THOMAS A. SEBEOK

On December 21, 2001, Professor Thomas Albert Sebeok passed away peacefully at his home in Bloomington, Indiana. Over his illustrious career as semiotician and linguist, his writings cast a spell on a whole generation of young scholars and colleagues, influencing both theory and practice within the two interrelated fields. Without him, they will never be the same. He brought not only outstanding scholarship to both, but also an enthusiasm and *joie* that made them interesting in and of themselves. He loved everything about semiotics and its practice. We have all lost a guide and teacher; but his spirit lives on in the content of courses and in the ideas that are put forward and debated within and outside of semiotics and linguistics.

By his own admission Thomas Sebeok was not the prototypical scholar, one who takes on a narrow topic and studies it to its most profound depths. He liked to characterize himself as an academic *Apis mellifera* who darts 'solitary from flower to flower, sipping nectar, gathering pollen from flowers, serendipitously fertilizing whatever [he touches]' (Sebeok 1995:121). His scholarly career progressed not linearly, but rather by ever-widening centrifugal movements. The insatiable intellectual curiosity, astounding working capacity, and ease of writing that would yield more than 450 books and articles manifested itself early: by age twenty-three he had published nine articles.

Sebeok entered the world in Budapest in 1920. After a brilliant secondary career at Fasori Evangélikus Gimnázium (a premier breeding ground for Nobel Prize winners), his father sent him to learn English at Magdalene College, Cambridge. As a sixteen-year-old, his initial encounter with the English language was not auspicious, as he was fond of recalling:

> An initial handicap to overcome was that I didn't know a word of English then . . . I still clearly recall both the first full English sentence I orally encoded and the first full sentence I aurally decoded. When I got hungry that evening, I walked to the nearest Lyons and said to the waitress: 'I vant to become a sanvich'; to which she, thinking that I was an ill-trained German spy, lobbed back, 'Can't 'elp you guvnor'. (p.c.)

After a brief stay in England, Sebeok immigrated to the United States and matriculated at the University of Chicago, where he enrolled in a semiotics course taught by Charles Morris. He earned a Ph.D. in oriental languages and civilizations at Princeton. But with a firm grounding in American structuralism acquired in Leonard Bloomfield's classes at Chicago, he also commuted to Columbia to pursue his studies of linguistics under the tutelage of Roman Jakobson, his dissertation director, whose broader views on the place of language within the humanities and social sciences would shape Sebeok's intellectual development.

In 1943 the twenty-four-year-old doctorandus arrived in Bloomington to assist the Ameridianist Carl Voegelin in managing the country's largest Army Specialized Training Program in foreign languages. As enrollment swelled into the thousands and the number of less-taught tongues rose to fifteen, he took over the helm. During that period he also participated in the famous Broadway Project in which linguists were entrusted with the task of developing pedagogical materials to support instruction in the less-taught languages that had never been taught in universities, as well as in the spoken

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varieties of commonly taught languages like French and German disdained by the philologists and literary scholars who staffed the foreign language programs of academia in his era. At war's end some academic home had to be found for this interdisciplinary scholar par excellence. He was assigned to teach courses in English composition and world literature in the Department of English. His itinerary at Indiana University would eventually include stops in a half-dozen academic or research units spanning domains of the language sciences currently divided into five departments, in addition to teaching assignments in the medical school housed on the campus of the current Indiana University-Purdue University at Indianapolis. While teaching the rhetorical arts to young Hoosiers, Sebeok broadened his knowledge of anthropological linguistics by fieldwork on the Wisconsin Winnebago and the Bolivian Aymara. He created and chaired what was then the Program in Uralic and Altaic Linguistics, laying the groundwork for what was to become the United States' leading center for research and graduate training on the peoples of Central Asia as well as on Mongolian and Tibetan.

Recognizing his managerial talents, as well as his consummate skills in attracting external research funds and his transdisciplinary interests, the legendary university president Herman Wells offered Sebeok the directorship of a newly created Research Center for Anthropology, Folklore, and Linguistics. Several stints as fellow in the Center for Advanced Studies in the Behavioral Sciences at Stanford gave him an opportunity to return to his avocation—biology. Sebeok perceived that he could most effectively link that science to linguistics by exploring the relationship between animal and human communication. A new scholarly field was thus born—zoosemiotics. However, someone who set as his career goal the understanding of how the human brain processes contextual information could not remain contained within the narrow limits of linguistics. Thus Sebeok's trailblazing in the various language sciences and arts—ethnolinguistics (*Studies in Cheremis folklore*, 1952), psycholinguistics (*Psycholinguistics*, 1954, with the Illinois psycholinguist Charles E. Osgood), stylistics (*Style in language*, 1960), zoosemiotics (*Animal communication*, 1968)—must not be viewed as sallies outside of the traditional narrow purview of linguistics, but rather as laying the foundation for what might be viewed as his mature work in semiotics proper. As his new academic base at Indiana University progressively transformed itself into the Research Center for Language and Semiotic Studies, Thomas Sebeok, then a Distinguished Professor of Linguistics, established undergraduate and graduate programs in semiotics, coming to share with his friend Umberto Eco the signal honor of holding a designated chair in semiotics.

Perhaps Sebeok's greatest achievement in the field of semiotics was relocating it within the paradigm of biological science, from which it sprang. The science of signs grew out of attempts by the first physicians of the Western world to understand how the body and the mind interact within specific cultural domains. Indeed, in its oldest usage, the term *semiotics* was applied to the study of the observable pattern of physiological symptoms induced by particular diseases. Hippocrates (c.460–c.377 BC)—the founder of Western medical science—viewed the ways in which an individual in a specific culture would manifest and relate the symptomatology associated with a disease as the basis upon which to carry out an appropriate diagnosis and then to formulate a suitable prognosis. The physician Galen of Pergamum (c.130–c.200 AD) similarly referred to diagnosis as a process of semiosis. It was soon after Hippocrates's utilization of the term *semeiosis* to refer to the cultural representation of symptomatic signs that it came to mean, by the time of Aristotle (384–322 BC), the 'reference system' of a sign itself. Those who took up the concept of sign in their writings are too numerous to mention

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here. We mention—just for the sake of mentioning—St. Augustine, John Poinsot, John Locke, Ferdinand de Saussure, Charles Sanders Peirce, and Umberto Eco. Thomas Sebeok would often point out that the list of those who did semiotics without knowing it would fill the pages of an infinitude of books. If we recall correctly, he referred to this state of affairs as the 'Monsieur Jourdain syndrome'. Monsieur Jourdain was, of course, the character in Molière's *Bourgeois Gentilhomme* who, when told that he spoke good prose, answered by saying that he didn't realize he had been speaking prose for forty years. Analogously, Sebeok would point out to some scholar in a field such as psychology, anthropology, or medicine that he or she was, like Monsieur Jourdain, doing something of which he or she was not aware—semiotics. He made innumerable 'converts' to semiotics in this way.

What has a whole generation of semioticians learned from Thomas A. Sebeok? We have learned that there is an intrinsic connection between the body, the mind, and culture, and that the process that interlinks these three dimensions of human existence is semiosis, the innate faculty that underlies the production and interpretation of signs. The raison d'être of semiotics is to investigate that very interconnection. And that is what Sebeok did brilliantly. His major books, and we mention only a few here—*Contributions to the doctrine of signs* (1976), *The sign and its masters* (1979), *The play of musement* (1981), *I think I am a verb* (1986), *Signs* (1994), *Global semiotics* (2001)—have shown how semiosis interacts with biological, psychological, and cultural processes and systems.

It is difficult to identify a single theme as characteristic of his overall 'theory of semiosis'. Like the great biologist Jakob von Uexküll (1864–1944)—whose 'discovery' by North American scientists is due in large part to his efforts—Sebeok found a point of contact between a mainstream scientific approach to the study of organisms—biology—and that of the strictly semiotic tradition. Von Uexküll argued that every organism had different inward and outward 'lives'. The key to understanding this duality is in the anatomical structure of the organism itself. Animals with widely divergent anatomies do not live in the same kind of world—known as the *Umwelt*. There exists, therefore, no common world of referents shared by humans and animals equally. This common 'internal world' is known as the *Innenwelt*. The work of von Uexküll and Sebeok has shown that an organism does not perceive an object in itself, but rather does so according to its own particular kind of *Innenwelt* that allows it to interpret the world of beings, objects, and events in a particular way. For Sebeok, such a system is grounded in the organism's body, which routinely converts the external world of experience into an internal one of representation in terms of the particular features of the neural modeling system with which a specific species is endowed.

Sebeok thus transformed semiotics back into a 'life science', having taken it back, in effect, to its roots in medical biology. In other words, he uprooted semiotics from the philosophical, linguistic, and hermeneutic terrain in which it had been cultivated for centuries and replanted it into the larger biological domain from which it sprang originally. Sebeok's biological approach inhered in a perspective that aims to investigate how all animals are endowed genetically with the capacity to use basic signals and signs for survival, and how human semiosis is both similar to, and different from, this capacity. He distilled rudimentary elements of semiosis from animate reality, so as to establish a taxonomy of notions, principles, and procedures for understanding the uniqueness of human semiosis. The result has been a program for studying human cognition as a biological capacity that transforms sensory-based and affectively-motivated responses into a world of mental models. Signs are forged within the mind as

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extensions of the body's response system. No matter how bizarre or unearthly the shape of creatures that might inhabit alien planets, we are likely to recognize them as animals nonetheless. The chief basis for this recognition is that they are bound to give off 'signs of life'.

There is no doubt in our minds that Sebeok's ideas will continue to shape the development of semiotics in the future, for the simple reason that they now have become unconscious patterns of thought in those who have themselves been influenced by his work—and there have been myriads of them. Indeed, in having transformed the mainstream study of semiosis into a life science, Sebeok has expanded the nature of semiotic inquiry and attracted, in the process, more and more interest in it from those working outside the field.

The term MODEL, which is central to the Sebeokian paradigm, requires some discussion and elaboration. Model-making typifies all aspects of human intellectual and social life. Before building a house, a constructor will make a miniature model of it and/or sketch out its structural features with the technique of blueprinting. An explorer will draft a map of the territory he or she anticipates traversing. A scientist will draw a diagram of atoms and subatomic particles in order to get a 'mental look' at their physical behavior. Miniature models, blueprints, maps, diagrams, and the like are so common that one hardly ever takes notice of their importance to human life; and even more rarely does one ever consider their raison d'être in the human species. Model-making constitutes a truly astonishing evolutionary attainment, without which it would be virtually impossible for humans to carry out their life schemes. All of this suggests the presence of a modeling instinct that is to human mental and social life what the physical instincts are to human biological life. What is even more remarkable is that modeling instincts are observable in other species, as the relevant literature in biology and ethology has amply documented. The purpose of semiotics, Sebeok argued, is to study the manifestation of modeling behaviors in and across all life forms.

Sebeok's framework for studying semiosis has come to be called SYSTEMS ANALYSIS (SA). The main tasks of SA are to determine: (1) what constitutes a model in animal behavior, (2) to what modeling system the model pertains, (3) what kind of modeling activity the model manifests, and (4) what the model's function is. These tasks are guided by several key notions. First, there is the notion that posits three distinct but interconnected types of models: (1) a primary model, which is a simulacrum of a referent; (2) a secondary model, which is either an extension of a simulacrum or an indexical form; and (3) a tertiary model, which is a symbolically-devised form of some kind. Second, there is the notion of stability versus pliability, which claims that a model (natural or artificial) can be stable (e.g. a written text) or pliable (e.g. oral conversation): stable models are fixed and relatively permanent or invariable; pliable ones are temporary and adaptive to the dynamics of a situation. Third, there is the notion that posits that the form a model assumes can be singularized (e.g. words), composite (e.g. narratives), cohesive (e.g. systems of knowledge), or connective (e.g. figurative assemblages), providing clues as to the nature of the referent or referential domain that it encodes. Fourth, there is the notion of interconnectedness, whereby the modeling system deployed will vary according to the nature of the referent, the function of the model, and the situation in which the modeling act occurs. Fifth, SA makes a distinction among semiosis, modeling, and representation: semiosis is the neurobiological capacity to produce forms (signs, texts, etc.); modeling is the channeling of the semiosic capacity (the natural capacity to understand and produce forms) to encode some referent; and representation is the actual act of creating a form. Sixth, there is the notion that all models possess the same

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structural features, from paradigmaticity to displacement. Finally, there is the notion that modeling reveals how the brain carries out its work of transforming sensory forms of knowing into internal conceptual forms of thinking and external forms of representation: a specific external model is thus considered to be a 'cognitive trace' to the form a concept assumes in the mind, and since concepts depend on how they are modeled, Sebeok argued that the form that knowledge takes depends on the type of modeling used.

In SA, the species-specific forms of knowing are seen as manifest in the modeling behaviors of the species. Access to how a species knows something, therefore, is through the modeling system it possesses. Primary modeling, for instance, is knowing through simulation. Secondary modeling, on the other hand, is knowing through extension and indication. This implies that secondary modeling does its handiwork, by and large, after the primary system has completed its own. Further extensions of forms lead eventually to highly abstract, symbolic (tertiary) systems of representation. The primary (iconic) system is the 'default' system, while the other systems are extensional systems. Thus, SA attempts to take systematically into account the various facets of semiosis in an integrative fashion.

Once the nature of the modeling process has been ascertained, then its forms and functions can be inferred from observation of the semiosic behavior they permit. Thus, the cross-species nature of SA has clear implications for ethology and animal psychology, as well as for traditional semiotic theories. Its central proposal is that the tendency in human representation is to reproduce, first and foremost, a sensory model of some referent or referential domain and then, by extensional processes, to make it encompass increasingly larger domains of meaning. This 'flow' from iconicity to cultural symbolicity, that is, from concrete, sensory modes of representation to complex, abstract modes, characterizes human modeling.

As mentioned, Sebeok's type of semiotics is based on the premise that the *Umwelt* and *Innenwelt* of all animals, as well as the feedback links between the two, are created and sustained by the particular biology that characterizes a species. Sebeokian semiotics shows, in other words, how human consciousness originates in the 'organic world'. The models that animals produce are natural forms that must fit 'reality' sufficiently to secure the survival and 'sanity' of the members of a species in their ecological niche. In human beings, the modeling instinct is so pervasive and powerful that it can become very sophisticated, far surpassing any survival function, as borne out by the evidence of Einstein, or by what we know about Mozart's or Picasso's ability to model intricate auditory or visual referents in their heads in anticipation of transcribing them onto paper or canvas. Language and symbolism, as far as we know, are unique to the human species. These make it possible for humans not only to represent immediate reality, but also to frame an indefinite number of possible worlds. The particular nature of modeling in humans has, thus, led to true culture, which Sebeok defined as the most creative assemblage of signs in existence.

Sebeok could be characterized as the quintessential academic entrepreneur, a label to which we assign highly valorized meaning. For him there existed no sharp break between service activities and scholarship. He certainly never was a solitary bee. Theoretical and doctrinal issues could be resolved only by collaborative brainstorming in the form of conferences, symposia, and colloquia, whose proceedings then required dissemination. All this required was unique skills in persuading holders of purses to loosen them, indefatigable energy, and most of all, a bold and a brilliant 'central European' panache in getting things done.

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A half-century of outstanding contribution to all facets of academic life and to the pursuit of knowledge could scarcely go unrecognized. The honors bestowed on Sebeok in the form of fellowships (among them two Guggenheims, in 1958 and 1980), major office in professional associations (notably the presidency of the Linguistic Society of America in 1975, of which he also served as secretary-treasurer, 1969–1973, and the presidency of the International Association of Semiotic Studies), and honorary doctorates (most significantly from the University of Budapest) were as numerous as the books he authored or the volumes he edited.

To conclude this retrospective on Thomas A. Sebeok, we would like briefly to draw attention to Sebeok, the humane person. As great an intellectual as he was, with a truly international reputation, he nevertheless had profound respect for his colleagues in the field and a considerable attachment to students and to younger colleagues for whom he served as mentor. It really could not be otherwise. Great thinkers are invariably appreciative and respectful of the others in their field. It is perhaps fitting to recall here the apt words of the nineteenth-century German philosopher, Arthur Schopenhauer (1788–1860), which certainly apply to Sebeok. He wrote in 1851: 'Great minds are related to the brief span of time during which they live as great buildings are to a little square in which they stand: you cannot see them in all their magnitude because you are standing too close to them' (*Parerga and Paralipomena*, Oxford: Oxford University Press, 2000). Finally, it is fitting to close this homage to our cherished departed friend and colleague with one of his own autobiographical reminiscences in which he saw himself as an academic sign that spawned further, more developed academics, by the use of two fundamental strategies: 'publishing and teaching as much as possible; and, equally important, doing one's best to facilitate the success of one's colleagues' (Sebeok 1995:125). [MARCEL DANESI, *University of Toronto*; ALBERT VALDMAN, *Indiana University*.]*

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* A shorter preliminary version of this obituary, written by Danesi, appears in the web journal *SIGN: aliquid stat pro aliquo* (vicu.utoronto.ca/courses/semiotics/SIGN.htm) maintained by the Program in Semiotics and Communication Theory at the University of Toronto.

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