A PEIRCEAN READING OF JAKOBSON

As everybody knows, Jakobson's diagram of communication is the following:

Context

Sender

Message

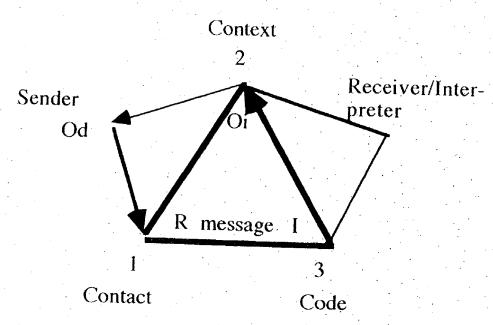
Receiver

Contact

Code

(Jakobson 1963: 214)

Jakobson's diagram can be translated into a Peircean graph without altering Jakobson's theses on linguistics and poetics. The Message is related by the Sender to an Object with which the Message has some *contact*. The Message reaches a Receiver who is in a *context* which may be different from that of the Sender. Accordingly, the *code* of the Sender and the Receiver being different, the Receiver may give the sign-representamen of the Sender a different immediate Object or meaning from that of the Sender, as shown in the following Peircean graph:



in which the dynamic object (Od) is the reverse of the object (O) and the immediate object (Oi), the obverse of the object (O); the interpreter is the meeting

The Protocol of the hierarchy of the three categories has nothing to do with the Protocol of degeneracy. It rests on the value of a "phaneron," whether triadic, dyadic, or monadic.

It is only when one tries to combine the two sets of concepts of the two protocols—which are, properly speaking, uncombinable—that ideas of the following kind can be entertained, such as "the degenerate sign is a deterioration of the triadic relation"; "hypoicons are the degenerate forms of icon"; "symbol has two degrees of degeneracy: icon (first degree), index (second degree)." None of these propositions is true.

- 1. A degenerate sign is *not* a deterioration of the triadic relation. It is a subdivision of a general relation, such as the definition of a triangle as a figure with three sides, which is a "genuine" triangle, and the isosceles triangle which is a "degenerate" case of the triangle as defined. The proper definition of "degeneracy" is "the condition of a lower stage or type of being obtained by more specification."
- 2. It is impossible to say that "icon and index are degenerate aspects of the symbol," because the idea of "degenerate" is opposed to the idea of "genuine," and the only genuine categories are First, Second, and Third.

In this context, as we have three genuine categories: Firstness, Secondness, and Thirdness, which are respectively constituted by one, two, and three "indecomposable" elements, Firstness has no degenerate case: Firstness is pure feeling (feeling before it is felt: life provides innumerable cases which you and I have experienced but which cannot be expressed); Secondness with its two elements is genuine as an Index which is Second of a Second, but degenerate as First, as an icon; Thirdness with its three elements is genuine as Third (Third of a Third), for instance the "structures" corresponding to the ideas of implication, law, generality, continuity, but degenerate in the second degree as a case of a structure in action, such as a given "process," hic et nunc, and also degenerate in the second degree as "Tertiality" or "Mentality," such as "the way something [a process, in the present case] is thought or represented" (1.534).

Here we should explain why one can think that there are "degenerate" cases of icon, although there are not. Peirce speaks of "hypoicons," which are respectively as a First an image, as a Second a diagram, and as a Third a metaphor. But this division is not what Peirce calls a "pre-scission," because it is not "ordered." Hypoicons are divided in the same manner as "discrimination" and "dissociation," although the idea of the categories stays the same: the idea of First is related to "feeling" (here image), the idea of Second to "action" (here diagram: diagram as drawn, not just thought), the idea of Third as "metaphor," i.e., as "mediation." What is important in Peirce is that a metaphor is not of the nature of an abstract idea, but is really linked with its object as a First, and only thought of as Third as a hypoicon.

It is only out of context and metaphorically that one could say with Peirce that

two aspects, consists merely in the continuity of being in passing from one apparition to another. Thus uniting, as the line of identity does, the natures of symbol, index, and icon, it is fitted for playing an extraordinary part in this system of representation. (4.448)

In other words, hierarchically speaking, an icon by itself cannot act, and consequently be an index, for an index by itself implies an icon, but in itself it has no meaning whatever; it is what it is by sheer chance. That is why a mental sign must be triadic: a symbol, which necessarily includes an index and an icon. One can think of an index, but, if the index is genuine, it cannot be, in any way conceivable, symbolic. The same thing may be said of the icon of a genuine First. It is a sheer possible relation of a possibility.

It is extremely difficult to maintain the delicate balance between the dualistic meanings of the semiological concepts of Saussure and the pragmatic and triadic meanings of the new protocols of Peirce: the protocol of hierarchy and the protocol of degeneracy.

And also the delicate balance between the protocols themselves. The fact that the combination of the two protocols has been made only shows that it would have been better not to do it, although the following passage might seem to imply Peirce's approval of the process:

A genuine symbol is a symbol that has a general meaning. There are two kinds of degenerate symbols, the Singular Symbol whose Object is an existent individual, and which signifies only such characters as that individual may realize; and the Abstract Symbol, whose only object is a Character (2.293)

Of course, the existent individual is not, properly speaking, an index, nor the character an icon.

Let us remember that the protocol of degeneracy is mathematical and the protocol of the hierarchy of categories is phenomenological or phaneroscopical.

		· · · · · · · · · · · · · · · · · · ·	
	1	2	3
Firstness	Genuine		
Representamen	Qualisign/Tone		
Secondness	Degenerate (first degree)	← Genuine	
Object	Icon	Index	
Thirdness	Degenerate (first degree)	Degenerate (second degree)	← Genuine
Interpretant	Rhema	Dicisign	Argument

Table 11.1. Protocol of degeneracy

mous in itself and does not require the presence of the referred object as an element of its definition. (Eco 1979: 179)

Although it is a fact that, for Peirce, the "referred object" does not enter in the definition of the sign, the reference to Saussure and Morris is confusing for all concerned.

Jakobson's "Relative Hierarchy" versus Peirce's Ordinal Hierarchy of the Classes of Signs

Why should we speak in a given case of an icon rather than of an index or a symbol? asks Jakobson. It is simply because of "the predominance of one of these factors over the others" (Jakobson 1965: 26), "the most perfect of signs" being, according to Peirce, those signs "in which the iconic, indicative, and symbolic characters are blended as equally as possible" (4.448).

Two remarks must be made here: On one hand, Jakobson is not speaking from a semiotic point of view, but from a literary or poetical point of view, and using Peircean terms in a loose way. It is understandable, for instance, that in a given sentence the iconic aspect may appear to "predominate" or actually does predominate from the point of view of the literary analysis of a poem. But in a semiotic analysis of the Peircean type, it cannot be said that the icon "predominates" over the two other aspects of the sign. On the other hand, "equally" in Peirce's quotation does not mean what Jakobson thinks it means. It means: "in equal proportions" if and only if the hierarchical order of each of the three aspects of the sign is respected, as Peirce shows immediately afterwards in the same paragraph: "Of this sort of signs the line of identity is an interesting example" (4.448).

"As a conventional sign, it is a symbol; and the symbolic character, when present in a sign, is of its nature *predominant* over the others" (4.448). The symbol (because of its triadic nature) is hierarchically "predominant" over the index (which is dyadic) and over the icon (which is monadic).

Let us consider the graph of identity between two portions, such as

— is identical with —

[A]s a symbol, [the graph] is of the nature of a law, and is therefore general, while here there must be an identification of individuals. This identification is effected not by the pure symbol, but by its replica which is a thing. The termination of one portion and the beginning of the next portion denote the same individual by virtue of a factual connexion, and that the closest possible; for both are points, and they are one and the same point. In this respect, therefore, the line of identity is of the nature of an index. To be sure, this does not affect the ordinary parts of a line of identity, but so soon as it is even conceived, [it is conceived] as composed of two portions, and it is only the factual junction of the replicas of these portions that makes them refer to the same individual. The line of identity is, moreover, in the highest degree iconic. For it appears as nothing but a continuum of dots, and the fact of the identity of a thing, seen under

From his reading of Peirce, Jakobson concluded (1) that the sign is divided into icons, indices, and symbols, and (2) that this division is "relative" in the ordinary sense of the word. In every sign there is a ratio of icon (resemblance), index (contiguity), and symbol (conventional rule)—"merely a difference in relative hierarchy within individual signs, since in each case one of these factors predominates over the others" (Jakobson 1966: 26-27).

Unfortunately, the definition of the sign and the conception of the "hierarchy" are wrong: there are three trichotomies and not one (i.e., nine relational aspects of a sign and not three), and the hierarchy is not relative, but ordered.

### The Conception of the Sign

The fact that Jakobson says that the "totality of signs" is divided into "icons, indices and symbols" (Jakobson 1966: 26) is a genuine misreading. According to Peirce, the division between "icons, indices and symbols" refers only to the sign in relation with its immediate object. It is true, however, that Peirce is not always very clear and that the following way of speaking is misleading:

Thus we may show the relation between the different kinds of signs by a brace, thus:

Signs: Indices Symbols

(2.282)

The misreading is aggravated when Jakobson introduces Peirce's icons, indices, and symbols between Saussure's signifier and signified.

It is not the absolute presence or absence of resemblance or contiguity between the signifier and the signified, nor the fact that the usual connection between these constituents would be of the order of the purely factual or the purely institutional, which is at the basis of the division of the totality of signs into icons, indices and symbols, but only the predominance of one of these factors over the others. (Jakobson 1966: 26)

Jakobson is here trying to explain Peirce in Saussurean terms, for example, the use of "signifier" and "signified," without mentioning the "interpretant." Is the signifier Peirce's representamen? Although Jakobson is right concerning the fact that the icon is related to similarity together with the emotional aspect of sign and that the index is related to contiguity together with the action or pragmatic aspect of sign, he does not mention the third relation with the object: the symbol, which is related in the same way to continuity together with the inferential aspect of sign.

We will later encounter the same problem with Umberto Eco's reading of Peirce:

I am thus asserting that the relationship between signifiant and signifié (or between sign-vehicle and significatum, or between sign and meaning) is autono-

## Semeiotic and Linguistics

### PEIRCE AND JAKOBSON

[Charles Sanders Peirce] est l'un des plus grands précurseurs de l'analyse structurale en linguistique. Peirce n'a pas seulement établi la nécessité de la sémiotique, il en a aussi esquissé les grandes lignes. Le jour où on se décidera à étudier soigneusement les idées de Peirce sur la théorie des signes, des signes linguistiques en particulier, on se rendra compte du précieux secours qu'elles apportent aux recherches sur les relations entre le langage et les autres systèmes de signes.

-Jakobson (1963: 27-28)

Philosophers are still divided concerning the importance of Peirce's philosophy. Nevertheless, if Peirce is accepted today everywhere, and especially in France, it is thanks to the linguists who followed Jakobson's misreading of Peirce. The cross-reading I propose here is not intended as a criticism of Jakobson, but as a kind of clarification of Peirce. The fact that I worked on the French text of Jakobson does not affect the argument.\*

We shall deal respectively with Jakobson's reading of Peirce and with a possible Peircean reading of Jakobson.

### JAKOBSON'S READING OF PEIRCE

In the fifties, Roman Jakobson discovered Peirce and wrote that Peirce was one of the greatest forerunners of structural analysis in linguistics. He said that Peirce had not only proved the necessity of semiotics, but stated the outlines of its theory. And he predicted that, when Peirce's ideas on the theory of signs, and of linguistic signs in particular, were thoroughly studied, the researches on the relations between language and the other systems of signs would be far easier.

\* The Jakobsonian material I used is: Roman Jakobson, Essais de linguistique générale (Paris: Éditions de Minuit, 1963); Roman Jakobson, "A la recherche de l'essence du langage" in Problèmes du langage (Paris: Gallimard, 1966); "Roman Jakobson," L'Arc, special issue n° 60 (1975). The translations from the French otherwise mentioned are mine.

"linguistic signs." Linguistic signs, says Dewey, which constitute thought and belong to thirdness, do not refer, by themselves, to things. This reference to things is the affair of "indexical signs" which pertain to secondness. Dewey quotes Peirce as follows:

We are constantly bumping up against hard fact. [...] There can be no resistance without effort; there can be no effort without resistance. They are only two ways of describing the same experience. It is a double consciousness. [...] as the consciousness itself is two-sided, so it also has two varieties; namely, action, where our modification of other things is more prominent than their reaction on us, and perception, where their effect on us is overwhelmingly greater than our effect on them. And this notion of being such as other things make us, is such a prominent part of our life that we conceive other things also to exist by virtue of their reactions against each other. The idea of other, of not, becomes a very pivot of thought. To this element we give the name of Secondness. (1.324)

Consequently, the interpretant is a sign, and as such, triadic: third (final or logical), second (dynamic or energetic), first (immediate or affective). As such, the sign does not require a faculty of thought. Thinking is a system of signs (thirdness) which action (secondness) binds to things, not, however, in themselves, but experienced qualitatively in the unity of a global situation (firstness).

Morris takes as reference a Peirce divested of his mentalism. By doing so, he divests him of his semiotics. What Morris did not see is that Peirce's theory, although biological and social, is not psychological, but logical and, if the term be allowed, "cosmic," as Dewey rightly remarks: "The organism is an integrated part of the world in which habits form and operate" (Dewey 1946: 94).

I shall conclude with a text by Peirce which I have already quoted in another context (ch. 3) and that Dewey quotes in his paper of 1946, in which the notion of interpreter as an individual separated from society and the cosmos is authoritatively rejected:

When we come to study the great principle of continuity and see how all is fluid and every point partakes the being of every other, it will appear that individualism and falsity are one and the same. Meantime, we know that man is not whole as long as he is single, that he is essentially a possible member of society. Especially, one man's experience is nothing if it stands alone [...] It is not "my" experience, but "our" experience that has to be thought of, and this "us" has indefinite possibilities. (5.402 n. 2, in Dewey 1946: 94)

position to react to the object designated as if it had certain observable properties; (2) To the appraisive dimension corresponds a disposition to act toward a designated object as if it had properties enabling to satisfy or not satisfy the impulse; (3) To the prescriptive dimension corresponds a disposition to act in a certain way with regard to the designated object. This tridimensionality of the interpretant has nothing triadic about it either. It is difficult to see how these three sorts of interpretants could be made to correspond with the immediate, dynamic, and final interpretants, even if one called them affective, energetic, and logical, which is not the case with Morris. (It should be remembered that the trilogy of the three interpretants: affective, energetic, and logical is not hierarchized. In other words it is not an ordered series.) In fact, Morris expressly rejects triadicity. "Peirce," he says, "always connects processes of mediation, sign-processes, and mental processes. This means that he would not accept any behavioral psychology which attempted to reduce behavior to two-term relations between stimuli and responses" (337). Some behaviorists, he remarks further on, have tried to introduce a third factor, "a 'reinforcing' state of affairs in which a need of the animal is reduced or satisfied" (338).

Even if the process is triadic in this case, this addition cannot satisfy either Peirce or the behaviorist. The behaviorist cannot accept the idea that the conditioned stimulus is a sign—and still less so, in that there are other processes of mediation than conditioning, for instance, the eye or the retinal image. Hence, says Morris, it is preferable to restrict sign-processes "to those in which the factor of mediation is an interpretant" (338).

Peirce would certainly not be content with "reinforcement" as the third term of semiosis, nor with Morris's interpretant. For Morris, the interpretant cannot be a sign:

- 1. because if it were, one would constantly encounter the empirical question of whether signs always generate new signs;
- 2. because if it were, a circularity would be introduced in the (theoretical) definition of the sign;
- 3. because by emphasizing behavior rather than thought, one "avoids the extension of sign-processes to inorganic nature" and this "does not require that all behavior involves sign phenomena" (339).

Morris's semiotics is thus in reality a distortion of that of Peirce. The final logical interpretant is admittedly a habit for Peirce, but it is not a disposition of the interpreter. Morris defines "disposition" as "[t]he state of an organism at a given time such that under certain additional conditions a given response takes place" (361)—the interpreter being "an organism for which something is a sign" and the interpretant "the disposition in an interpreter to respond, because of a sign, by response-sequences of some behavior-family" (363).

For Peirce, habit is a rule of action: it is logical (it is not without reason that he calls it "logical interpretant"). Habit is third and because it is third it presupposes an existing second: "the sheriff's arm," as he says, without which the law could not be. Dewey insists on this point in his critique of Morris, which concerns

by the sign is the interpretant which refers the sign or representamen to an object.

### Signification

In discussing the problem of signification, Morris apparently adopts a triadic point of view which could be Peircean, but is in fact inspired by Mead and his analysis of an act. According to Mead, the analysis enables one to distinguish four levels of the act: that of the impulse, that of perception, that of manipulation, and that of consummation.

Morris summarizes Mead as follows:

[...] if an impulse (as a disposition to a certain kind of action) is given, the resulting action has three phases: the perceptual, the manipulatory, and the consummatory. The organism must perceive the relevant features of the environment in which it is to act; it must behave toward these objects in a way relevant to the satisfaction of its impulse; and if all goes well, it then attains the phase of activity which is the consummation of the act. (403-404)

In consequence, Morris goes on, if signs are treated behaviorally (which is apparently what he intends to do), their significations are related to these three aspects of action and so exhibit tridimensionality. A sign is:

- 1. designative insofar as it signifies observable properties of the environment or of the actor;
- 2. appraisive insofar as it signifies the consummatory properties of some object or situation:
- 3. prescriptive insofar as it signifies how the object or situation is to be reacted to so as to satisfy the governing impulse.

It will be noticed that all this is a matter only of the action-object relation. Morris points out that "Mead also speaks of the distance properties of the object, its manipulatory properties, and its consummatory properties" (404). As regards the "formal signs" (logical, grammatical, or structural signs: "or," parentheses, adverbial endings such as "-ly," which Morris had called "formators"), they constitute the fourth dimension of signification: the "formative signification," the other dimensions being the designative, appraisive, and prescriptive significations. Morris wonders how to integrate this fourth dimension in a tridimensional semiotics: by making "formal signs" a particular class of lexical signs, like metalinguistic signs, for instance? The question would not have to be asked if his semiotics was really three-dimensional, in other words, if there were a place for the legisign (410-411).

Interpretant

The interpretant is not a sign for Morris. It is a disposition to react in a certain way because of a sign. There are three sorts of interpretants, as there are three dimensions of signification: (1) To the designative dimension corresponds a dis-

### **MORRIS'S SEMIOTICS**

#### Seniiosis

[Semiosis] is a five-term relation: v, w, x, y, z, in which v sets up in w the disposition to react in a certain kind of x, to a certain kind of object y (not then acting as a stimulus) under certain conditions z:

v = signs

w = interpreters

x = interpretants (not necessarily with a "subjective" connotation)

y = meanings

z = contexts (401-402)

Morris recognizes that this formulation is behavioristic and valid for all organisms—the case of the human organism is particular only by the fact of its capacity for awareness of its semiotic behavior (401–402).

### Sign

The two definitions of the sign given by Morris in Signs, Language and Behavior are behavioristic:

- 1. "If something, A, controls behavior towards a goal in a way similar to (but not necessarily identical with) the way something else, B, would control behavior with respect to that goal in a situation in which it were observed, then A is a sign" (84).
- 2. "If anything, A, is a preparatory-stimulus which in the absence of stimulus-objects initiating response-sequences of a certain behavior-family causes a disposition in some organism to respond under certain conditions by response-sequences of this behavior-family, then A is a sign" (87).

Presence or absence of "dynamical" objects? The paradigm of knowledge is, for Morris as for Mead, "presentationistic." Knowledge can only be direct, knowledge by signs is a substitute: "If we present a distant planet, its matter is presented as we would actually sense it if we could place our hands upon it" (Mead: 20).

### Signification

### Preliminary Remarks: "Signification" and "Meaning"

"Signification" by Morris is not used in the ordinary sense of the term. English has the privilege of possessing at least two terms: "signification" and "meaning." What we could say in French to explain what signification means is that it is not synonymous with sens. The question of "sense" has nothing to do with semiotics, neither in Morris nor in Peirce. Signification is, for Morris, the significatum, i.e., "The conditions such that whatever meets these conditions is a denotatum of a given sign" (366). This is not expressible in Peircean terms, for what is "signified"

things without describing them; so are the letters on a geometrical diagram, and the subscript numbers which in algebra distinguish one value from another without saying what those values are. (3.361)

Indices need symbols to say something, although symbols which are generals, are in themselves empty:

Without [symbols] there would be no generality in the statements, for they are the only general signs; and generality is essential to reasoning. [...] But [symbols] alone do not state what is the subject of discourse; and this can, in fact, not be described in general terms; it can only be indicated. The actual world cannot be distinguished from a world of imagination by any description. Whence the need of pronouns and indices, and the more complicated the subject the greater need of them. (3.363)

Although logicians are content with these two relations to the object, Peirce goes further in his analysis, showing that by themselves these two relations are insufficient for reasoning. In order to reason, we need a third type of relation, which appears in the form of logical diagrams and sensorial images (mostly visual). These diagrams and images Peirce calls icons:

With these two kinds of signs alone (symbols and indices) any proposition can be expressed; but it cannot be reasoned upon, for reasoning consists in the observation that where certain relations subsist certain others are found, and it accordingly requires the exhibition of the relations reasoned within an icon. (3.363)

### **MORRIS'S PRAGMATICS**

Morris's paradigm of knowledge and experience is, according to him, reductionist: the only knowable and experienceable objects are spatio-temporal. Morris states his position explicitly: the semiotics developed in Signs, Language and Behavior (Morris 1971: 75–398) does not take Peirce as its point of departure. It is based on the quite behavioristic theories of George H. Mead (1863–1931). (I have not found one single reference to Peirce in the complete works of Mead.) Later, says Morris, he studied more seriously "Peirce, Ogden and Richards, Russell and Carnap, and still later, Tolman and Hull' (Morris 1971: 445). Tolman and Hull are behaviorists; Russell and Carnap can be classified as logical empiricists with an atomistic tendency. Peirce, Ogden, and Richards remain.

Morris was convinced that he was faithful to Peirce. When Dewey accused him of misrepresenting Peirce's thought, in particular by substituting the interpreter for the interpretant, Morris obstinately insisted that he was faithful to Peirce—quoting, notably, 5.470-493, in which Peirce discusses the logical interpretant. In actual fact, Morris's reading of Peirce is behavioristic.

# Semeiotic and Semiotics

### PEIRCE AND MORRIS

Peirce's account of signs is embedded in the metaphysics of his categories [...] and in the metaphysics of his view of mind. These are not secure bases for a scientific semiotics. But Peirce himself, in his rejection of the older Cartesian mentalism [...] has at least indicated a possible direction of advance towards a more adequate account of sign phenomena.

-Morris (1971: 340)

The present treatment [by Morris] follows Peirce's emphasis upon behavior rather than his more mentalistic formulations.

-Morris (1971: 339)

Did Morris read Peirce? The question I am asking is not meant to be a criticism of Morris. It only implies that I take Peirce as my point of departure and will judge Morris with reference to his fidelity to Peirce, if he read Peirce.

Morris's tripartition: syntactics, semantics, and pragmatics, is undeniably Peircean. The separations between these three classes are not. Pragmatics is continuistic.

### PEIRCE'S PRAGMATICS

According to Peirce, the three relations of any sign to its possible object are respectively iconic, indexical, and symbolic. We shall first examine that which is apparently the easiest to understand: the index, of which the index finger of the hand is the type:

The index asserts nothing; it only says "There!" It takes hold of our eyes, as it were, and forcibly directs them to a particular object, and there it stops. Demonstrative and relative pronouns are nearly pure indices, because they denote

But Saussure thought otherwise because although "the sentence is the ideal type of syntagm [...] it belongs to speaking not to language" (124). Does the sentence belong to language or to speech?

A rather widely held theory makes sentences the concrete units of language: we speak only in sentences and subsequently single out the words. But to what extent does the sentence belong to language? If it belongs to speaking, the sentence cannot pass for the linguistic unit. If we picture to ourselves in their totality the sentences that could be uttered, their most striking characteristic is that in no way do they resemble each other [...] In sentences [...] diversity is dominant, and when we look for the link that bridges their diversity, again we find, without having looked for it, the word with its grammatical characteristics and thus fall back into the same difficulties as before. (106)

The discussion can be summed up in the following table in which the Saussurean terms which might be equivalent to the Peircean semiotic terms are given instead of the latter. The empty spaces indicate either that Saussurean analysis does not enable us to make the corresponding distinctions, or that Saussure did not think this necessary.

	1	2	3
R	Sound-image	Material element (Support)	Signifier
O "Substance"			
I "Value"	Signified		

Table 9.4. Peircean classification of Saussurean concepts

- R1—Peirce's qualisign: The sound-image is "not the material sound, a purely physical thing, but the psychological imprint of the sound, the impression it makes on our senses" (66). "The sound-image is par excellence the natural representation of the word as a fact of potential language outside any actual use of it in speaking" (66 n. 1).
- R2—Peirce's sinsign: "All our conventional values have the characteristic of not being confused with the tangible element which supports them" (118).
- R3—Peirce's legisign: The linguistic signifier is incorporeal (118). It is "unmotivated," i.e., "arbitrary in that it actually has no natural connexion with the signified" (69), "collective habit," "convention," "fixed by rule" (66).
- 01-Peirce's icon: Nothing corresponds to Peirce's icon in Saussure.
- 02—Peirce's index: The support can play the part of an index, but, in that case, Saussure does not consider it as a sign, because it is not linguistic.
- 03-Peirce's symbol: The "symbol" is "natural" for Saussure.
- 11-Peirce's rhema: A word which is the link that bridges the diversity of sentences (106).
- I2—Peirce's dicisign (such as a sentence): The sentence cannot pass for the linguistic sign: it does not belong to language (106).
- 13-Peirce's argument: Nothing corresponds to Peirce's argument in Saussure

in writing; the letter t, for example, may be written in different ways so long as it is not liable to be confused with t or d. "The means by which the sign is produced is completely unimportant [...] Whether 1 make the letters in white or black, raised or engraved, with pen or chisel—all this is of no importance, with respect to their signification" (120).

#### THE TRICHOTOMY OF THE OBJECT

Saussurean semiology, which is dyadic, maintains that the linguistic sign unites, not "a thing and a name," but "a concept and a "sound-image" (66), the concept playing the role of an interpretant. However, Saussure does encounter Peirce's index and symbol.

Difference and Index "The value of letters is purely negative and differential. The same person can write t in different ways:

t At

The only requirement is that the sign for t not be confused in his script with the signs used for l, d, etc." (119).

We have already agreed on that in another context, and Peirce would not object. But the way of writing can be an index in another field of interpretants; here, for instance, in graphology. The reasons why Saussure is not interested in the different ways of writing t are, first, that a sign does not unite a word and a thing, and, second, that what Saussure is describing is the *linguistic* sign.

Symbol and Nature If Saussure had used the word "symbol," symbol would have been only another term for legisign, and for the same reasons. But as he used the words as they are used in everyday language, Saussure could not use the word "symbol" to designate the linguistic sign because "one characteristic of the symbol is that it is never wholly arbitrary; it is not empty, for there is the rudiment of a natural bond between the signifier and the signified" (68). "The symbol of justice, a pair of scales, could not be replaced by just another symbol, such as a chariot." It is because they have lost their "natural bond" that onomatopoeia and interjections are no longer symbols, but linguistic signs (124).

#### THE TRICHOTOMY OF THE INTERPRETANT

Saussure seems to limit the interpretant to the concept of the signified and thus to the rhema. However, the opposition between syntagmatic and associative relations (122-127) could have been a way of distinguishing proposition (dicisign) from concept and argument.

The syntagmatic relation is in praesentia. It is based on two or more terms that occur in an effective series. Against this, the associative relation unites terms in absentia in a potential mnemonic series. (123)

### The Three Trichotomies of the Sign

THE TRICHOTOMY OF THE REPRESENTAMEN

Signifier, Qualisign, and Sinsign For Saussure, as we have seen, "the linguistic sign unites [...] a concept and a sound-image" (98), a signified and a signifier (66). Now the sound-image "is not the material sound, a purely physical thing, but the psychological imprint of the sound, the impression it makes on our senses" (66). The sound-image could thus be a (psychical) qualisign of which the material sound would be the sinsign. We shall see that, in the case of this particular sign, the linguistic sign, a given sound-image (which is in any case a sinsign) is the replica of a legisign.

Arbitrary Sign and Legisign Saussure defines the arbitrary sign when he asks if modes of expression like mime are not the affair of semiology:

Every means of expression used in society is based, in principle, on collective behavior (in French *habitude*), or what amounts to the same thing,—on convention. Polite formulas, for instance, though often imbued with a certain natural expressiveness [...] are nonetheless fixed by rule; it is this rule and not the intrinsic value of the gestures that obliges one to use them. (67-68)

The global sign (signifier-signified) is thus a legisign, "a law which is a sign" (2.246).

**Replica** "The signs that make up language are not abstractions, but real objects" (102).

Linguistic signs, though basically psychical, are not abstractions; associations which bear the stamp of collective approval—and which, added together, constitute language—are realities that have their seat in the brain. Besides, linguistic signs are tangible (14)

Signs are not abstractions. What Saussure means is that the signifier is nothing without the signified and *vice versa*, as we have already noted. Peirce also insists on the fact that the representamen, the object, and the interpretant by themselves are not signs. It is their conjunction which constitutes the sign.

But what is concrete and tangible is not the linguistic sign, but its replica. Saussure, like Peirce, makes a distinction between the legisign and the replica:

It is impossible for sound alone, a material element, to belong to language [...] All our conventional values have the characteristic of not being confused with the tangible element which supports them. For instance, it is not the metal in a piece of money that fixes its value. (118)

The linguistic signifier is incorporeal (118), i.e., in Peircean terms a "legisign." For instance, says Saussure, "in French, general use of a dorsal r does not prevent many speakers from using a tongue-tip trill; language is not in the least disturbed by it; language requires only that the sound be different and not  $[\ldots]$  that it have an invariable quality" (119). An identical state of affairs is observable

interdependent whole that one must start and through analysis obtain its elements" (113). Peirce, for his part, distinguishes three types of systems of signs according to whether the signs are considered in themselves (repertory), in reference to their objects (area), or in reference to their interpretants (field). It will be noticed that, for Peirce, the repertory of representamens, the area of objects, and the field of interpretants are not semiotically separable.

#### VALUE AND INTERPRETANT

Saussure distinguishes between value and signification. The definition he gives of value in its relation to signification makes it a good equivalent of interpretant. Signification is the counterpart of the sound-image (115).

The value of a word is not limited to the possibility of "exchanging" it for an idea or another word. It comes from the fact that it belongs to a system, or more exactly here to a field of interpretants.

Its value is [...] not fixed so long as one simply states that it can be 'exchanged' for a given concept, i.e. that it has this or that signification: one must also compare it with similar values [...] Its content is really fixed only by the concurrence of everything that exists outside it. (115)

Thus mutton and sheep have the same meaning, but not the same value, the reason being that English has in its repertory two words for the same animal: sheep and mutton, while French has only one. In English, it is the repertory of signs which will determine the signification, whereas in French it is the field of interpretants. Saussure neglects the area of objects, as we shall see.

Repertory of representamens	Area of objects	Field of interpretants
Sheep	live	any other meaning
Mutton	meat	food

Table 9.3. Value and interpretant

In the same way, there are two signs or representamens in the German and English repertories (*meten* and *vermeten*; to rent and to let) which correspond to only one sign-representamen in the French repertory: louer, the signification being supplied by the field of interpretants or, if one prefers, the context (cf. 116). Similar remarks can be made about grammatical entities: the value of a French plural does not correspond to that of a Sanskrit plural which covers the dual and the plural (116).

The signifier-signified relationship "symbolizes signification," but "is only a value determined by its relations with other similar values and [...] without it signification would not exist" (117). So there is no signification without an interpretant.

	1	. 2	3
Representamen (R1)	Qualisign	Sinsign	Legisign
Object (O2)	Icon	Index	Symbol
Interpretant (I3)	Rhema	Dicisign	Argument

Table 9.2. The nine sub-types of a sign

#### The Sign

#### LINEARITY OF THE SIGN AND SEMIOSIS

For Saussure, "the linguistic sign [...] unites a concept and a sound-image" (98), a signified and a signifier (99). It is a "two-sided psychological entity" (66). For Peirce, it is a semiosis, a relation which is real, in the sense of existentially active, of the sign. "By semiosis, I mean [...] an action, or influence which is or involves a cooperation of three subjects, such as a sign (representamen), its object, and its interpretant, this tri-relative influence not being in any way resolvable into actions between pairs" (5.584). There is, in both cases, continuity of the sign, but the similarity stops there, for linearity is temporal and is valid only for "auditory signifiers" of the linguistic sign, and not for "visual signifiers (nautical signs, etc.)" (70); semiosis, although also temporal, is by definition logical and encompasses the whole semiotic process ad infinitum (2.303). It must, however, be remarked that Saussure admits that "the linguistic entity exists only through the associating of the signifier with the signified. Whenever only one element is retained, the entity vanishes" (102). That appears to be the case here:

# THE ARBITRARINESS OF THE SIGN AND THE CONVENTIONALITY OF THE INTERPRETANT

The arbitrary sign is unmotivated. It is, in this sense, that we can also understand the interpretant. The interpretant does not interpret freely; it is a translator which says in one language exactly the same thing which is said in another. According to Saussure, the arbitrary sign "should not imply that the choice of the signifier is left entirely to the speaker (we shall see [...] that the individual does not have the power to change a sign in any way once it has become established in the linguistic community)" (69). "The community is necessary if values that owe their existence solely to usage [pragmatic and not practical, given that the community engenders and imposes its rules] and general acceptance [of the community of users (Saussure) or investigators (Peirce)] are to be set up; by himself the individual is incapable of fixing a single value" (113).

### THE SYSTEM OF SIGNS, REPERTORY, AREA, AND FIELD OF SIGNS

"To consider a term as simply the union of a certain sound with a certain concept is grossly misleading. To define it in this way would isolate the term from the system; it would mean assuming that one can start from the terms and construct the system by adding them together, when, on the contrary, it is from the

### Principles of the Theory of Signs

In the first place, one can read in Saussure two principles of Peircean semiotics: First principle. No thought without signs: "Without the help of signs we would be unable to make a clear-cut, consistent distinction between two ideas" (111-112). Second principle. The principle of pragmatism which underlies the Saussurean idea of difference. A sign exists in its own right only because it does not coincide with another one: "In language, there are only differences" (120). But "although both the signified and the signifier are purely differential and negative when considered separately, their combination is a positive fact" which generates a system of values which constitutes the effective link between the phonic and psychological elements contained in each sign. "In language, as in any semiological system, whatever distinguishes one sign from the other constitutes it. Difference makes character just as it makes value and unit" (121). This is proved by diachronical facts. "When two words are confused through phonetic alteration [...] the ideas that they express will also tend to become confused if only they have something in common. A word may have different forms. Any nascent difference will tend to become significant" (121).

Peirce says exactly the same thing, even if he says it differently: "There is no distinction in meaning so fine as to consist in anything but a possible difference in practice" (5.400). How to avoid "the deceits of language" of the kind which consists in mistaking "a mere difference in the grammatical construction of two words for a distinction between the ideas they express" (5.399), Peirce wonders. His answer is that there is no better rule than the following: "Do things fulfil the same function practically? Then let them be signified by the same word. Do they not? Then let them be distinguished" (8.33). This is what Peirce calls the principle or maxim of pragmatism.

### The Analysis of Sign

#### The Peircean Analysis

As we noted above, Peirce analyzes signs semiotically in three steps at three different levels of relation: (1) In reference to the representamen: the sign is analyzed as such in reference to itself; (2) in reference to its object; (3) in reference to the sign-interpretant, in other words in reference to the sign or field of signs with which the reader or listener associates the representamen in such a way that the latter refers to an object. The third step, or level 3, semiotically presupposes 2 and 1; the second step, or level 2, presupposes 1. This gives the following wellknown table in which the Peircean analysis of signs enables us to distinguish nine types of sub-signs:

LV.

I shall sum up the comparison between Peirce's semiotics and Saussure's semiology in the following table:

Saussure's Semiology	Peirce's Semiotics
Based on philology linguistics	Based on pragmaticism phaneroscopy
Mill's empirical psychology  Durk heim's sociology	logic of relatives
Man's speech is individual Man is social by nature	Man is social by nature
Dualism Psychology/Sociology signified/signifier speech/language	Continuism  Man's mind and the world are not dissociated
Nominalism  Concepts are reducible to  "acoustic images"	Realism  Concepts are general and real
Spectator epistemology:  World = "acoustic images"  "acoustic images" = Idea	Actor epistemology: Pragmatism & Contextualism: An idea is what it does.

Table 9.1. Peirce and Saussure—a comparison

### SAUSSURE AND PEIRCE

Although the contexts of Saussurean semiology and Peircean semiotics are radically different, it is possible and even relatively easy to find in the semiology of Saussure some of the fundamental concepts of Peirce's semiotics—which does not mean that they may be assimilated. On the contrary, their respective a priori conditions for thinking rule out any assimilation. This being so, my intention is not to "confound" them, as Lady Welby would have said, after opposing them, but to use generally understood Saussurean concepts in order to pave the way for a better understanding, or even acceptance, of Peircean concepts. If we take the Peircean system for my point of reference, it is because its triadic nature allows the introduction into sign-analysis of nuances about which Saussure was sometimes well aware, but which the dyadic nature of his system did not enable him to express.

spectively as first, second, and third). This system comprises only symbols; they refer also to (representative) signs which may be (existential) indices of objects; of objects in every sense of the term: possible, existential, or general. The Storming of the Bastille is a symbol in the system of meanings of the history of France. It refers to a certain idea of liberty, the negation or refusal of the arbitrary. But the documents which have reached us (the Bastille having been destroyed), which imagery or our imagination represent, are the indices of a state of France described by history and interpreted by the systems of symbols. However, let there be no mistake, the enactment of action is not limited to a given action, for there is no action which reveals, and, at the same time, constitutes, its meaning. The enactment is at the meeting point, always social, of the three paths of the sign.

Have we to choose between Peirce and Saussure? The question should perhaps be put differently. Does one construct a model—a priori conditions for thinking—from experience? Or does one analyze experience in the light of a model whose principles and axioms owe nothing to chance encounters, but everything to the coherence of the choice? In other words, how should one choose? Given that a model is autonomous and does not admit of interference from outside, it would be vain to try to describe (and to judge) the semiotics of Peirce in Saussurean terms and Saussure's semiology in Peircean terms. The test of their respective validity resides, in the last analysis, in the coherence of the model on which they are based, and in the fecundity of the analyses they can provide. One cannot choose without committing oneself.

not answer this question. What we can be sure of is that a triadic theory of signs is pregnant with a plural and committed semiotics which Roland Barthes could not but approve of and of which Peirce provides a model.

A "same sign" belongs to different categories, types, and classes of signs according to whether it is considered in reference to itself as a first, in reference to its object as a second, in reference to its interpretant as a third. In reference to itself, it is what it is independently of its object and its interpretant. But, as a first, it will be the possibility of a sign: a qualisign; as a second, a given sign (a token): a sinsign; as a third, a codified or archetypal sign: a legisign. In reference to its object, it may either resemble the latter or indicate it or stand for it. In that case, it is respectively icon, index, and/or symbol. In reference to its interpretant, it may be simply conceived or represented (rhema), said or shown (dicisign), or else interpreted by inference in all senses of the word "infer" (argument). Thus, to borrow one of Peirce's examples, "that footprint that Robinson Crusoe found in the sand" (4.531) is in reference to itself a qualisign, the sign of a quality (what it is independently of the fact of being printed in the sand), a sinsign as being the only mark which is there at that particular spot on Robinson Crusoe's island. Although it cannot be a legisign proper, for a legisign is a sign of law and possesses a generality which Man Friday's footprint does not possess, it belongs to a type which enables Robinson Crusoe to say that it is a man's footprint, and not that of any kind of animal he knew. It could be a legisign proper in another context, if, like fingerprints, it could be used to distinguish Man Friday from the other inhabitants of the island, if there were any. In reference to its object, this footprint is a perfect icon, although reversed like the image of a person looking at himself in a mirror. But it is at the same time the index of a presence on the island, and not just any presence, but the presence of a human being the shape of whose foot is the "symbol" for the interpretant, which infers from the representation of this shape and what it indicates, that there is another man somewhere on the island. Whence the fact that Peircean semiotics is a semiotics at once of representation, of communication, and of meaning. The sign in itself has its own existence, an existence of a non-sign, one might say, just as an ambassador, although representing his country, is what he is in reference to himself, with his own history which distinguishes him from his predecessor and from the role he assumes at the moment when, for instance, he presents his credentials. The words "role" and "at the moment when" exactly situate the other two levels of the sign-of the same sign. The "role" refers to the meaning which is a rule of interpretation in a system of sign-interpretants. The presentation of credentials is a game which has its own rules and the meaning of the gestures is general. It is valid for every ambassador and for every presentation of credentials. The words "at the moment when" indicate that the game is being played: the communication constituted by the presentation of credentials is being enacted.

Communication is thus a concrete individual action, an event of and in history: it defines the sense of every act of the same type in a given system of signs. (Of course, representation, communication, and meaning may be considered re-

we shall find opposite to it the word man, which, so placed, represents homme as representing the same two-legged creature which man itself represents" (1.553). Peirce adds that it was a requisite, and that consequently a Third was required, only because we receive a diversity of impressions. If we had but one impression, "the conception of reference to an interpretant" would not be required, as there would not be a manifold to reduce to unity (1.554).

It is a fact that the Saussurean theory is dyadic. All the analyses of Saussure are dichotomic: signifier/signified, language/speech, synchrony/diachrony, etcetera. Does this imply that Saussure had a "dichotomic temperament," as Marcel Cohen suggests (Cohen 1958 in Mounin 1968: 38)? In that case, we should have to say that Peirce's temperament was trichotomic. It is true, however, as Marcel Cohen points out, that this dichotomism is "not at all necessary for the study of linguistics" (ibid.). In fact, it is because Saussurean semiology is associationistic that it is dualistic-like all Western philosophy since Plato, including Cartesianism which was continued by associationism. Whereas, for Peirce, semiotics is another name for logic: "the quasi-necessary, or formal, doctrine of signs" (2.227), for Saussure, semiology is a chapter of social psychology and consequently of general psychology. Let us say, however, to avoid any misunderstanding, that what is in question here is the place occupied by the theory of signs among the other "sciences." When I said that the theory of categories explained the Peircean theory of signs, I was alluding to something quite different: the system or explicative context of reference. Although for Saussure, it is psychology which is the locus and point of reference of semiology, one must only distinguish even more carefully between semiology as a psychological science and the psychological philosophy of the associationists which he uses to express his theory of signs. That this philosophy is implicit does not change the situation, unless it be that Saussure, feeling the need of a means of expression other than semiological to describe signs, found himself obliged to use linguistics, which is a part of semiology, as the general pattern of semiology.

It must be admitted, in defense of Saussure, that he fully realized that a psycho-social analysis was not enough for semiology. If we emphasize the view-point of the psychologist and the social viewpoint, "the goal is by-passed, and the specific characteristics of semiological systems in general and of language in particular are completely ignored, for the distinguishing characteristic of the sign [...] is that in some way it always eludes the individual and the social will" (17). If we are to discover the true nature of language, we must learn what it has in common with all the other semiological systems. "It is probable," says Mounin, "that if Saussure had lived longer, his theory of signs would have been the point of departure and of the organisation of his entire doctrine" (Mounin 1968: 50). It is then that the question of its logical foundation would have arisen and could not have been eluded. Would he have renounced dyadic logic? Would he have introduced a third dimension into his theory of signs, as Barthes did? "In meaning, as it has been conceived since the Stoics," Barthes wrote, "there are three things: the signifier, the signified and the referent" (Barthes 1975: 169). We can-

locus of signs and especially that of interpretants, a locus which is not isolated, but is, on the contrary, in a context—and every context is social.

Unlike the theory of Saussure, that of Peirce is plural and committed (in the political sense or not, according to whether the situation is or is not political). This plural and committed conception of the sign is intrinsic to the very nature of the sign in Peircean semiotics.

The sign is a triadic relation. The Peircean triadicity of the sign has a double origin, mathematical and Kantian. Mathematical:

[...] it is impossible to form a genuine three [...] without introducing something of a different nature from the unit and the pair, [...] (Thus) the fact that A presents B with a gift C is a triple relation, and as such cannot possibly be resolved into any combination of dual relations. Indeed, the very idea of a combination is something which is what it is owing to the parts which it brings into mutual relationship. But we may waive that consideration, and still we cannot build up the fact that A presents C to B by any aggregation of dual relations between A and B, B and C, and C and A. A may enrich B, B may receive C, and A may part with C, and yet A need not necessarily give C to B. For that, it would be necessary that these three dual relations should not only coexist, but be welded into one fact. Thus we see that a triad cannot be analyzed into dyads. (1.363)

Kantian: Peirce's avowed intention in 1867, when he proposed a new list of categories, was to "reduce the manifold of sensuous impressions to unity" (1.546), which can be done only by the means of categories. But, for Peirce, the synthesis could not be achieved, as it was for Kant, in intuition, for the reason that Peirce had already banished intuition and all psychologism, as would appear in the anti-Cartesian articles of 1868. For Peirce, "the unity to which the understanding reduces impressions is the unity of a proposition" (1.548). Now, the logic of relations allows us to distinguish in the proposition: a propositional function, a first, in other words, a relation with no indication of the objects or terms in relation (-loves-); a simple proposition, a second, which indicates that a relation exists between objects or terms which Peirce calls "indices": "Ezekiel loveth Huldah" or Rij (2.295); and a complex proposition, a third, which puts propositions in relation (conjunctive, disjunctive, implicative). Whence the three logicophaneroscopic categories: Firstness, the category of quality which has the generality of the possible; Secondness, the category of existence, of action enacted in its unique singularity here and now; and Thirdness, the category of mediating thought, of instrumental generality. The sign is First when it refers to itself, Second when it refers here and now to its object, Third when it refers to its object through an interpretant. (And the sign taken in itself, its object and its interpretant are themselves signs, and each of them entertains, for that reason, the same triadic relation with itself, its object, and its interpretant.) Peirce coined the word "interpretant" because the sign at this stage in a semiosis plays the role of an interpreter. Thus, "suppose we look up the word homme in a French dictionary;

1977: 25). Ideoscopy, which Peirce sometimes calls phenomenology, but most of the time phaneroscopy, is the proper context of his semiotics, the categories of which are a priori conditions for thinking the world. The "idea" (or "phenomenon" or "phaneron") concerned, he warns the reader, is not that of the English philosophers who have given the word "a psychological connotation [...] which I am careful to exclude" (1.285). It is "all that is in any way or any sense present to the mind, regardless of whether it corresponds to any real thing or not" (1.284). Phaneroscopy, he says further on, "religiously abstains from all speculation as to any relations between categories and physiological facts, cerebral or other" (1.287). This does not mean that these categories cannot have a psychical origin (1.374), but their origin affects their logical nature no more than the psychical origin of numbers (i.e., the fact of their being conceived and thought by a "mind") affects their mathematical nature. Some logicians base logic on the results of psychology: they "confound psychical truths with psychological truths" (5.485).

It would consequently not be fair to reproach Peirce with maintaining a behavioristic theory, which, even if he did defend it, is not that on which he bases his theory of signs. However, the question may be asked: was Peirce a behaviorist? Historical behaviorism is posterior to the "behavioristic" texts of Peirce. Watson was not yet born when Peirce wrote some of them. This fact being established, it is true that the principle of pragmatism plays a part in Peirce's semiotics, since it was proposed in order to reply to the question that the Cartesian analysis left unanswered when Descartes made clearness and distinctness the test of the meaning of an idea. What is a clear idea? Peirce asks; and his reply is: "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). If two ideas have the same effects or consequences or bring about an identical action, they are, in fact, only one idea; if one idea has different effects or consequences, it is made up of two or more ideas, as the case may be. For Cartesian intuition, Peirce substitutes scientific experimentation in every sense of the word "experimentation": that carried out in a laboratory as well as the "mental" experimentation of mathematical physics, which is also the testing of a hypothesis or idea. To abandon the intuitive method is to refuse the introspective psychology of states of consciousness in favor of action, and not another psychology, were it behavioristic. What is a sign? Peirce asks; and his reply is: A sign is first and foremost what it does and what it does is its meaning; in other words, it is a rule of action.

Peirce's antipsychologism is the indirect reason of his sociologism, which is connected with his semiotics just as his pragmatism is connected with his criticism of Descartes. It is because the theory of Peirce is not psychological and refuses the subject of discourse that it is social. I shall explain. Peirce constantly defended the social nature of the sign; not by opposing, like Saussure, language to speech, but by eliminating purely and simply the subject of discourse. It is the "I" which speaks, but what it says is not and cannot be "subjective": the "I" is the

Saussure was essentially a linguist, more inclined to study languages than to elaborate theories about language. Thus his linguistics is based on the analyses of languages, and semiology only comes later as a general theory of linguistic signs. And even this was not his main interest, as he was at the same time (1909–1911) carrying out research on Saturnian verse, and this took much more of his time than the preparation of his lectures on general linguistics. After his death, nothing or practically nothing about linguistics and semiology was found in his papers, which, however, contained a hundred and fifty books of notes on Saturnian verse.

The first problem—and it is to this that I shall confine myself here—encountered by the reader of Peirce or Saussure is that of the context in which Peircean semiotics and Saussurean semiology originated and developed. Of Saussure, Georges Mounin says that he was "a man of his time" (Mounin 1968: 21). Which means that the Saussurean theory finds its *a priori* conditions for thinking within the framework of the associationistic psychology which was still very much alive, and Durkheim's sociology which came into fashion around the turn of the century. Now, as Mounin remarks, to say, as Saussure said, that "the linguistic sign unites not a thing and a name, but a concept and a sound-image" (66) is to base "linguistic facts" on mental facts "considered as well-known and accepted" and about which the linguist "knows probably less than he does about language" (Mounin 1968: 21).

Nonetheless, the linguistic fact is for Saussure a "psychological entity" (66). From Durkheim he borrows the idea that "language is a social fact" (6) without realizing perhaps that it is contradictory to assert that "language is the social side of speech, outside the individual who can never create nor modify it by himself," and, at the same time, that "it exists only by virtue of a sort of contract signed by the members of a community" (14). But is this not to dodge the question at the risk of complicating the system without resolving the contradiction of the impossible union of psychologism and sociologism? For what are these members? Individual or social beings? Saussure's answer lies in the famous distinction between language which is social and speech which is individual (13). But how can an individual who can never create nor modify language be "its master," the "executive side" of language (13)? Peirce, Saussure's contemporary, is in advance of his time. He denounces psychologism—which enables him, as we shall see, to adopt a coherent sociological position. His antipsychologism is constant and can be found in the 1868 articles as well as in the letters to Lady Welby which he wrote at the end of his life. "To explain the proposition in terms of the 'judgment'," he wrote in 1902, "is to explain the self-intelligible in terms of a psychical act, which is the most obscure of phenomena or facts" (2.309 note). In an article of 1868, he made the following remark which one of the most daring ideas of Michel Foucault seems to echo: "Just as we say that a body is in motion, and not that motion is in a body, we ought to say that we are in thought and not that thoughts are in us" (5.289 note). And in 1904, he wrote to Lady Welby: "I abstain from psychology which has nothing to do with ideoscopy" (Hardwick

# Semeiotic and Semiology

PEIRCE AND SAUSSURE

Let us not precide our conclusions beyond what our premisses definitely warrant.

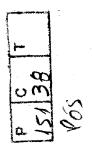
-Peirce (8.244)

### PEIRCE OR SAUSSURE

Contemporary research on the sign proceeds from two sources: Charles S. Peirce (1839–1914) who is at the origin of the semiotic trend, and Ferdinand de Saussure (1857–1913) who is at the origin of the semiological trend. That there are two trends is simply that Peirce's and Saussure's *a priori* conditions for thinking are different. I am going to explain why I have preferred to follow Peirce rather than Saussure. This will entail some repetition, but some things are better said twice than once; I shall also appear sometimes to be stating what is perhaps obvious, but is better said than left unsaid.

First some preliminary remarks. The standard Saussurean theory of signs was publicized by the *Course of General Linguistics* which is a posthumous reconstruction based on lecture notes taken by students. Although the publication of Peirce's writings is also partly posthumous, and although we do not know what Peirce would have retained or rejected, all the texts of the *Collected Papers* are by Peirce himself.

A pioneer in many fields, Peirce continued all his life to elaborate his theory of signs, even when he seemed to be giving his attention to other subjects. He gave a first version of it in 1867 and 1868, developed the "pragmatic" aspect of it in 1877 and 1878, provided it with a new logical foundation between 1880 and 1885, and developed it on this new basis from 1894 to the end of his life. Saussure did not mention the subject before giving his second course of general linguistics in 1908–1909, even if he did, as it would seem, have the idea before 1901 (according to Adrien Naville). Historically, Peirce's priority to Saussure is unquestionable.



# Charles S. Peirce's Philosophy of Signs

ESSAYS IN COMPARATIVE SEMIOTICS

Gérard Deledalle

Indiana University Press

PLOOMINGTON AND INDIANAPOLIS