

# THE CODING AND DECODING OF THE SIGN AT THOMAS A. SEBEOK

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## Abstract

If we look, even from far away, at the development of the means of communication or at the interests of the scientist we notice that together with the philosophers, sociologists, political scientists, linguists and psychologists, the 21st century individual develops within the local or global cultures under the dictatorship of the image, rendered as a symbolic form. Semiotics is considered a field of study which possesses, within its field of investigation the language (languages) and the practice of signification / communication as social practices. Throughout the years, this field of study has received many definitions which have tried to explain its epistemic horizons. Most of the attempts to define the field of semiotics belong to language philosophy, logic and linguistic. However, the expert in semiotics Thomas A. Sebeok tells us that semiotics is rooted in medicine and that Hippocrates (460-377 B. C.), regarded as the founder of the Western medical science, was one of first people who used the sign science to study the patients' symptoms. We should acknowledge the fact that in the history of the subjects that analyse the production of signs and the relations among them, there are some theorists who have identified semiology as part of a whole, semiotics, an idea especially spread by John Deely, but disputed by Georges Mounim. Therefore, medical diagnosis represents a semiotic science since it relies on the principle that the physical symptom doesn't represent itself, but a state or internal condition. However, later research in the field separate the concept of symptom from that of sign, bringing the latter closer to semiotics. This is how the encoding and decoding device is formed...

**Keywords:** *communication, sign, symbol, semiotics, semiosis, message, codification, decoding, hermeneutic, icon.*

Thomas A. Sebeok (1920-2001), together with Umberto Eco, Algirdas-Julien Greimas, Julia Kristeva and many others is considered as one of those who, by transforming the global study of semiosis into a science of life, has enlarged the field of semiotics research, arousing the interest of the cognitive and social sciences. Born in Budapest, the expert in semiotics emigrates in USA, where he defends his PhD thesis at the prestigious Princeton University in 1945. After that, during some worldwide conference tours, one of which was in Bucharest in 1998 where he

lectures, T. A. Sebeok develops a theory which states that semiotics is an independent field of study, proving on various occasions that it has some connections with the cognitive and biological sciences. His research activity in the field of semiotics is proven by those over 500 book and article titles which he wrote throughout time, as well as by the generations of young experts in semiotics, who had the opportunity to understand his ideas during his lectures at North-American universities. The research and ideas present in his papers present the way in which semiotics interacts with the biological, psychological and cultural products and processes. From this standpoint Thomas A. Sebeok can be regarded as an innovator within the semiotics field of study, as we notice that the scholar takes semiotics out of the philological, linguistic and hermeneutic systems and it reseats it in the sphere of the biological sciences. Transforming once again semiotics into a science of life, Sebeok doesn't do anything else than to show us that the signs appear within the human body as extensions of the body's recreation system.

Thomas A. Sebeok shows that, between the body, mind and culture, there is a process that ties them together, a process called semiosis, which helps us understand the production and interpreting of the signs. The nature of semiotics is that it researches the interconnection between life, meaning everything that is organic and offers *a sign of life* - from termites to people - and semiosis. Sebeok's research and ideas can be put together with those of the biologist Jakob von Uexküll (1864-1944) who proved, more than half the century before that every system has different lives on the inside and on the outside. In this regard, the semiotics scholar shows that one of the main goals of the biological research of

semiosis is *non-verbal* communication, which takes place within one or multiple systems. In comparison to other species which send *life signals* regardless of their nature, the humans species is the only one capable of simultaneously communicating, using both non-verbal (with the help of language and writing) and verbal means. If, for example, an individual's verbal communication process suffers an *accident* (as in the case of people who are born without verbal communication abilities, or others who lose their speaking capacity because of different traumas of because they get old), then the individual can continue to communicate. Without the capacity to verbalize the man can communicate in a non-verbal manner: "Non-verbal communication takes place within a system or between two or more systems. Within the system, the participants at the communication activities can assume – as sources of the messages, their addressees or both – on ascendent levels of integration, cell components, cells, tissues, organs and organ systems. Moreover, the main characteristics of the biological organization in its whole, non-verbally directed in that *milieu intérieur*, include protein synthesis, metabolism, hormonal activity, the transmission of nervous impulses, and others. Communication at this level is mainly studied (among other sciences) by subfields of *biosemiotics*, called *protosemiotics*, *citosemiotics*, or, generally speaking, *endosemiotics*. Internal communication takes place by means of some semic operations or due to the chemical, thermic, mechanical or electrical semiosis. (Sebeok, 2002, p. 30-31)

According to the research conducted, Thomas A. Sebeok shows that the oldest forms of communication between the systems from our biosphere can be identified in prokaryotes, in other words, in *bacteria*. Their social behaviour, of organizing themselves in colonies and of transmitting the information, has determined biologists, but also experts in semiotics, to research their non-verbal communication processes, characterized as forms of biological semiosis.

If, on the other hand, we look at the vertebrates, the scholar shows that a comparative analysis is necessary, not only between the non-verbal and the verbal communication, but also between the non-verbal and the vocal one. For example, he

argues that, in their communication, people use many channels, among which is the acoustic one. Acoustic communication can be both verbal and vocal, but it can also be semiotic or artificial. Somatic acoustic communication can be vocal, as a yell triggered by an affright, or non-vocal, like clapping of hands at the end of a performance in order to show the artist appreciation. Sebeok shows that, in people, the non-verbal communication, in its acoustic manner, in all acknowledged communities, has been artistically developed taking the form of a great variety of musical achievements. Acoustic communication (in all its forms) sends the receiver *the sound*. When it is verbal, it can be shaped, starting from an intimate whisper and up to a definite shout, as we sometimes encounter during a theatrical performance or during the reading of a poem. When there is a relationship between sounds, they can produce signs or systems of signs, and eventually we encounter what we call semiosis. For example, the sounds of the word l-a-m-p taken separately will only represent some bodies that due to *the social contract* are similar to some vowels or consonants, while put together they offer a signs, the word *lamp* which characterizes the object lamp. In their turn, words perceived as signs, connected with other signs (words) will lead to a system of signs, as following: *the bedroom lamp is orange*. In this respect, Einstein, in a letter sent to a friend in 1945 wrote how signs can be interconnected with the help of the mind, so that they communicate something about the universe: "the words or the language, as they are written or spoken, don't seem to play any role in my own thinking mechanism. The physical entities seem to serve as thinking elements, and there are some signs and images more or less clear which can willingly be reproduced or combined." Coming back to the sound can say that: "it doesn't depend on light and it can be used both day and night. Also, it fills up the whole space around the source. Therefore, it doesn't require a direct connection line with the destination. Moreover, it requires very low energy expenses. In the case of humans, the sound can be modulated from the intimate whisper up to the long shout." (Sebeok, 2002, p. 36)

Thomas A. Sebeok's studies show that the man is the only being in the biological system who, after hard work, on the scale of evolution, managed to communicate, even with the help of some instruments, *conventional words and other signs*. The scholar's idea shows how systems communicate using models or individual worlds "each of them according to its specie's specific sense organs, starting from the simplest representations of the approaching and withdrawal maneuvers and ending up with the most sophisticated cosmic theories belonging to Newton and Einstein. (Sebeok, 2002, p. 43)

The expert in semiotics, Thomas A. Sebeok, does never reveal what the world is, but he guides us on how we can get to know it; in other words, *the semiotic model does not describe "pure reality," but nature as it is revealed to us* with the help of the research methods used by the expert in semiotics. In this regard, semiotics represents a meta-field of study. It facilitates possible communication, presenting the relationships between the signs or sign production. Continuing and developing Jakob von Uexküll's theories, Thomas A. Sebeok shows that the verbal message traffic is currently identified only in animals or especially at *Homo sapiens sapiens*. He finds two separate, but combined, semic repertoires in the individual, as following: a) the non-verbal language, derived from the mammals' ancestors, especially primates and b) the verbal language, exclusively human. If the field of semiotics is closely linked to the two types of language, well then, the type of verbal language represents the subject of another field of study, ancillary to semiotics, namely *linguistics*, which we have defined in the first part of our paper, where we have presented the contributions to the linguistic sign brought by the Linguistic Schools from Prague and Copenhagen.

Recent research shows that starting from *Homo habitas la Homo sapiens* the language has developed, firstly, as an adaptation, while speech developed from the language: "Therefore, languages - which consist of a set of traits that promote aptness - can mainly be sequels of a construction process which uses selection taking into account the cognitive function of modulation and not, as the both the philosopher Popper and the linguist Chomsky claimed, in regard to the

communication function through message exchange. The latter has been supported by the non-verbal messages, as in the case of animals, and it still exists today if we consider the majority of the human interactions. A few million years later, the language began representing an unexpected function for communication, firstly under the form of speech, and then of writing. This relatively short time interval was necessary for a plausible mutual adjustment of the coding and decoding capacity". (Sebeok, 2002, p. 185-186.)

From what was mentioned above one can understand that the human being has the capacity to establish and send messages. In this regard, the contemporary communication and hermeneutic sciences showed that the established messages are sent via a channel to an addressee. On this channel called *the communication channel* (verbal and non-verbal) the message goes through some operations: it is codified and decoded. The transmission process of the message, from the transmitter to the addressee, from *one form of energy* into another is known as *the codifying process*. While, the addressee detects and extracts from the channel of coded messages, in order to understand them, he has to perform another *translation*, followed by other transformations, before the interpretation can take place. This final process is called *decoding process*. "Codifying and decoding require a code, a set of clear rules which convert the messages from one representation into another; the code is what it is assumed to have in common, completely or partially, the two parties involved in the message exchange". (Sebeok, 2002, p. 53)

According to Thomas A. Sebeok, the rich field of the semiotic research is composed of six factors: the message and code, the source and destination, the channel and the context. Following the path opened by medicine and continued by the philosophical and linguistic tradition, Sebeok shows that the central concept of semiotics still remains *the sign*. So far, we have defined the sign, in the parts dedicated to Saussure, Peirce, Jakobson etc. However, I will remind you that, for Peirce, the sign was a generic concept. Peirce acknowledges the sign as *something which replaces somebody or something in some respect or quality*. The sign is derived from a

trichotomic base comprised of cone, index and symbol. Peirce comes to distinguish from 9 to 66 sign classes. In an article published in 1868 Peirce, as well as Thom, comes to the conclusion that signs are born from their own development from other signs, the sign in its turn becoming another sign, and so on *ad infinitum*, which makes us think of *an unlimited semiosis*.

The American expert in semiotics, Thomas A. Sebeok finds at least three general sign characteristics. Therefore, the open line by Dante Alighieri in *De vulgarieloquentiae* offers the following definition for the concept of sign: *this sign is sensitive in its quality of a sound; and to the extent that it proves capable of meaning something, it is rational.* (Alighieri, 1971) Sebeok says that **a)** the sign is bifocal, meaning it is made out of two indispensable parts: *aaistheton one*, perceptible or sensitive, and a *noeton one*, intelligible and rational. Therefore, the *signifier* lies in the area of the perceptible, having an important impact on at least one of the sense organs of the interpreter, while the signified content lies in the area of the intelligible, of the rational. **b)** there is a *zero degree sign*, such as the phonemes and the morphemes. Yet, Sebeok warns that the linguists who use *the zero sign* terminology are obliged to understand either *the zero signifier*, or *the zero signified*, never both cases. **c)** A third general characteristic of signs identified by Thomas A. Sebeok is the one related to *occurrence* or the particular *denotement* of a sign. That is why, the expert in semiotics offers the following example: "we can say that one page from a book has 250 words, and this represents the number of lexical occurrences, while the number of different words on a page represents the number of the different lexical items." (Sebeok, 2002, p.62)

Even though, in time, a series of philosophers, logicians, linguists and experts in semiology tried to look for and to define the multiple possible relationships between *the signifier* and *the signified*, relationships which could lead to new classifications for the sign and for the system of signs, today only a small part are usually identified and used. Thus, Sebeok ends up classifying signs in six categories, which aren't only characteristic to humans. The six sign categories are: *the signal, the symptom, the icon, the index, the symbol and the name.*

For Thomas A. Sebeok *the signal* is a sign that triggers mechanically (naturally) or conventionally (artificially) some reaction from a receiver. In its turn, the receiver can be both a car or a body and we can imagine even a personified supernatural entity. (Sebeok, 2002, p.66) A polemic reception may be found in Bühler and Pazukhin. From the point of view of the first one signal addresses, the destination whose internal and external behavior govern it. In other words, the signal acts as a traffic regulator that causes or inhibits the reaction. (Bühler, 1934) On the other hand, Pazukhin emphasizes that Bühler's theory is risky because it leaves room for misinterpretations. He says that Bühler's theory there are at least two errors: the first error is that it neglects Bühler's organon model as a whole, where the concepts of signal is placed in the same position with the concepts of symptom and symbol, and the other error is that it overlooks to have permanently take into account the *aspects* of signs. Thomas A. Sebeok's view on this dispute is that we should as soon as possible "understand that the relationship between signal and sign is the one between a marked and a unmarked category, that is between a species and genre to which it belongs, as Bühler claimed too. Secondly, Pazukhin introduces and discusses in detail what he calls the two control modes, both interactions founded on the idea of causal relationship: direct control and the lock-and-release control type. Control by signaling is a special case of the latter, which leads to the conclusion, implicitly stated in the definition given by Pazukhin concerning the signal, namely that *between a signal and the reactions it produces there is only a casual relationship.*" (Pazukhin, 1972, p. 43)

In Thomas A. Sebeok's conception the symptom is a compulsive sign, automatic, non-arbitrary, in such a way that the signifier is coupled with the signified as a natural connection. Inspired by the medical semiotics Sebeok shows that the syndrome is a pattern of symptoms regulated by symptoms with a set designated. A fundamental characteristic that the semiotician identifies in the symptom is that its denotations in most cases are different both for the sender (patient - *objective symptoms*) and the recipient

(doctor -*objective symptoms*). The theory of symptoms interpretation, in other words the symptomatology or the semeiology (as Sebeok calls it) could be considered the beginning of the theory of signs. If, for example, we look to ancient thinking - we find the famous doctors, physiologists and anatomists, Erasistratos, Hippocrates, doctor Galen of Pargam, Herophilos, the epicurean Asclepiades of Bithynia how they used to interpret the symptoms to identify a certain disease. Today, the art of interpreting the symptoms „has a meaning far beyond the daily management of the disease by the physician. As anticipated by Hippocrates, its success derives from the psychological ability of the doctor, and this depends decisively on the ability of the practitioner to put his/her imprint competence both on the patient and the environment together (assistance gathered in his/her office that may consist of family and friends of the patient, as well as from the doctor's peers and team. (...)) According to recent medical judgment the contemporary concern for diagnostics - namely the idea that the recognized mission or the core action of the physician is to explain the significance of the patient's condition - ultimately depends on the role self-assigned of the doctor as an authorized factor to explain the values of contemporary society. The disease is thus raised to the status of a moral category and the sorting out of symptoms should be seen therefore best as a semiotics taxonomy system - or, in the Russian semiotic language, *a secondary modeling system* „. (Pazukhin, 1972, p. 107-108)

Thomas A. Sebeok says that a sign is an icon when there is a topological similarity between a signifier and its denoted objects. It is known that the concept of icon is inherited from Plato's philosophy, namely his theory about *mimesis*. At Plato we find the idea that art in general (in which the poetry is included) presents itself as an imitation: *mimesis*. In Plato's Socratic dialogues we find poetry as the *art of muses*. With this art Socrates will attempt to translate the dream, that is fantasia. The philosopher born in Alôpekê, Attica in 470 BC, when he was explaining his belief that after death something else was *awaiting* for him, something better for the good than for the evil, something for philosophers, that is, when explaining the theory of immortality by

separating the soul from the body he retells Cebes's why he started writing poems (until then Socrates has never written poems): „CEBES: Ah, Socrates, it is good that you reminded me. What about the poems you wrote by putting into lines Aesop's fables and composing a hymn to Apolon? (...) what skeme you had in mind when you started, after you came here, to compose lyrics, you who have not done this before. (...) SOCRATES: Well, Cebes, tell him the truth ... I did not start writing lyrics to compete (referring to the poet Euenos ) with him or with his fables (no easy thing at all, I perfectly understand), but to find the meaning of dreams, to obey the gods, to find out if this is really the art of the Muses that the dreams assiduously urged me to compose. (...) I was haunted all my life by a certain dream that under changing guises, always gave me the same exhortation: *Socrates, the art Muses be your diligence*. And I, until now, I used to understand that the urge and encouragement of the dream had in mind exactly what I was doing, the same as a runner is encouraged by the viewers: I thought that through the art of the Muses the dream meant the highest *music*, I mean philosophy, my usual occupation. Now, after the trial and after the celebration of the god delayed my end, I thought maybe the dream still has in view the art of Muses in its common sense and that I ought to obey. (...) And so I firstly composed a hymn to the god celebrated right now, then I thought that the poet, if he is a poet, should not sing true events, but to invent „(60 d, e, 61). (Platon, 2006) Thus it is that Socrates tells us in his apology (22 b, c) that poets *do not out of the wisdom (they have sophia) what they do, but through a natural endowment and the power of inspiration, like the prophets and oracles illustrators*.

Plato tells us that Socrates believes that over the poets, when they get inspired there works the *madness coming from the gods*. And so it is that the poets, when inspired by the muses, are driven by a desire to enlighten the mind and soul of those close to them to show the beauty: „The third image of madness and of the holy possession does not come from the Muses. If it lodges in a gentle and pure soul, it arouses him and exalts him and drives him to various songs and poems; due to this image, the countless actions of our ancestors takes on the garb of beauty and

enlightens the mind and soul of the successors But he who, lacking the madness that comes from the Muses, arriving at the gate of poetry, confident that he will get in here by none other than his craft is an imperfect poet, and his poetry - only moderation - fades before the one nourished by the holy madness. „(245) (Platon, 2006). Democritus too says that when the poet writes with bliss and divine breath it is in a beautiful way.

Plato in the *Ion*, talks about a chain of inspiration, which opens the Muse, passing through the poet to the listener. (The poems in antiquity were heard uttered in public, wearing a music which also aimed to attract attention.) According to Plato, the poetry appears in the human being when it is penetrated by the divine grace and he loses control of himself, deserted the reason. As long the poet retains his judgment he has no power to write poetry: „As long as he keeps his judgment, no man has the power to create poetry to give voice, in verse, to a prediction” (see Plato, *Ion*, 543 b , trans. Dan Slușanschi Peter Crete). The poetry appears at the ancient philosophers as an art that is meant to make man more handsome, like gods, to make him love life, and to gain confidence in his abilities, to celebrate through song the days lived with the gods.

Daily life is invaded by numerous iconic representations that we might call cultural identity icons, anthropological, or geographical icons or motivated. The first category icons we could assign to a certain culture, they demonstrate a particular civilization or organization, while the geographic icons or motivated, in our view, are icons from other cultures, but who come through some motivation degree in contact with a particular culture. The contemporary society, governed by the idea of cultural globalization and, even more of religious globalization, is *choked* by geografic icons *imported* from certain cultural areas.

Thomas A. Sebeok, adopting P. Bouissac's positions on the essential features of iconicity suggests that they may be summarized as follows: (Sebeok, 2002, p. 136-141)

- There are no pure iconic signs; continuing Ayer, Sebeok shows that in fact, *no real sign is an icon*. The transformation deiconization is

common; the contrary process of iconization is rarely met.

- The iconicity, Thomas A. Sebeok suggests, plays a fundamental role in shaping everyday life in all cultures. The iconic signs flood the human beings communication codes, the verbal and non-verbal ones.

- The iconic signs are to be found throughout the whole phylogenetic series, in all ways as they are circumscribed by the sense organs through which the members of a given species are able to learn about their environment. Counterfeiting signs, in fact all delusion maneuvers undertaken by plants, animals as well as by the people depend on iconicity.

- The unresolved enigmas about the omnipresent way of production, storage and transmission of occurrences as iconic signs abound. Some of them related to logic, some to psycho-physiology, others to ethology. Their resolution, shows Sebeok, expects the emergence of some analytical instruments, among which by far the most promising seem to come from the catastrophe theory, which will be likely submitted to topological analysis.

Referring to the index, Thomas A. Sebeok says that a sign can be indexed insofar as its signifier is contiguous with its signified or it is a sample of it. In this regard, the semiotician shows that a given object can function to some extent as iconic sign, as index or as symbol. He brings the example the U.S.A. flag and says: (Sebeok, 2002, p. 116-117)

- The iconicity move to the fore when the attention of the interpreters sets on the organized seven red stripes of the flag alternating with six other white ones (identical together with the number of founding colonies) or on the number of white stars grouped in a unique blue field (fully identical to the number of States in the Union).

- In a cavalry charge, say, the flag was usually used to imperatively guide, in an indexical maneuver, to a target.

- The debates following the recent decision of the Supreme Court on cases of flag burning present the USA flag as an emotionally overloaded matter, being a symbol subspecies.

Thomas A. Sebeok calls *symbol* (Sebeok, 2002, p. 79) a sign devoid of similarity or contiguity,

but only with a conventional connection between signifier and the signified objects, and with an intentional class for its signified. He states that feature *conventional connection*, which at Peirce is that *arbitrary character*, is introduced to distinguish the symbol from the iconic sign, the index, while the feature *intension* is necessary to distinguish it by name.

In recent decades the specialists in semiotics have discussed a number of subspecies of symbols including: the allegory, the mark, the brand name, the division, the emblem, the badges etc. In this regard, Ekman and Friesen have reintroduced and reactivated the notion of emblem: the emblems are different from most other nonverbal behaviors firstly through use and especially through their relationship with the verbal behavior, the consciousness and the intentionality. The emblems are those non-verbal acts that have a direct verbal translation or a dictionary definition, usually consisting of a word or two, or maybe a sentence. This definition or verbal translation of the emblem is well known by all the members of a group, of a class or culture ...the people are almost always aware of the use of emblems, that is they know when to use an emblem, can repeat it if asked to do it and they will take the communication responsibility for it. „ (EKMAN & FRIESEN, 1969)

The last category of sign that Thomas A. Sebeok distinguishes in the sign system is the *name*. According to the semiotician, the sign that has an extensional class for its signified is called *name*. In doing so, he shows that individuals denoted by a proper name have no common property except the fact that they respond to that

name. The individuals are identified using names/numours verbally certified, such as a personal name or a PCN (personal code/identification number), and with a lot of non-verbal indicators. Thomas A. Sebeok shows that all the species that emit *live signals*, utter a steady stream of *dentificator* that is postings identifying their source in one or more ways: in terms of species, the reproductive status, the position in space or time the rank in a social hierarchy, etc.

Besides the six species of signs that we have presented here Thomas A. Sebeok often makes allusion to other signs too, such as: the display, the allegory, the descriptor, the slogan, the chart, the effigy the logo, the emblem, the identifier, the image indicator, the badges, the trademark, the brand name, the metaphor, the numour, the ID-plate, the signature, the syndrome and the mark.

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