

POST MODERN ENCOUNTERS

**Sebeok**  
**and the Signs of Life**

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## **Life of signs and signs of life**

Thomas A. Sebeok<sup>1</sup> is one of the scholars who has most contributed to establishing semiotics as a field and interdisciplinary perspective. His research is largely inspired by Charles S. Peirce (1839-1914), though his *maîtres à penser* also include such figures as Charles Morris (1901-1979) and Roman Jakobson (1896-1982) whose work under certain aspects he continues.

Sebeok's interests cover a broad range of territories ranging from the natural sciences to the human sciences. Consequently, he deals with theoretical issues and their applications from as many angles as are the disciplines called in question: linguistics, cultural anthropology, psychology, artificial intelligence, zoology, ethology, biology, medicine, robotics, mathematics, philosophy, literature, narratology, and so forth. Even though the initial impression might be that he proceeds rather erratically as he experiments varying perspectives and embarks upon

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<sup>1</sup>Thomas A. Sebeok was born in Budapest, 9th November, 1920. He migrated to the United States in 1937, and became a citizen in 1944. He has been a faculty member of Indiana University since 1944 and is General Editor of the journal of the International Association for Semiotic Studies, *Semiotica*, founded in Paris in 1969. Sebeok is among the figures who have most contributed to the institutionalization of semiotics internationally, and to its configuration as 'global semiotics'. His work is largely inspired by Charles S. Peirce, but also by Charles Morris and Roman Jakobson. His numerous and diversified research interests cover a broad expanse of territories, ranging from the natural sciences to the human sciences.

different research ventures, in reality his expansive and seemingly distant interests find a focus in his 'doctrine of signs', and in the fundamental conviction subtending his general method of enquiry that the universe is perfused with signs, indeed, as Peirce hazards, may be composed exclusively of signs.

As a fact of signification the entire universe enters Sebeok's 'Global Semiotics'. Semiotics is the place where the 'life sciences' and the 'sign sciences' converge, therefore where consciousness is reached of the fact that the human being is a sign in a universe of signs.

Sebeok extends the boundaries of traditional semiotics, or more correctly semiology, which is based on the verbal paradigm and vitiated by the *pars pro toto* error. He tags this conception of semiotics the 'minor tradition' and promotes what he calls the 'major tradition' as represented by Locke and Peirce and early studies on signs and symptoms by Hippocrates and Galen. Semiotics, therefore, is at once recent if considered from the viewpoint of the determination of its status and awareness of its wide-ranging possible applications, and ancient if its roots are traced back, following Sebeok,<sup>2</sup> to the theory and practice of Hippocrates and Galen at least.

Through his numerous publications Sebeok has propounded a wide-ranging vision of semiotics that

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<sup>2</sup> Cf. *The Sign & Its Masters*, Austin: University of Texas Press, 1979; 2nd ed. with a new Foreword by the author and Preface by J. Deely, Lanham: University Press of America, 1989.

coincides with the study of the evolution of life. After Sebeok's work both the conception of the semiotic field and history of semiotics are changed noticeably. Thanks to him semiotics at the beginning of the new millennium presents a far more enlarged view than that of the first half of the 1960s.

In what may be defined then as a 'global' or 'holistic' approach to sign studies, Sebeok extends his gaze over the whole universe insofar as it teams with information, messages, signifying processes; a universe which is characterized, as anticipated, and as he never tires of repeating, as a fact of signification long before becoming a fact of communication.<sup>3</sup> And as he playfully puts it during a seminar held in 1987, 'Semiotic and communication':

*The world is composed entirely of signs, and therefore, I think of the whole world as my oyster; whereas for some people only the human world, and then only a small portion of that, is their oyster.*<sup>4</sup>

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<sup>3</sup> For one of his most recent statements on this aspect, cf. Sebeok, 'Global Semiotics', plenary lecture delivered on June 18, 1994 as Honorary President of the Fifth Congress of the International Association for Semiotic Studies, held at the University of California, Berkeley, now in Sebeok, *Global Semiotics*, Bloomington: Indiana University Press, 2000.

<sup>4</sup> Sebeok, 'Semiotic and Communication: A Dialogue with Thomas A. Sebeok' (1987), in J. Y. Switzer *et alii* (eds.), *The Southern Communication Journal* 55, 1990, p. 391.

The 'life of signs' and the 'signs of life' are inextricably interrelated, indeed, in Sebeok's view semiosis and life coincide. This belief leads to an intriguing hypothesis: given that semiosis or sign behaviour involves the whole living universe, a full understanding of the dynamics of semiosis may in the last analysis lead to a definition of life itself. Semiosis originates with the first stirrings of life on the planet, which leads Sebeok to formulate an axiom which he believes is cardinal to semiotics: 'semiosis is the criterial attribute of life',<sup>5</sup> that is, 'the criterial mark of all life is semiosis', accompanied by his second axiom, 'semiosis presupposes life'.<sup>6</sup> No wonder all the life sciences find a place in Sebeok's intellectual horizon, estimated in their importance for a full understanding of signs and their workings in the terrestrial 'biosphere'.<sup>7</sup> Well may we state then that 'global semiotics' provides a point of confluence and an observation post for studies on the life of signs and the signs of life.

The most advanced trends in semiotics today owe their configuration as global semiotics to Sebeok, no doubt its most important exponent. This general approach to semiotics is represented in the fundamental and variegated

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<sup>5</sup> Sebeok, *American Signatures: Semiotic Inquiry and Method*, intro. & ed. by I. Smith, Norman: University of Oklahoma Press, 1991, p. 124.

<sup>6</sup> Sebeok, 'Global Semiotics', cit.

<sup>7</sup> Cf. Vladimir I. Vernadsky, *Biosfera*, Leningrad: Knizhnaia, 1926.

Handbook in three volumes *Semiotik/Semiotics* <sup>8</sup> In fact, this Handbook not only studies processes involving signs in human culture — social institutions, everyday human communication and information processing by machines, knowledge and scientific research, production and interpretation of literary works, music, and art — but also in the orientation, perception and communication activities of nonhuman animals, in the metabolism of organisms, and in the behaviour of all living beings. The foundational articles of chapters I (‘Systematics’), II (‘General Topics I: Aspects of Semiosis’), and III (‘General Topics II: Types of Semiosis’) are consistent with the overall plan of global semiotics and present semiotic and semiosic aspects, models and types accordingly.

In line with the 'major tradition' in semiotics, Sebeok's global approach to sign life presupposes his critique of anthropocentric and glottocentric semiotic theory and practice. In his explorations of the boundaries and margins of the science or 'doctrine' of signs (interestingly enough in the mentioned paper of 1994<sup>9</sup>, that is, almost twenty years after his book of 1976, *Contributions to the Doctrine of Signs*,<sup>10</sup> he no longer considers the debate on

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<sup>8</sup> *Semiotik Semiotics. A Handbook on the Sign-Theoretic Foundations of Nature and Culture*, ed. by R. Posner, K. Robering, T. A. Sebeok, 3 vols., Berlin and New York: Walter de Gruyter, 1997, 1998; vol. 3 is forthcoming.

<sup>9</sup> 'Global Semiotics', cit.

<sup>10</sup> *Contributions to the Doctrine of Signs*, Lisse: Peter de Ridder Press, 1976; 2nd ed. Lanham: University Press of America, 1985.

whether semiotics is a 'science', a 'theory' or a 'doctrine' of much consequence), Sebeok opens the field to include *zoosemiotics* (a term he introduced in 1963), or, even more broadly, *biosemiotics*, on one hand, and endosemiotics, on the other. In Sebeok's conception, the sign science is not only the 'science qui étudie la vie des signes au sein de la vie sociale' (Saussure), that is, the study of communication in culture, but also the study of communicative behaviour in a biosemiotic perspective. Consequently, by comparison with other approaches, Sebeok's global semiotics is characterized by a maximum broadening of competencies.

### **Semiotics is not only anthroposemiotics**

For Sebeok semiotics is far broader than a science that studies signs solely within the sphere of socio-cultural life. Moreover, before contemplating the signs of unintentional communication (semiology of signification), semiotics was further limited by an exclusive preference for the signs of intentional communication (semiology of communication) as indicated by Saussure's *sémiologie*. On the contrary, in Sebeok's conception the sign science not only studies communication in culture, but also communicative behaviour of a biosemiotic order. And according to this perspective, biosemiotics is by no means a separate sphere with respect to semiotics reductively identified with anthroposemiotics or semiotics of culture, but rather may be considered as providing the wider context. Indeed,

*biological foundations lie at the very epicenter of the study of both communication and signification in the human animal.*<sup>11</sup>

Sebeok's critique of anthropocentrism and glottocentrism orients the general direction of his semiotic discourse and may be extended to all those trends in semiotics which look to linguistics for their sign model. For what concerns Sebeok, his interest in cultural processes at the intersection between nature and culture induces him to consider the research of such scholars as the biologist Jakob von Uexküll (1864-1944), one of the so-called 'criptosemioticians' he has studied most.

To free oneself from the anthropocentric perspective as it has characterized semiotics generally, implies to take into account other sign systems beyond those specific to mankind. These sign systems are not alien to the human world, however they are not specific to it. They concern the encounter between human communication and the communicative behaviour of nonhuman communities within the species and with the environment, as well as the sphere of endosemiotics, that is, the study of cybernetic systems inside the body on both an ontogenetic and phylogenetic level.

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<sup>11</sup> Sebeok, *Contributions to the Doctrine of Signs*, cit., x..

Sebeok's position succeeds in avoiding any form of biologism as occurs when human culture is reduced to communication systems that can be traced in other species; just as he avoids, vice versa, the anthropomorphic reduction of nonhuman animal communication to characteristic traits and models specific to mankind.

Consequently, his doctrine of signs insists particularly on the autonomy of nonverbal sign systems with respect to the verbal, demonstrated through the study of human sign systems which depend on the verbal only in part, in spite of the predominance of verbal language in the sphere of anthroposemiosis.

Semiotics is not only *anthroposemiotics* but also *zoosemiotics*, *phytosemiotics*, *mycosemiotics*, *microsemiotics*, *endosemiotics*, *machinesemiotics*, *environmental semiotics*.

### **A transitional book**

In the opening lines to *The Sign & Its Masters*,<sup>12</sup> Sebeok describes this book of 1979 as 'transitional', being a remark that may be extended, in truth, to the whole of his research if considered in the light of recent developments in philosophico-linguistic and semiotic debate. Our allusion is to the transition from 'code semiotics' which is centered on

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<sup>12</sup> Sebeok, *The Sign & Its Masters*, cit. See the programmatic chapters: 1. 'Semiosis in Nature and Culture', pp. 3-26; and 4. 'Ecumenicalism in Semiotics', pp. 61-84.

linguistics and, therefore, verbal signs, to 'interpretation semiotics' which unlike the former accounts for the autonomy and arbitrariness of nonverbal signs as well, whether 'cultural' or 'natural'.

In his survey of the problems relevant to semiotics and of the masters of signs, Sebeok discusses the various aspects characterizing these two different modalities of practising semiotics, and which may be very simply summarized with two names — Ferdinand de Saussure and Charles S. Peirce. The study of signs is 'in transit' from 'code semiotics' to 'interpretation semiotics' as represented by these two emblematic figures, and in fact has now decidedly shifted in the direction of the latter.

An earlier book of 1976, *Contributions to the Doctrine of Signs*, has a strong theoretical bias; and in it Sebeok had already expressed his preference for the semiotics of interpretation. *The Play of Musement*, a collection of papers published in 1981,<sup>13</sup> explores the efficaciousness of semiotics as a methodological tool and the potential range of its application, and does so in more discursive terms. In both these books Sebeok's interpreters are faced with an orientation that is rooted and consolidated in his theoretical formation. By contrast, *The Sign & Its Masters*, the inbetween book, considers the different possibilities which branch out from our two semiotic alternatives thus described, code semiotics and interpretation semiotics. In

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<sup>13</sup> Sebeok, *The Play of Musement*, Bloomington: Indiana University Press, 1981.

fact, in addition to being a compact theoretical book, *The Sign & Its Masters* also offers a survey of the various alternatives, positions and phases in sign studies as they have been incarnated through history by important scholars of signs, who have dealt with signs either directly or indirectly.

Sebeok's writings transform us into the direct witnesses and interpretants of (abductive) turning points in his research as he experiments, discusses, and evaluates different methods of semiotic inquiry, identifies possible objects of analysis and outlines the boundaries, or, better, suggests the boundlessness of semiotics as a disciplinary field. From this point of view *The Sign & Its Master*, but in reality the overall orientation of his research, is transitional insofar as it contributes significantly to the shift towards interpretation semiotics, freed once and for all from subordination to (Saussurean) linguistics and from false dichotomies: communication semiotics vs signification semiotics, referential semantics vs nonreferential semantics.<sup>14</sup>

*I Think I Am a Verb* of 1986 is the fourth book in Sebeok's tetralogy of the 1970s and 1980s. Since then other important volumes have followed in rapid succession, they include: *Essays in Zoosemiotics*, 1990, *A Sign is Just a Sign*, 1991, *American Signatures*, 1991, *Semiotics in the United*

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<sup>14</sup> Umberto Eco, *Trattato di semiotica generale*, Milano: Bompiani 1975; Eng. trans. *A Theory of Semiotics*, Bloomington: Indiana University Press.

*States*, 1991, *Signs. An Introduction to Semiotics*, 1994, *Come comunicano gli animali che non parlano*, 1998, *Global Semiotics*, 2000<sup>15</sup>, without forgetting important earlier volumes such as *Perspectives in Zoosemiotics*, 1972, and numerous others under his editorship including *Animal Communication*, 1968, *Sight, Sound, and Sense*, 1978, and *How Animals Communicate*, 1979<sup>16</sup>.

Rather than continue this long list of publications, it will suffice to remember that Sebeok has been publishing since 1942. His writings are the expression of ongoing research and probing reflection over more than half a century as he interprets the semiotic universe, whose infinite multiplicity, variety and articulation he has substantially contributed to manifesting.

*I Think I Am a Verb* is a book which at once assembles a broad range of interests and which also acts as a

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<sup>15</sup> *I Think I Am a Verb: More Contributions to the Doctrine of Signs*, New York: Plenum Press, 1986; *Essays in Zoosemiotics*, ed. by M. Danesi, Toronto: University of Toronto Press, 1990; *A Sign is Just a Sign*, Bloomington: Indiana University Press, 1991; *American Signatures: Semiotic Inquiry and Method*, cit.; *Semiotics in the United States*, Bloomington & Indianapolis: Indiana University Press, 1991; *Signs. An introduction to Semiotics*, Toronto: Toronto University Press, 1994; *Come comunicano gli animali che non parlano*, ed. by S. Petrilli, Bari: Edizioni dal Sud, 1998; *Global Semiotics*, cit..

<sup>16</sup> .Sebeok, *Perspectives in Zoosemiotics*, The Hague: Mouton, 1972; Sebeok (ed.), *Animal Communication Techniques of Study and Results of Research.*, Bloomington: Indiana, 1968; Sebeok (ed.), *Sight, Sound, and Sense*, Bloomington and London: Indiana University Press, 1978; Sebeok (ed.), *How Animals Communicate*, Bloomington: Indiana University Press.

launching pad for new research itineraries in the vast region of semiotics. The title evokes the dying words of the 18th President of the United States, Ulysses Grant, which ring with Peircean overtones. In fact, in Peirce's view man is a sign and Sebeok's choice of a verb instead of a noun to characterize this sign (which not only each one of us, but also the whole universe in its globality is) serves to underline the dynamic and processual character of semiosis.

A fundamental point in Sebeok's doctrine of signs is that living is sign activity, so that to maintain and to reproduce life, and not only to interpret it at a scientific level, are all activities that necessarily involve the use of signs. Sebeok theorizes a direct connection between the biological and the semiotic universes, and, therefore, between biology and semiotics. His research would seem to develop Peirce's conviction that man is a sign with the addition that this sign is a verb: to interpret. And in Sebeok's particular conception of reality, the interpreting activity coincides with the life activity, and in his own personal case, with the whole of his life. If I am a sign, as he would seem to be saying through his life as a researcher, then nothing that is a sign is alien to me — *nihil signi mihi alienum puto*; and if the sign situated in the interminable chain of signs is necessarily an interpretant, then 'to interpret' is the verb that may best help me understand who I am.

Sebeok's position is distant from Saussure's who limited the sign science to the narrow spaces of the signs of human culture and, still more reductively, to signs produced

intentionally for communication. Instead, for Sebeok no aspect of sign life must be excluded, just as no limits are acceptable on semiotics, whether contingent or deriving from epistemological conviction. At the same time, however, contrary to eventual first impressions, Sebeok's work discourages any claims to the status of scientific or philosophical omniscience, and to the ability to solve all problems indiscriminately.

We believe that Sebeok's awareness of the vastness, variety and complexity of the territories he is committed to exploring and of the problems he analyzes, confers an extreme sense of prudence, problematicity and humility on the interpretations he hazards not only when venturing over the treacherous territory of signs, but still more in relation to the deceptive sphere of the signs of signs — the place of his semiotic probings.

### **Sebeok's semiotic universe**

Sebeok began his studies in the second half of the 1930s with *The Meaning of Meaning* (1923) by Charles K. Ogden and Ivor A. Richards.<sup>17</sup> Also, he boasts having benefitted from his direct contacts with two great masters of the sign, mentioned above, who in different ways and under

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<sup>17</sup> Charles K. Ogden and Ivor A. Richards, *The Meaning of Meaning. A Study of the Influence of Language upon Thought and of the Science of Symbolism*, London: Kegan Paul, 1923; new ed. with intro. by U. Eco, New York: Harcourt Brace Janovich, 1989.

different aspects were also his teachers: Charles Morris and Roman Jakobson.<sup>18</sup>

Let us now list and at once distinguish between the various aspects and parts of the multifarious 'semiotic universe', as it emerges from Sebeok's semiotic research.

In Sebeok's view the universe is perfused with signs. These signs are interconnected and interdependent and form a huge semiotic 'network' or 'web' — to use an image lauded by Sebeok in 1975. Instead, the sign science or semiotics is the place where studies on the life of signs and on the signs of life converge. Through his abductive analyses of the signifying material making up the biosphere, Sebeok contemplates the whole universe *à la* Peirce as a sign considered in its global complexity. And, indeed, he recalls that for Peirce the whole universe viewed in its totality is a comprehensive global sign,

*a vast representamen, a great symbol...an argument...necessarily a great work of art, a great poem...a symphony... a painting* <sup>19</sup>.

Sebeok turns his attention to signs that are commonly the object of study by specialists from different fields,

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<sup>18</sup> See chp. 5, 'Vital Signs', in *I Think I am a Verb*, cit., also the parts dedicated to these figures in *The Sign & Its Masters*, cit., and throughout *Semiotics in the United States*, cit.

<sup>19</sup> Charles S. Peirce, *Collected Papers*, 8 vols., Cambridge (Mass.): The Belknap Press of Harvard University Press, 1931-58, vol. 5, § 119.

viewing them at once in their specificity and interrelation: these signs range from the signs of 'nature' to the signs of 'culture', from human signs to animal signs, from verbal signs to nonverbal signs, from natural languages to artificial languages, from highly plurivocal and dialogical signs to univocal and monological signs, or better signals, signs endowed with varying degrees of indexicality, symbolicity and iconicity, signs of conscious and unconscious life.

As a student of signifying processes Sebeok looks to the whole universe, however we must stress that this does not imply a claim to intellectual omnipotence, as could be suspected. On the contrary, Sebeok's expansive gaze is the sign of his profound awareness that signs are interdependent and relational as he demonstrates how an understanding of any one particular type of sign — such as the verbal — is only possible in the light of its relation with other signs in the great sign network. In Sebeok's ecumenical perspective, therefore, the signs of nature and of culture forming this network are not considered as divided and separate but as interpretants of each other.

With reference to this last point and polemicizing with major exponents representing different trends in semiotics today, Sebeok states that

*to me, however, the imperium of Nature, or Weltbuch, over Culture, or Bucherwelt, has always been unmistakable. Only a patent theoretical basis was veiled to resolve what*

*Blumenberg*<sup>20</sup> has called an 'alte Feindschaft' between these two semiotic systems, the latter obviously immersed in the former. This is why my 'rediscovery' of the *Umweltlehre* came as such a personal revelation<sup>21</sup>.

Sebeok's semiotic universe comprises:

— the life of signs and the signs of life as they appear today in the biological sciences: the signs of animal life and of specifically human life, the signs of adult life, and of the organism's relations with the environment, the signs of normal or pathological forms of dissolution and deterioration of communicative capabilities;

— human verbal and nonverbal signs: the latter includes signs which depend on natural languages and those which, on the contrary, have nothing to do with natural languages and which, therefore, are refractory to the categories of linguistics. These include the signs of 'parasitic' languages such as artificial languages, the signs of 'gestural languages' such as the sign language of Amerindian and Australian aborigines<sup>22</sup>, and the language of deaf-mutes, the signs of infants, and the signs of the human body both in its more culturally dependent and in its natural-biological manifestations;

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<sup>20</sup> Cf. Hans Blumenberg, *Die Lesbarkeit der Welt*, Frankfurt: Suhrkamp Verlag, 1981, p. 17.

<sup>21</sup> Sebeok, 'Global semiotics', cit.

<sup>22</sup>Cf. Sebeok (ed. with D. Jean Umiker-Sebeok), *Aboriginal Sign Language of the American and Australia*, 2 vols., New York: Plenum Publishing Corporation, 1978.

— human intentional signs controlled by the will, and unintentional, unconscious signs such as those which pass in communication between human beings and animals in 'Clever Hans' cases.<sup>23</sup> Here, animals seem capable of certain performances (for example, counting) simply because they respond to unintentional and involuntary suggestions from their trainers. This group includes signs at all levels of conscious and unconscious life, signs in all forms of lying (which Sebeok identifies and studies in animals as well), decept, self-decept, and good faith;

— signs at a maximum degree of plurivocality and signs that are characterized by univocality and which, therefore, are signals;

— signs viewed in all their shadings of indexicality, iconicity, and symbolicity.<sup>24</sup>

— finally, 'signs of the masters of signs'. Those through which we may trace the origins of semiotics, for example, in its ancient relation to divination and to medicine; or through which we may identify the scholars who have contributed directly or indirectly (as 'criptosemioticians') to the characterization and development of this science. Or 'signs of the masters of signs' through which we may establish the origins and development of semiotics relatively to a given national and cultural area, as in Sebeok's study on semiotics in the United States. 'Signs of

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<sup>23</sup> Cf. "Talking" with Animals. Zoosemiotics Explained', in Sebeok, *The Pkay of Musement*, cit.

<sup>24</sup> Cf. Sebeok, *Signs*, cit., pp. 17-93.

the masters of signs', the narrative signs of anecdotes, testimonies, personal memoirs which reveal these masters to us not only as scholars, but also as persons, their character, behaviour, everyday habits. Not even these signs, 'human, too human', escape Sebeok's semiotic interests.

Indeed, all this is a far cry from the science of signs as conceived in the Saussurean tradition!

### **Metascience and 'doctrine of signs'**

Sebeok's semiotics unites what other fields of knowledge and human praxis generally keep separate either for justified exigencies of a specialized order, or because of a useless, even harmful tendency towards short-sighted sectorialization. Such an attitude is not free of ideological implications which are often poorly masked by motivations of a scientific order.

Biology and the social sciences, ethology and linguistics, psychology and the health sciences, their internal specializations — from genetics to medical semeiotics, psychoanalysis, gerontology, immunology — all find in semiotics, as conceived by Sebeok, the place of encounter and reciprocal exchange, as well as of systematization and unification.

At the same time, it must be stressed that systematization and unification are not understood here neopositivistically in the static terms of an 'encyclopedia', whether this takes the form of the juxtaposition of

knowledge and linguistic practices, or of the reduction of knowledge to a single scientific field and its relative language (the physicalism of the neopositivists).

Global semiotics may be presented as a *metascience* which takes all sign-related academic disciplines as its field. It cannot be reduced to the status of a philosophy of science, but as a science it is engaged in dialogical exchange with philosophy.

In Sebeok's work a unifying vision is obtained through a continuous and creative shift in perspective. This approach favours the development of new interdisciplinary relationships and new interpretive practices. Sign relations are identified where there seemed to be no more than mere 'facts' and relations among things, independently from communicative and interpretive processes. Moreover, this continual shift in perspective also favours the discovery of new cognitive fields and languages, which act as the dialogical interpreted-interpretant signs of signs and their relations which already exist. As he explores the boundaries and margins of the sciences, Sebeok calls the open field of semiotics the 'doctrine of signs'.

### **Semiotics as the 'doctrine of signs'**

Despite such a totalizing orientation characteristic of semiotics, Sebeok uses neither the ennobling term 'science' nor the term 'theory' to name it. Instead, he privileges the expression 'doctrine of signs', adapted from John Locke

according to whom a doctrine is a body of principles and opinions that vaguely form a field of knowledge. However, Sebeok also uses this expression as understood by Charles S. Peirce, that is, with reference to the instances of Kantian critique. This is to say that Sebeok invests semiotics not only with the task of observing and describing phenomena, in this case signs, but also of interrogating the conditions of possibility which characterize and specify signs for what they are, as they emerge from observation (necessarily limited and partial), and for what they must be.<sup>25</sup>

This humble and together ambitious character of the 'doctrine of signs' leads Sebeok to interrogate *à la Kant* its very conditions of possibility: the doctrine of signs is the sign science that questions itself, attempts to answer for itself, and inquires into its very own foundations. As a doctrine of signs, semiotics is also philosophy not because it deludes itself into believing it can substitute philosophy, but because it does not delude itself into believing that the study of signs is possible without the philosophical question regarding its conditions of possibility.

### **How is semiotics as a science and metascience possible?**

Sebeok most significantly adds another meaning to 'semiotics' beyond the general science of signs: as indicating, that is, *the specificity of human semiosis*. This concept is clearly proposed in a paper of 1989, 'Semiosis

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<sup>25</sup> Cf. Sebeok's 'Preface' to *Contributions to the Doctrine of signs*, cit.

and Semiotics: What lies in Their Future?<sup>26</sup>, and is of vital importance for a *transcendental founding of semiotics* given that it explains how semiotics as a science and metascience is possible. Says Sebeok:

*Semiotics is an exclusively human style of inquiry, consisting of the contemplation — whether informally or in formalised fashion — of semiosis. This search will, it is safe to predict, continue at least as long as our genus survives, much as it has existed, for about three million years, in the successive expressions of Homo, variously labelled — reflecting, among other attributes, a growth in brain capacity with concomitant cognitive abilities — habilis, erectus, sapiens, neanderthalensis, and now s. sapiens. Semiotics, in other words, simply points to the universal propensity of the human mind for reverie focused specularly inward upon its own long-term cognitive strategy and daily manoeuvrings. Locke designated this quest as a search for 'humane understanding'; Peirce, as 'the play of musement'.<sup>27</sup>*

This particular meaning of the term semiotics is connected with semiotics conceived as the general study of signs and of the typology of semiosis. In his article 'The

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<sup>26</sup> Originally written on invitation from Norma Tasca, representing the Associacao Portuguesa de Semiotica, for the Portuguese journal *Culture e Arte* 52, 1989; now available in *A Sign is Just a Sign*, cit., pp. 97-99.

<sup>27</sup> Ibid., p. 97.

evolution of semiosis'<sup>28</sup>, Sebeok explains the correspondences that exist between the branches of semiotics and the different types of semiosis, from the world of micro-organisms to big kingdoms and the human world. Specific human semiosis, anthroposemiosis, is characterized as semiotics thanks to a modeling device specific to humans, called by Sebeok 'language' (it is virtually certain that *Homo habilis* was endowed with language, but not speech). His distinction between *language* and *speech* corresponds, if roughly, to the distinction between *Kognition* and *Sprache* drawn by Muller in his book of 1987, *Evolution, Kognition and Sprache* .<sup>29</sup>

In the world of life which coincides with semiosis,<sup>30</sup> human semiosis is characterized as *metasemiosis*. In other words, human semiosis offers the possibility of reflecting on signs, of making signs the object of interpretation not only at the level of the immediate response to signs, but also of reflection on signs, where response and the possibility of deliberation are suspended. This exquisitely specific human capacity for metasemiosis may also be called 'semiotics'.

Developing Aristotle's correct observation made at the beginning of his *Metaphysics*, that man tends by nature to knowledge, we could say that man tends by nature to semiotics. Human semiosis characteristically presents itself as *semiotics*.

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<sup>28</sup> Cf. *Semiotik Semiotics*, vol. 1, chp. III.

<sup>29</sup> Cf. *ibid.*, p.443.

<sup>30</sup> Cf. *ibid.*, pp. 436-437.

Semiotics as human semiosis or anthroposemiosis can: a) venture as far as the entire universe in search of meanings and senses, considering it therefore from the viewpoint of signs; or, b) absolutize anthroposemiosis by identifying it with semiosis itself. In the first case semiotics as a discipline or science (Saussure) or theory (Morris) or doctrine (Sebeok) presents itself as 'global semiotics' (Sebeok) and is extensible to the whole universe insofar as it is perfused with signs (Peirce); on the contrary, in the second case it is limited and anthropocentric.

### **Three aspects of the unifying function of semiotics**

As it emerges in Sebeok's research, the unifying function of semiotics may be considered from the viewpoint of three strictly interrelated aspects all belonging to the same interpretive practice and characterized by a high level of abductive creativity:

1) *The descriptive-explanatory aspect.* Semiotics singles out, describes and explains sign relations, that is, interpreted-interpretant relations forming events, which:

a) being connected by a relation of contiguity and causality are given immediately and necessarily (the indexical relation); or which,

b) on the contrary, in spite of the distance between them on an indexical level, may be associated on the basis of an hypothetical iconic relation of similarity. In some cases

(b1), such a relation is largely the result of obeying certain conventions (the iconic-symbolic relation); in other cases

(b2), it mainly ensues from the tendency to innovation (the iconic-abductive relation), and not from obeying prefixed convention. Such interpreted-interpretant relations are identified by semiotics not only in thematized objects, but also in interpretive practices, including those carried out by the different sciences. Therefore, the descriptive-explanatory function of semiotics is also exercised in relation to cognitive processes in terms of the renewal of critique in a Kantian sense, that is, as the search for the a priori conditions of possibility.

2) *The methodological aspect.* Semiotics also presents itself in terms of methodological and epistemological research. As such, semiotics passes from an initial descriptive and explanatory level to the level of epistemological proposals. It does this with a focus on those sciences which, like semiotics, are capable of taking a distance from unjustified separatisms, and of practising abductions as they associate seemingly disparate fields and plan new ones.

3) *The ethical aspect* (for which we propose the term 'ethosemiotics' or 'teleosemiotics'). Specially when a question of proposals and practical orientations, the unifying function of semiotics concerns human life in its entirety: that is, human life considered in all its biological and socio-cultural aspects with a focus on what may be called the

'problem of happiness', to evoke the story of Croesus as described by Herodotus in *Histories* (and interpreted by Sebeok). Happiness is impossible for Croesus to maintain because of his inability to hold in due account the worlds (and signs) of each of his two sons — one endowed with the word, the other deaf and dumb and unnamed.

Sebeok's study 'The Two Sons of Croesus: A Myth about Communication in Herodotus'<sup>31</sup> faces this third aspect of semiotics with reference to the problem of wisdom as it is deposited in myths, popular tradition and literature, specially in certain genres (described by Mikhail Bakhtin as carnivalized literature<sup>32</sup>): by analogy to the deaf and dumb son of Croesus, we may recall King Lear's reticent Cordelia or the muteness and simplicity of the leaden casket in *The Merchant of Venice*, a sign that it holds Portia's image contrary to common expectation.

Concerning this third aspect of the unifying function of semiotics, particular attention is paid to recovering the connection with what is considered and experienced as being separate. In today's world where the laws of production and equal exchange render humanity increasingly insensible to nonfunctional and ambivalent signifiers (ranging from the signifiers of the body to the signifiers of *phatic* communication with others), such considerations would seem to be absolutely necessary. The

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<sup>31</sup> In Sebeok, *The Sign and Its Masters*, cit.

<sup>32</sup> See Mikhail M. Bakhtin (1965), *Rabelais and his World*, Cambridge: Massachusetts Institute of Technology, 1968.

economics of capitalist globalization imposes ecological conditions with which communication between our body and the environment has become ever more difficult and distorted (cf. Sebeok's interesting considerations in 'The Semiotic Self'<sup>33</sup>).

Moreover, this third aspect of semiotics also operates in the sense that it unites rational worldviews to myth, legend, fable, and all other forms of popular tradition. Such a function is pregnant with significant implications for human behaviour: those signs of life which today we cannot, or know not how to, or do not wish to read may well recover one day their import and relevance for humanity.

### **Origin of signs and origin of life**

As the study of any kind of message, semiotics discovers 'semiotic events' in innumerable organisms. Consequently, as mentioned at the beginning of this booklet, on the basis of both an inductive and abductive reading of such phenomena, Sebeok matures the conviction that semiotic processes and life coincide. A pivotal concept in Sebeok's research, in fact, is his identification of semiosis and life, with which semiosis is considered as the criterial feature that distinguishes the animate from the inanimate. Such identification invests biosemiotics with a completely different role from that conceived by Umberto Eco<sup>34</sup> (1975)

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<sup>33</sup> In Sebeok, *The Sign and Its Master*, Appendix I.

<sup>34</sup> Cfr. Eco, *Trattato di semiotica generale*, cit.

when on delineating its reach he refers to 'the inferior threshold of semiotics', or from its more reductive interpretation as a sector of semiotics.

In Sebeok's research semiotics is interpreted and practised as a life science, as biosemiotics. It follows that his semiotics may be situated in the tradition of thought established by the founders and masters of semiotics, by such figures as the already named Hippocrates, Galen, Peirce, von Uexküll, and, in recent times, René Thom — an important Peirce scholar and topologist with competencies of a biological order.

In this perspective, Sebeok's semiotics examines the problem of the origin of signs, which is nothing less than the problem of the genesis of the universe (which, as we have said, following Peirce, is perfused with signs) from the free flow of energy-information to signals and signs.

The development of semiosis and its complex articulation coincides with the evolution of terrestrial life from a single cell to its present-day multiform diversity, subdivided into three (or four) big cellular kingdoms: plants, animals and funghi. These kingdoms coexist and interact with the microcosm and together they form the 'biosphere'. What Lotman calls the 'semiosphere', a concept introduced to refer to the cultural dimension, in reality coincides with the 'biosphere'<sup>35</sup> so that together they form what we may call the great 'biosemiosphere'.

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<sup>35</sup> Cf. 'Semiosis and Semiotics: What Lies in their Future?', cit.

A characteristic trait of human semiosis is the presence of verbal signs. However, to avoid interpretations of an anthropocentric or phonocentric order, human semiosis or anthroposemiosis must be considered in the broader context of semiosis, that is, biosemiosis. As emerges in an interview released to Susan Petrilli in 1987<sup>36</sup>, according to Sebeok all terrestrial life functions through nonverbal signs; whereas only human life functions through two types of signs, verbal and nonverbal.

### **To live and to lie**

In Italy long before Eco<sup>37</sup> defined semiotics as the discipline that studies lying, Giovanni Vailati (1863-1909) before him realized that signs may be used for deviating and deceiving and in fact entitled his review of Giuseppe Prezzolini's *L'arte di persuadere*, 'Un manuale per bugiardi' (A handbook for liars)<sup>38</sup>. This particular aspect of Vailati's studies is analyzed by Augusto Ponzio in his monograph of 1988 on the Italian philosopher and semiotician Ferruccio Rossi-Landi (1921-1985) under the paragraph title 'Plurivocità, omologia, menzogna' ('Plurivocality, homology,

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<sup>36</sup> Cf. 'From Peirce (via Morris and Jakobson) to Sebeok: Interview with Thomas A. Sebeok', in Sebeok, *American Signatures. Semiotic Inquiry and Method*, cit., pp. 95-105.

<sup>37</sup> Eco, *Trattato di semiotica generale*, cit.

<sup>38</sup> Vailati's collected writings are now available in a work in three volumes: Vailati, *Scritti*, ed. by M. Quaranta, Sala Bolognese: Arnaldo Forni Editore.

lying'), included in a chapter dedicated to the relation between Rossi-Landi and his predecessor Vailati.<sup>39</sup> Sebeok himself also evokes Vailati in relation to Peirce in his paper 'Peirce in Italia' of 1982<sup>40</sup>. He describes the nonisomorphic character of signs with respect to reality, thereby presenting yet another general lietsmotif running throughout his research: the use of signs for fraud, illusion and deception, the capacity of signs for masking and pretence.

Deception, lying, and illusion are forms of behaviour which a semiotician like Sebeok, seduced by signs wherever they occur, cannot resist. For example, he is attracted by the signs of the magician and constantly returns to forms of behaviour and situations of the Clever Hans type — the horse which presumably knew how to read and write, but which in reality was an able interpreter of the signals which were communicated to it by its trainer either inadvertently, or voluntarily through an intentional attempt at fraud.<sup>41</sup>

Sebeok explores the capacity for lying in the nonhuman animal world, an interest we believe is motivated by two main reasons:

the first concerns his commitment to contradicting the belief that animals can 'talk' in a literal sense, with which they are invested with a characteristic that is species-specific

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<sup>39</sup> Cf. A. Ponzio, *Rossi-Landi e la filosofia del linguaggio*, Bari: Adriatica.

<sup>40</sup> Sebeok, 'Peirce in Italia', *Alfabeta* 35, 28 April, 1981.

<sup>41</sup> Cf. Sebeok, 'Looking in the Destination for What Should Have Been Sought in the Source', in Sebeok, *The Sign & Its Masters*, cit., pp. 85-106.

and exclusive to humankind. In certain cases this involves unmasking the fraudulent acts of impostors, in others it involves undermining illusions. Sebeok has often contributed with theoretical discussions, documentation, and even parody<sup>42</sup> to semiotic debate on the impossibility of considering human verbal language and animal language homologous;

the second reason is related to Sebeok's wish to explore the fascinating question of whether nonhuman animals lie as well, given that signs do not belong exclusively to the human world, as evidenced by studies in zoosemiotics, and that to use signs also means to know how to lie.<sup>43</sup>

### **Semiotic excess beyond sign function**

The world of signs, however, is not only the world of deception but also of other practices (no doubt connected to it), such as playing, using symbols and making gifts. The fact that nonhuman animals use signs implies that such practices, mostly considered as the prerogative of 'culture', may be traced in the nonhuman animal world as well. By contrast with those researchers who often insist too strongly or too exclusively on the function of signs to the end of understanding the nature of signs, Sebeok highlights the

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<sup>42</sup> Cf. 'Averse Stance', in Sebeok, *I Think I Am a Verb*, cit., pp. 154-148

<sup>43</sup> Cf. Sebeok, 'Can Animals lie?', in Sebeok, *I Think I Am a Verb*, cit. pp. 126-130.

importance of sign activity as an end in itself, that is, sign activity which is transcendent with respect to specific functions and purposes, and, therefore, on sign activity as a sort of idle or useless and unproductive semiotic mechanism.

This aspect of his research is not merely restricted to ritual behaviour among both human and nonhuman animals, considered as excess behaviour relatively to specific functions and objectives. Too, verbal language, most often than not interpreted in relation to communicative function, is also better understood in terms of play and of the human propensity for fantasizing and daydreaming, for musement (examined under certain aspects by Morris, for example, in 'Mysticism and Its Language', 1957,<sup>44</sup> a rather unusual paper for those who identify his work with his books of 1938 and 1946<sup>45</sup>). This exquisitely human propensity for musement implies the ability to carry out such operations as predicting the future or 'traveling' through the past, the ability, that is, to construct, deconstruct and reconstruct reality, thereby inventing new worlds and interpretive models. Let us remember that the happy expression *The*

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<sup>44</sup> 'Mysticism and Its Language', in: *Language: An Inquiry into Its Meaning and Function*, ed. by R. N. Ashen, pp. 179-187, New York: Harper, 1957; now in C. Morris, *Writings on the General Theory of Signs*, ed. by T. A. Sebeok. The Hague-Paris: Mouton, 1971.

<sup>45</sup> *Fonundations of the Theory of Signs*, and *Signs, Language and Behavior*, now in Morris, *Writings on the General Theory of Signs.*, cit.

*Play of Musement* is used by Sebeok, interpreter of Peirce, as the title of his book of 1981.

Indeed, as already demonstrated by Peirce, the capacity for inferential mechanisms, which allow for the qualitative development of knowledge, is fundamental to play and fantasy as well as to the practices of inquiry and simulation. We are alluding to what Peirce calls 'abduction', or 'hypothesis', or 'guessing', what Auguste Dupin, Edgar Allan Poe's investigator calls 'analysis', and what Sherlock Holmes, Arthur Conan Doyle's famous character calls 'deduction'<sup>46</sup>, .

Semiotics itself is engaged in the play of musement. In the words of Sebeok:

*the central preoccupation of semiotics is an illimitable array of concordant illusions; its main mission to mediate between reality and illusion — to reveal the substratal illusion underlying reality and to search for the reality that may, after all, lurk behind that illusion. This abductive assignment becomes, henceforth, the privilege of future generations to pursue, insofar as young people can be induced to heed the advice of their elected medicine men.<sup>47</sup>*

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<sup>46</sup> Cf. Sebeok (with J. Umiker-Sebeok), “‘You Know My Method’”. – A Juxtaposition of Charles S. Peirce and Sherlock Holmes’, in Sebeok, *The Play of Musement*, cit.

<sup>47</sup> Sebeok, ‘Vital Signs’, in Sebeok, *I Think I Am a Verb*, cit, pp. 77-78.

And to show how the unconscious aspect of sign behaviour transcends the intentional symbolic order which is precisely oriented to functions and ends, Sebeok also refers to the problem of dreaming, to what Freud called 'oniric work'.

The lack of functionality, forms of unproductive consumption, of dissipation are identified by Sebeok as entropic phases necessary to the development of life on earth: it is as though life is in continual need of — indeed is founded on — death in order to reproduce and maintain itself. The implications of such a statement made by different trends in the history of philosophy are numerous; for what concerns sign theory, the implication is that the semiotic chain is subject to loss, gaps, the erasing of sense. All this implies that in relation to sign material we must also necessarily postulate a sort of anti-material.

As we have stated then, Sebeok points out the limits of research on the nature of signs when it restricts its attention to sign function, and he evidences instead the importance of sign activity which is not directed towards precise goals and ends. As hinted above, the propensity for nonfunctional and unproductive sign activity, in this sense transcendent with respect to function, is visible in ritual behaviour among human beings and animals, but also in language. In fact, beyond its communicative function, language may be considered in terms of play without which imagination, fantasy, or abductive reasoning at the highest

degrees of innovation and invention, would have never been possible.<sup>48</sup>

### **Modeling systems theory**

A fundamental notion in Sebeok's semiotics is that of *model*. Sebeok develops the concept of modeling as proposed by the so-called Moscow-Tartu school (A. A. Zaliznjak, V. V. Ivanov, and V. N. Toporov. Ju. M. Lotman), where it is used to denote natural language ('primary modeling system') and the other human cultural systems ('secondary modeling systems'), but differently to the latter he goes further to extend this concept beyond the domain of anthroposemiotics. By connecting it to the biologist Jakob von Uexküll and his concept of *Umwelt*, Sebeok's interpretation may be translated as 'outside world model'. On the basis of research in biosemiotics, the modeling capacity is observable in all life forms.<sup>49</sup>

The study of modeling behaviour in and across all life forms, requires a methodological framework developed from the field of biosemiotics. This methodological framework is *the modeling systems theory* proposed by Sebeok in his research on the interface between semiotics

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<sup>48</sup> On these aspects, cf. in particular Sebeok's *The Play of Musement*, cit.

<sup>49</sup> See Sebeok, *A Sign Is Just a Sign*, cit., pp. 49-58, 68-82, and Sebeok, *Signs*, cit., 117-127.

and biology. Modeling systems theory studies semiotic phenomena as modeling processes.<sup>50</sup>

In the light of semiotics viewed as a modeling systems theory, semiosis — a capacity of all life forms — may be defined as ‘the capacity of a species to produce and comprehend the specific types of models it requires for processing and codifying perceptual input in its own way’.<sup>51</sup>

The applied study of modeling systems theory is called *systems analysis*, which distinguishes between primary, secondary, and tertiary modeling systems.

The primary modeling system is the innate capacity for simulative modeling, in other words, it is a system that allows organisms to simulate something in species-specific ways.<sup>52</sup> Sebeok calls ‘language’ the species-specific primary modeling system of the species called *Homo*.

The secondary modeling system is the system that subtends both indicational and extensional modeling processes. The nonverbal form of indicational modeling has been documented in various species, whereas extensional modeling is a uniquely human capacity, because it presupposes *language* (primary modeling system) which, as we shall see below, Sebeok distinguishes from *speech* (human secondary modeling system).<sup>53</sup>

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<sup>50</sup> See Sebeok and Marcel Danesi, *The Forms of Meanings. Modeling Systems Theory and Semiotic Analysis*, Berlin/New York: Mouton de Gruyter, 2000, pp.1-43.

<sup>51</sup> Ibid., p. 5.

<sup>52</sup> Cf. ibid., pp. 44-45.

<sup>53</sup> Cf. ibid., pp. 82-85.

The tertiary modeling system is the system that undergirds highly abstract, symbol-based modeling processes. Tertiary modeling systems are the human cultural systems.<sup>54</sup>

### **The question of the origin of human verbal language**

The question of the origin of human verbal language is largely set aside by the scientific community as unworthy of discussion, having most often given rise to statements that are naive and unfounded (an exception is offered, for example, by a book by Giorgio Fano [1885-1963] entitled, *Origini e natura del linguaggio*.<sup>55</sup>

Despite this general attitude, however, Sebeok neither forgets this problem nor underestimates its importance.

He claims that human verbal language, in his terms, speech, is species-specific, and on this basis he intervenes polemically and with ironical overtones towards the enthusiastic supporters (whom he attempts to cool down) of projects and practices developed to the end of training animals how to talk. Such bizarre behaviour is based on the false assumption that animals talk. In the aforementioned interview with Petrilli<sup>56</sup>, where reference is made to his text

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<sup>54</sup> Cf. *ibid.*, pp. 120-129

<sup>55</sup> Giorgio Fano, *Origini e natura del linguaggio*, Torino: Einaudi, 1972; Eng trans and intro. by S. Petrilli, *Origins and Nature of Language*, Bloomington: Indiana University Press, 1992.

<sup>56</sup> 'From Peirce (via Morris and Jakobson) to Sebeok: Interview with Thomas A. Sebeok', *cit.*

'Communication, Language, and Speech. Evolutionary Considerations',<sup>57</sup> Sebeok distinguishes between *language* and *speech*, which adds a further argument to his critique of phonocentrism.

On Sebeok's account, language appeared and evolved as an *adaptation* much earlier than speech in the evolution of the human species to *Homo sapiens*. Language is not a communicative device (and on this point Sebeok is in accord with Noam Chomsky even though the latter does not make the same distinction between *language* and *speech*); in other words, the specific function of language is not to transmit messages or give information.

As anticipated, Sebeok describes language as a *modeling device* <sup>58</sup>. Every species is endowed with a model that produces its own world, and language is the model belonging to human beings. However, as a modeling device human language is completely different from the modeling devices of other life forms. Its characteristic trait is what the linguists call *syntax*. Syntax makes it possible for hominids not only to have a 'reality', that is, a world, but also to frame an indefinite number of possible worlds, being a capacity which is unique to the human species.

Thanks to syntax human language is like Lego building blocks, it can reassemble a limited number of construction pieces in an infinite number of different ways.

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<sup>57</sup> Included in his book of 1986, *I Think I Am a Verb*, cit., pp. 10-16.

<sup>58</sup> Cf. Sebeok, 'Language as a Primary Modeling System?', in Sebeok, *Signs*, cit., p. 125.

As a modeling device language can produce an indefinite number of models; in other words, the same pieces can be taken apart and put together to construct an infinite number of different models.

Thanks to language not only do human animals produce worlds similarly to other species, but, as Leibniz says, human beings can also produce an infinite number of possible worlds. This brings us back to the 'play of musement', a human capacity which Sebeok considers particularly important for scientific research and all forms of investigation, as well as for fiction and all forms of artistic creation.

Speech like language made its appearance as an adaptation, but *for the sake of communication* and much later than language, precisely with *Homo sapiens*. Consequently, language too ended up becoming a communication device; and speech developed out of language as a derivative *exaptation*. (this designation is proposed by Gould and Vrba).<sup>59</sup> Exapted for communication, first in the form of speech and later of script, language enabled human beings to enhance the nonverbal capacity with which they were already endowed. On the other hand, speech came to be *exapted* for modeling and to function, therefore, as a *secondary modeling system*. Beyond increasing the capacity for communication, speech also increases the capacity for innovation and for the 'play

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<sup>59</sup> Cf. S.J. Gould and E.S. Vrba, 'Exaptation: A Missing Term in the Science of Form', *Paleobiology* 8, 1982, pp. 4-15.

of musement'. The plurality of languages and 'linguistic creativity' (Chomsky) testify to the capacity of language, understood as a primary modeling device, for producing numerous possible worlds.

### **Modeling device and iconicity. Mind as a sign system**

Sebeok believes that language as a modeling device relates iconically to the universe it models. This statement connects him directly with Peirce and Jakobson, though an equally important connection can be made with Wittgenstein's *Tractatus*, particularly with the notion of 'picturing'.

The iconic relation can be further explained and analyzed through the distinction made by Rossi-Landi between *analogy*, *isomorphism* and *homology*,<sup>60</sup> a distinction congenial to the general orientation of Sebeok's own research, given its association with biology.

This approach to the relation between language and world has implications for the theory of knowledge, for the study of cognitive processes and psychology, which Sebeok directly addresses in terms of psycholinguistics and psychosemiotics. Relating semiotics to neuro-biology, he considers the mind as a sign system or model representing what is commonly called *Umwelt*. The world is an icon of given pertinent space/time relations which are fixed,

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<sup>60</sup>Cf. Ferruccio Rossi-Landi, *Language as Work and Trade* (1968), Eng. trans. by M. Adams, et al., South Hadley (Mass.): Bergin and Garvey, 1983.

modified and fixed again in the organism's *Innenwelt*, and which are interpreted in the chain of deferrals from the interpreted sign to the interpretant sign.<sup>61</sup>

### **Semiotics of life and globalization**

Sebeok's semiotics of life may be used for an adequate understanding and comprehensive interpretation of the current phase in production which may be tagged 'globalization'.

Social production today is characterized by the automated industrial revolution, by global communication and by the global market (which is not only a quantitative fact of expansion, but also and above all qualitative transformation, represented by the translatability of anything into goods as well as by the production of new goods-things). In the present age, communication is no longer just an intermediate phase in the production cycle (production, exchange, consumption), but rather it has become the constitutive modality of production and consumption processes themselves. Not only is exchange itself communication, but production and consumption are also communication. Therefore, the whole production cycle has become communication and, consequently, this particular phase in social production may be characterized as the 'communication-production' phase.

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<sup>61</sup> Cf. Sebeok, 'Naming in animals with reference to playing: A hypothesis', in Sebeok 1986, chp. 7.

Communication-production is communication of the world as it is today. It is *global* communication, not only in the sense that it has expanded over the whole planet but also in the sense that it sticks to and relates to the world as it is, it accomodates the world. It may be better to say: it is communication of this world. Communication and reality, communication and being coincide. Realistic politics (but if it is not realistic, it is not politics) is politics appropriate to global communication, to the being of communication-production.

The risks involved in global communication-production include the risk of destroying communication itself.

Here, the concept of destruction is not merely referred to that relatively simple or banal phenomenon commonly identified in literature and in filmic discourse as 'incommunicability' (a subjective-individualistic malady caused by the transition in communication to its current phase of development and inseparable from production). On the contrary, when we speak of the risk of the end of communication, we are referring to nothing less than the possibility of the end of life over the planet Earth: in the present context, communication is obviously not understood in the reductive terms described above but rather is equated to life itself. According to this wide interpretation, communication and life coincide, as Sebeok's semiotics in particular has made clear. From this point of view the end of communication would in fact involve the end of life. And,

indeed, production in today's society, unlike all other preceding phases in social development, is endowed with an enormous potential for destruction.<sup>62</sup>

For an adequate understanding of communication in its current historico-social specification as a world-wide phenomenon as well as in its relationship with life over the whole planet (and remembering, therefore, that life and communication coincide), semiotics must adopt Sebeok's planetary perspective in both a spatial and temporal sense. Such an orientation will permit the necessary distance and indeclinable responsibility (a responsibility without alibis) for an approach to contemporaneity that does not remain imprisoned within the confines of contemporaneity itself.

With the spread of 'bio-power' (Foucault)<sup>63</sup> and the controlled insertion of bodies into the production apparatus, world communication goes hand in hand with the spread of the concept of the individual as a separate and self-sufficient entity. The body is understood and experienced as an isolated biological entity, as belonging to the individual, the individual's sphere of belonging. Such an attitude has involved the almost total extinction of cultural practices and worldviews based on intercorporeity, interdependency, exposition and opening of the body (what remains is the

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<sup>62</sup> Cf. Augusto Ponzio and Susan Petrilli, *Il sentire nella comunicazione globale*, Rome, Meltemi, 2000.

<sup>63</sup> Cf. Luther H. Martin, Huch Gutman, Patrik H. Hutton (eds.), *Technologies of the Self. Seminar with Michel Foucault*, Amherst: The University of Massachusetts Press, 1988.

expression of a generalized situation of museumification, mummified archeological residues studied by folklore analysts, preserved in ethnological museums and in the histories of national literature).

Think of the ways the body is perceived in popular culture, discussed by Bakhtin,<sup>64</sup> the forms of 'grotesque realism', where the body and corporeal life generally are neither conceived individualistically nor separately from the rest of terrestrial life, indeed, from the world itself. Signs of the grotesque body (of which only very weak traces have survived in the present day) include ritual masks, masks used during popular festivities, carnival masks. 'Grotesque realism' in medieval popular culture (which preexists therefore with respect to the development of the various forms of individualism connected with the rise of the bourgeoisie), presents the body as something that is not defined once and for all, that is not confined to itself, but as flourishing in symbiosis with other bodies, in relations of transformation and renewal which far exceed the limits of individual life. World communication today does not weaken the individualistic, private and static conception of the body, but on the contrary reinforces it.

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<sup>64</sup> Cf. Bakhtin, *Problems of Dostoevsky's Poetics* (1963), Manchester: Manchester University Press, 1984; and Bakhtin, *Rabelais and His World*, cit.

Cfr. Rossi Landi, *Language as Work and Trade*, cit.; Rossi-Landi, *Linguistics and Economics*, The Hague: Mouton, 1977; and Rossi-Landi, *Between Signs and Non-Signs*, ed. by S. Petrilli, Amsterdam: John Benjamins, 1992.

As Michel Foucault in particular has revealed (but we must also remember Rossi-Landi's acute analyses as already proposed in his books of the 1970s), division and separatism among the sciences are functional to the ideologico-social necessities of the 'new cannon of the individualized body' (Bakhtin). This is in turn functional to the controlled insertion of bodies into the reproduction cycle of today's production system.

A global and detotalizing approach to semiotics demands extremely high degrees of availability towards the other, readiness to listen to others in their otherness, a capacity for opening to the other, to be measured not only in quantitative terms (the omnicomprehensive character of global semiotics), but also qualitatively. All semiotic interpretations by the student of signs, specially at a metasemiotic level, cannot prescind from a dialogic relationship with the other. Dialogicality, in fact, is a fundamental condition for a global approach to semiotics where to be oriented globally means to privilege the opening towards the particular and the local, rather than the tendency to englobe and enclose. Accordingly, we are describing an approach to the universe of signs that privileges the movement towards detotalization rather than totalization.

## **A dialogical approach to European and American Semiotics**

In *Semiotics in the United States*, Sebeok analyzes U.S. semiotics at three different levels, at once closely interrelated and yet easily identifiable.

At the *first* level he makes both a synchronic and diachronic survey of the various theoretical trends, perspectives, problems, fields, specializations and institutions that characterize U.S. semiotics. Regarding the diachronic perspective, Sebeok assumes the difficult task of reconstructing the origins of American semiotics, which he researches in discourse that was not yet connoted as semiotics at the time and that, in certain cases, is still today considered as only marginally associated with semiotics or completely distant from it.

The *second* level is theoretical and critical. Sebeok takes a stand with respect to given problems in semiotics: problems of a general order concerning, for instance, the delimitation of the field of semiotics or the construction of a general sign model; and problems of a more specific order concerning the various sectors and subsectors of the science, or 'doctrine of sign'. The impression which Sebeok would seem to confirm here and there, is that this more problematic level sets the perspective for the whole volume: it completes the first level and avoids limiting the volume to pure historical descriptivism.

The *third* level is connected to the second in the sense that while developing and illustrating his theoretical views, Sebeok colours them with personal overtones and most often with amusing biographical anecdotes. There are very

few pages in *Semiotics in the United States* where Sebeok does not figure as one of the characters populating the stories, episodes, and enterprises forming his narration. In fact, this is largely due to his surprising and perhaps unprecedented involvement in the organization and promotion of the semiotic science at a world level — a cause to which he has been committed since the gradual emergence of semiotics as a discipline in its own right. Sebeok has been in direct contact with many of the authors mentioned in his volume and has many 'memories' of personal experiences with them, consequently these memories have found their way into his description of the problems and orientations characterizing the semiotic globe.

With reference to these three shaping factors, another book by Sebeok similar to *Semiotics in the United States* is *The Sign & Its Masters*, already oft-cited throughout the present text. Here, in fact, the historical, theoretico-critical and anecdotal threads of Sebeok's discourse converge and interweave even more than in his other books, though the autobiographical aspect is never lacking in any one of them. However, *Semiotics in the United States* may also be related to *I Think I Am a Verb* where autobiographical motivations are not lacking in the choice of topics, authors and personalities cited, including the eighteenth President of the United States of America, Ulysses S. Grant, whose words as we have said inspire the title of the volume.

An aspect which immediately strikes the attention of the work of this great master of signs as is Sebeok, is what

without hesitation we may describe as his 'dialogical' and 'polyphonic' approach, in the Bakhtinian sense of these words. Sebeok promotes dialogue among signs, among the different orders of signs, among different interpretive practices, domains and fields, as well as among the 'masters' of signs, including those whom had never been in direct contact with each other, or whom did not even know they were dealing with signs (his so-called 'cryptosemioticians').

In line with his recognition of the importance of dialogism for the development of thought, and even more broadly for the evolution of life generally, of which human thought processes are a part, Peirce too (who had been forced into isolation having been excluded from academic life) had had occasion to write (in a letter to Victoria Lady Welby of December 2, 1904 and very much in accord with her own views) that

*after all philosophy can only be passed from mouth to mouth, where there is opportunity to object & cross-question.*<sup>65</sup>

As testified by his long teaching career and constant commitment to promoting the 'community of inquirers', for Sebeok the continuity of dialogic exchange is nothing less

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<sup>65</sup> In Charles S. Hardwick (ed. and Introd: ix-xxxiv), *Semiotic and Significs. The Correspondence Between Charles S. Peirce and Victoria Lady Welby*, Bloomington-London: Indiana University Press, 1977.

than of vital importance. Indeed, as claimed by Iris Smith in her introduction to Sebeok's book of 1991, *American Signatures: Semiotic Inquiry and Method*, his own peculiar way of living his condition as an intellectual testifies to the fact that individual reflection must be measured against the reflections of others.

### **Semiosis beyond Gaia?**

The semiotic field extends over all terrestrial biological systems, from the sphere of molecular mechanisms at the lower limit, to a hypothetical entity christened 'Gaia' (towards the end of the 1970s), this too a model of the world, at the upper limit. In Sebeok's view then, semiosis spreads over the *Lilliputian world* of molecular genetics and virology to *Gulliver's man-size world*, and, finally, to the *world of Brobdingnag*, that is, Gaia, our bio-geo-chemical and gigantic ecosystem.

And beyond? Can we assert that semiosis extends beyond Gaia? A 'beyond' understood in terms of space, but also of time: Is semiosis possible beyond Gaia, outside it, and beyond this gigantic organism's life span? Sebeok ponders this question too.<sup>66</sup>

With his research Sebeok takes stock of the impressive general progress and expansion of the field of semiotics during the past twenty to thirty years or so.

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<sup>66</sup> Cf. 'Semiosis and Semiotics. What Lies in their Future?', cit.

Starting from a definition of semiotics as the study of the exchange of any kind of message and related sign systems (which we have seen he criticizes), he theorizes semiotics as the 'play of musement' oriented to mediating between reality and illusion.

The 'play of musement' activating Sebeok's research is so free from prejudice that on examining the coincidence between life and semiosis, he even goes so far as to risk the hypothesis that the end of life does not necessarily imply the end of semiosis: with some probability sign processes building limitless interpretants may continue in machines independently of humans. This Orwellian conclusion (formulated by Sebeok in his important and oft-cited text 'Semiosis and Semiotics: What Lies in their Future?') plays on the hypothesis of the machine as the sole place to remain for the workings of the 'life of signs', however we wish to play on the words 'life' and 'signs'. It proposes a sort of negative utopia which in at least one sense (as partial as this might be considering the limits of the human condition) is surely a form of nonlife and, therefore, of absence of signs.

A propos the relation between life, semiosis and semiotics and as a conclusion to this booklet dedicated to Sebeok as a *Festschrift* on his eightieth birthday, we wish him that the semiosis of Sebeok the man and the semiotics of Sebeok the semiotician may yet live a long and signifying life!



## Further Reading

Eugen Baer, 'Thomas A. Sebeok's Doctrine of Signs', in Martin Krampen, et al., eds., *Classics of Semiotics*, pp. 181-210, New York: Plenum Press, 1987.

Jeff Bernard, "Thomas A. Sebeok und die Zeichen des Lebens." In: Peter Weibel, ed., *Jenseits von Kunst (= Passagen Kunst)*, pp. 739-740. (Wien: Passagen Verlag, 1997).

*Iconicity: Essays on the Nature of Culture. Festschrift for Thomas A. Sebeok on his 65th Birthday*, Foreword by Claude Lèvi-Strauss, Tübingen: Stauffenburg Verlag, 1986.

Instituto de investigaciones humanísticas Universidad Veracruzana (ed.), *Semiosis* 26-29, número dedicado a Thomas A. Sebeok por sus 70 años, 1992.

Marcel Danesi, *The Body in the Sign: Thomas A. Sebeok and Semiotics*, Toronto: Legas, 1998.

John Deely (ed), *Thomas A. Sebeok. Bibliography. 1942-1995*, Blomington, Indiana: Eurolingua, 1995.

John Deely, "Thomas A. Sebeok", Entry in: Paul Bouissac, ed., *Encyclopedia of Semiotics*, Oxford: Oxford University Press, 1998.

John Deely, *Basics of Semiotics*, Bloomington: Indiana University Press, 1999.

John Deely and Susan Petrilli, *Semiotics in the United States and Beyond; Problems, People, and Perspectives*, Papers resulting from 6-10 July, 1992, Papers resulting from seminar occasioned by the Sebeok's *Semiotics in the United States*, and held at

the Centro di Semiotica e linguistica di Urbino (Italy), Special Issue, *Semiotica* , 97-3/4,1993.

Iris Smith, 'Thomas A. Sebeok: "The Semiotic Self in America"', in: *American Signatures: Semiotic Inquiry and Method*, pp. 3-18, Norman: University of Oklahoma Press, 1991.

'Symbolicity': Papers from the International Semioticians' Conference in Honor of Thomas A. Sebeok's 70th Birthday, Budapest-Wien, 30 September - 4 October, 1990. Sources in Semiotics 11. Lanham: University Press of America, 1993.

Eero Tarasti, ed., Commentationes in Honorem Thomas A. Sebeok Octogenarii A.D. MM Editae, Imatra (Finland): International Semiotics Institute, 2000). Among 13 chapters of this book see especially Eero Tarasti's editorial Preface, Marcel Danesi's 'The Biosemiotic Paradigm of Thomas A. Sebeok', and Solomon Marcus's 'The Sebeok Factor: the Right Man at the Right Place at the Right Moment'.

Tasca, Norma (ed.), *Ensaio em homenagem a essays in honor of Thomas A. Sebeok*, *Cruzeiro semiotico*, 22/25, 1995.