Acta Baltica Historiae et Philosophiae Scientiarum
Vol. 1, No. 1 (Spring 2013)
DOI: 10.11590/abhps.2013.1.08

BOOK REVIEWS

Maran, Timo; Martinelli, Dario & Turovski, Aleksei (eds.) *Readings in Zoosemiotics. Semiotics, Communication and Cognition 8*, Berlin: De Gruyter Mouton, 2011, 438pp. ISBN 978-3-11-025342-9.

In semiotic terminology, the publication of any collection of articles in the format of a reader is a symptom as well as a message. It can often be interpreted as a symptom of such a developmental phase in some discipline or paradigm, in which university courses on the subject are already taught, certain key debates have come to the fore, a set of names and ideas is shared and circulating among people who identify themselves with the discipline, and a need for further self-organization and extraction of essentials is realized. On the other hand, such collection is also a message and statement about the discipline's existence—it is a way of positioning oneself in the field of research and formulating one's own distinctive features. The collection of articles and excerpts under the title *Readings in Zoosemiotics*, published in 2011 in the series *Semiotics, Communication and Cognition*, is not an exception, as it displays the state of affairs in the discipline of zoosemiotics, at the same time giving shape to this research field itself. The volume is divided into five sections and contains articles from 20 authors (some of the articles are co-authored). All the articles have been published before, but in this combination they are presented for the first time. The book also includes the editors' introduction to zoosemiotics, discussing its position among other disciplines, but also explaining the compiling principles of this volume. All sections are supplemented with additional introductions, guiding the reader towards semiotic reading of the authors who are otherwise identified as philosophers, anthropologists, zoologists, cognitive ethologists, etc.

Zoosemiotics, as the subject matter of this collection, might be classified as a subfield of biosemiotics (a discipline which investigates signification and communication processes in living nature), one that has narrower scope and fields of application, but also a set of specific research questions. However, while acknowledging the shared history and methodological framework of the two fields, the editors of this volume have clearly expressed their position that zoosemiotics carries an identity of its own, and placing zoosemiotics simply under biosemiotics might enforce the dichotomy of nature (as the subject

matter of biosemiotics) versus culture (as the subject matter of cultural semiotics) (pp. 16–17).

In his essay "'Talking' with Animals: Zoosemiotics Explained", republished in this collection, Thomas A. Sebeok, one of the founders of this discipline, defines zoosemiotics as follows:

> *Zoosemiotics* is a term coined in 1963 to delimit that segment of the field which focuses on messages given off and received by animals, including important components of human nonverbal communication, but excluding man's language and his secondary, language-derived semiotic systems, such as sign language or Morse code (p. 87).

The editors of the collection further specify the scope of zoosemiotics as "the study of signification, communication and representation within and across species" (p. 1). These three semiotic phenomena are also presented as the basis for the subdivision inside the field of zoosemiotics. In addition to that, an alternative way to segment the discipline is offered, with the division human–animal as its basis. According to the editors, ethological zoosemiotics (divided into a traditional current and a cognitive one) thus uses the tools of semiotics to study animal sign action, and anthropological zoosemiotics (divided into communicational, representational and comparative zoosemiotics) focuses on the interactions between human beings and other animals (pp. 8–9). The chapters of the book do not fully follow either of the two divisions, neither has it been the aim of the compilers. However, such a categorization of zoosemiotics helps to demonstrate the heterogeneity of the field and to fathom why different sections of the book are compiled departing from different principles. Although the selection of texts is explained in the introductions before each section, the editors also mention a more general point of departure for their choice of texts: "Texts are selected with two main aims kept in mind. First, to introduce zoosemiotics as a diverse field with a rich history, different authors and various research goals. [...] The second aim is to make zoosemiotics approachable for readers with different scholarly backgrounds." (p. 17)

The first intention is revealed already in the temporal extent of the writings included—the original publication times of the texts cover more than three centuries, from 1690 (an excerpt from John Locke's *An Essay Concerning Human Understanding*) to 2003 (the article 'Biotranslation: Translation between *Umwelten*' by Kalevi Kull and Peeter Torop). Although some of the authors whose works have been republished in the collection are still actively conducting their research and generating new ideas, contributing thereby also to the current debates in

zoosemiotics (e.g., Colin Allen, Marc Bekoff, Tim Ingold, and some others), the volume is slightly tilted towards the "classical" studies of animal communication and sign usage, the value of which has been proved by time. Considering the great variety in the publication times of the original texts, some additional historical notes about the key debates on animal communication might have helped to explain why some questions came up, and also to demonstrate the historical dynamics of empirical research and theoretical considerations. Some of those ties can be derived from the cross-references in the texts, as well as from some hints in the introductions: for example, that Karl von Frisch's research into the "dance language" of bees intensified debates over the use of symbols by animals, and that the shift in the animal language debates was related to the studies on Washoe (further on training and teaching Washoe see, e.g., Gardner *et al.*, 1989; Fouts, 1973), the chimpanzee who learned American Sign Language, as Donald R. Griffin indicates. The classical studies forming the core of the collection are not related to the canon of any single discipline. Bringing the key texts of different traditions (philosophical semiotics, cognitive ethology, anthropology, zoosemiotics proper) together into one volume as well as framing the writings with the introductions to each section by the editors creates a novel context for the texts and calls for refocused reading. Also, the editors of this collection are among the major contributors to the researches carried out in the field of zoosemiotics today. In his research, Timo Maran has focused on the phenomenon of mimicry as well as theoretical zoosemiotics, Dario Martinelli has studied the communication of whales, but is active also in the field of zoomusicology, and Aleksei Turovski is a practising zoosemiotician working at Tallinn Zoo as a parasitologist. The reluctance of the editors to include their own work in the collection is understandable, yet it leaves a gap in the depiction of modern zoosemiotic research proper.

As the first reader in biosemiotics (Favareau, 2010) was published just a year before the publication of *Readings in Zoosemiotics*, the reception of these two books inevitably evokes comparisons. Comparing the choice of texts in the two collections might also clarify the points of convergence and divergence between biosemiotics and zoosemiotics. The two books have a few authors in common—the Baltic German zoologist Jakob von Uexküll, the Estonian biologist and biosemiotician Kalevi Kull, the Swiss zoologist working with circus and zoo animals Heini Hediger, the English anthropologist and philosopher Gregory Bateson, and the American-Hungarian linguist and zoosemiotician Thomas A. Sebeok. The selected texts overlap only in case of von Uexküll's 'The Theory of meaning' (and even then the selected excerpts are not one hundred per cent the same). However, while the readings in biosemiotics lays more stress on the authors who have already

made their name as biosemioticians, the zoosemiotic companion has opened its publication space to authors whose connections to semiotics are complex. The authors' roles and relations to semiotics could be classified as follows: (a) belonging to semiotics proper (Thomas A. Sebeok, Kalevi Kull); (b) providing zoosemiotics with empirical material (Karl von Frisch; Robert M. Seyfarth, Dorothy L. Cheney); (c) covering the research topics of zoosemiotics, but using different methodology in their analyses (W. John Smith, Donald R. Griffin); and (d) helping to integrate zoosemiotics with the tradition of general semiotics (John Locke, David Hume, Peeter Torop). The editors draw the line between zoosemiotics proper and related disciplines not based on the subject matter, but rather on methodological grounds: "It is the subject matter that ties zoosemiotic investigations with those stemming from ethology, cognitive biology, philosophy and it is the 'how' as the editors of the volume have expressed, which makes the investigation of animal communication and signification a semiotic one" (p. 5).

Given such heterogeneity of backgrounds and writing times, a question may arise: How much does this selection cover the already existing network of influences and debates, and how much extra-framing or extra-textual knowledge is needed to bring the texts into a dialogue? The inter-article references might be used as an indication for answering the first question. Some of the articles in the volume form debating duets, for example W. John Smith's debate with Peter Marler about the referents of animal signaling. Smith suggests that the referents might not be only environmental objects (e.g., predators), but also the behavior patterns of the signaling individual. However, it is rather the shared topics of interest and matters of debate than intra-volume references that establish the links between articles. A prevalent topic that has attracted the attention of a number of authors concerns symbol usage by animals. Smith associates it with the probabilistic character of the assessment of the signaler's behavior in communication process and thus sees the presence of a symbolic component as a commonality, and not an exception in animal behavior. Tim Ingold confines symbol usages to humans, distinguishing it from the sign usage of animals, such as honeybee dance: "This means that their reference is to the internal world of concepts rather than the external world of objects." (p. 369) A similar, but still a separate topic concerns the presence of language in other animals besides humans. Donald Griffin discusses the question in length in his essay 'Is man language?' It is also the topic of Dominique Lestel's writing 'The biosemiotics and phylogenesis of culture'. The latter challenges the common practice of taking human language as a comparative ground for animal communication. Lestel is more interested in how human, language-based interactions with animals influence the means of animal communication. Kalevi Kull and Peeter Torop in their article 'Biotranslation:

translation between *umwelten*' define language through the presence of syntax and conclude that given this criteria, animal sign systems do not count as languages. Yet they find that translation is not confined to human languages only and can be carried out also between sign systems that are not languages. What is common to all those reflections on animal language is their reluctance to give simple pros and cons to the question whether animal sign systems are languages or not, and instead they propose bridging terms that avoid the contrastive ground.

Several articles in the collection also elaborate or discuss the classification of animal signs. Some of them have adapted previous and canonical classifications (such as the classification by Charles Morris (1971, p. 146) that divides signs into *identifiers*, *designators*, *appraisers*, *prescriptors* and *formators*, or one by Charles K. Ogden and Ivor A. Richards ([1923]1989, pp. 123–126) that delineates *emotive* and *referential* functions of language), but Adrian M. Wenner develops a novel classification of signals and their relation to behavioral acts for the animals. One of the key questions for semiotics—according to what principle are the form and content of a message bound together?—is discussed in the paper by Charles Darwin (the tendency to perform opposite movements under opposite sensations or emotions), as well as in another by Peter Marler (the type of information—sexual, environmental, motivational, etc.—and the iconic or arbitrary character of the corresponding sign).

Besides the shared set of research phenomena, a number of examples also recur in different articles. Those include above all the "dance language" of bees as studied by Karl von Frisch, and Robert Seyfarth's and Dorothy L. Cheney's research into the alarm call systems of vervet monkeys. As the editors also mention, these two examples have gained the status of 'icons' among zoosemioticians and thus the original studies that are included in the volume shed light to the questions that the authors of these studies themselves posed and the conclusions they drew, re-establishing thereby the status of these examples as more than just catchwords.

Despite differences in the tools used for analysis, the articles reveal methodological difficulties that zoosemioticians share with other researchers of animal behavior, cognition and interactions: How to find out, what is the object of reference in the process of representation? How to deduce from behavior the mental processes underlying it? As Seyfarth and Cheney put it, "[w]henever knowledge in another species is defined operationally, through behavior, there is a danger of concluding that an ability is absent when it is simply not manifested" (p. 169). This also means that the excessive use of Occam's razor easily leads to the reduction of all communication processes to stimulus–reaction schemas, causing the loss of the specifics of living interactions, which zoosemiotics tries to avoid. Concerning the

problem of crossing the mind–body border, Timo Maran, one of the editors of the volume, has elsewhere undermined the necessity to rely on such a division in the first place. He explains by comparing the zoosemiotic approach of Thomas A. Sebeok and the cognitive ethological one by Donald R. Griffin why it is not necessary to try to get into another being's mind in order to explain the processes that underlie behavior:

> Sign processes, language and also consciousness are not located in the mind or its physical carrier—the brain—but they are relations. Furthermore, the mind itself is a configuration of signs for Peirce, 'the content of consciousness, the entire phenomenal manifestation of mind, is a sign resulting from inference' (CP 5.311). Therefore, it is very difficult to make a distinction between communication and the setting where communication takes place; or separate information from the message and information from the context. According to this semiotic view, the mind grows into the environment or it grows with the environment. (Maran, 2010, p. 324)

Readings in Zoosemiotics serves as a platform of dialogue for the multidisciplinary texts and ideas, while avoiding an abrupt break from previous research and yet establishing the identity of the discipline. A preference for dialogue instead of dialectics therefore seems to form the basis for this volume and makes it a peaceful piece of reading.

Riin Magnus
Department of Semiotics,
University of Tartu
Jakobi 2,
Tartu 51014, Estonia
E-mail: riin.magnus@ut.ee

References

Favareau, D., ed. (2010), *Essential Readings in Biosemiotics,* Biosemiotics 3, Heidelberg & London & New York: Springer.

Fouts, R. S. (1973), 'Acquisition and testing of gestural signs in four young chimpanzees,' *Science*, vol. 180, no. 4089, pp. 978–980.
http://dx.doi.org/10.1126/science.180.4089.978
PMid:17735931

Gardner, R. A.; Gardner, B. T. & Van Cantfort, T. E., eds. (1989), *Teaching Sign Language to Chimpanzees*, Albany: State University of New York Press.

Maran, T. (2010), "Why was Thomas A. Sebeok not a cognitive ethologist? From 'animal mind' to 'semiotic self'," *Biosemiotics,* vol. 3, no. 3, pp. 315–329. http://dx.doi.org/10.1007/s12304-010-9079-8

Morris, C. W. (1971), *Writings on the General Theory of Signs*. The Hague: Mouton.

Ogden, C. K. & Richards, I. A. ([1923]1989), *The Meaning of Meaning: A Study of the Influence of Language upon Thought and of the Science of Symbolism*, San Diego: Harcourt Brace Jovanovich.