

# **Biosemiotics**

Volume 15

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# Cultural Implications of Biosemiotics

 Springer

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ISSN 1875-4651

Biosemiotics

ISBN 978-94-024-0857-7

DOI 10.1007/978-94-024-0858-4

ISSN 1875-466X (electronic)

ISBN 978-94-024-0858-4 (eBook)

Library of Congress Control Number: 2016949398

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*For  
John Deely*



# Acknowledgments

It is impossible to work for any extended period of time in any field unless you have the support of your colleagues. Such support is given for free and often goes unacknowledged. I take this opportunity to say heartfelt thanks and salute the following colleagues who made this book possible:

Myrdene Anderson, Richard Appignanesi, Chris Arning, Baranna Baker, Kristian Bankov, Marcello Barbieri, Merja Bauters, (the late and sadly missed) Jeff Bernard, Karin Boklund-Lagopoulou, Priscila Borges, Søren Brier, Sara Cannizzaro, James Carney, Vincent Colapietro, Marcel Danesi, (the volume's dedicatee, who originally encouraged me to write this book) John Deely, Jonathan Delafield-Butt, Per Durst-Andersen, Malcolm Evans, Xiaoli Fang, Don Favareau, José Enrique Finol, Alex Gordon, Anne Hénault, Jesper Hoffmeyer, Karel Kleisner, Evangelos Kourdis, Kalevi Kull, Alexandros Lagopoulos, Yunhee Lee, Christina Ljungberg, David Machin, Kobus Marais, Timo Maran, (the late and remarkable) Solomon Marcus, Anton Markoš, Dario Martinelli, Floyd Merrell, Danuta Mirka, Ivan Mladenov, Lucia Neva, Grigoris Paschalidis, Pengjia, Susan Petrilli, Augusto Ponzio, Anti Randviir, Alexei Sharov, Roger Sabin, Peter J. Schulz, (the late and irreplaceable) Tom Sebeok, Farouk Seif, Gary Shank, Alexei Sharov, Frederik Stjernfelt, Kim Sung-do, Eero Tarasti, Daina Teters, Torkild Thellefsen, Morten Tønnessen, Peeter Torop, Barendt van Heusden, Stéphanie Walsh Matthews, Gloria Withalm, Evripides Zantides and Yiheng Zhao.

Special thanks go to my colleagues/friends at Space Doctors: particularly, Gareth Lewis, Fiona McNae, Pavla Pasekova, Stephen Seth;

To colleagues/friends at Nanjing Normal University: especially, Hongbing Yu, Jie Zhang, Yongxiang Wang, Zhijun Yan;

To colleagues/friends at Middlesex University: particularly those with whom I work most closely, my inspirational and supportive Dean, Carole-Anne Upton, and my congenial partner in research administration, Vida Midgelow;

At Springer: Catherine Cotton, then Ineke Ravesloot, Iza Witkowska and Nel van der Werf – thanks, above all, for your patience. Plus the series editors whose work I value highly.

Needless to say, I'm grateful to all of my colleagues/friends in semiotics and biosemiotics. Sorry if I have forgotten anyone who should be included in this list.

Still, special mention must go to Terry Deacon who, at a crucial stage, provided me with material which was instrumental in the book coming to fruition.

And, socially, Adam Briggs who provided me with victuals that helped maintain at least a modicum of sanity.

But the biggest thank you of all goes to Elsie, Stan and Alison who put up with a major disruption to the work/life balance.

Small parts of this volume appeared in somewhat different form in other publications.

I would like to thank the following for permission to reproduce extracts from the following articles in this book: Lawrence and Wishart for 'Semioethics, voluntarism and antihumanism' *New Formations* 62: 44–60 (Autumn 2007); de Gruyter for extracts from 'Codes and coding: Sebeok's zoosemiotics and the dismantling of the fixed-code fallacy' *Semiotica* 198: 32–45 (2014); Springer for extracts from 'The cultural implications of biosemiotics' *Biosemiotics* 3 (2): 225–244 (2010); the Semiotic Society of America for extracts from 'Enhancing survival by not enhancing survival: Sebeok's semiotics and the ultimate paradox of modelling', SSA Sebeok Fellow Address 3 October Seattle, *The American Journal of Semiotics* 30 (3–4): 191–204 (2014) and 'What the humanities are for – a semiotic perspective', *The American Journal of Semiotics* 30 (3–4): 205–228 (2014); and MDPI for extracts from 'Cybersemiotics and human modelling' *Entropy* 12: 2045–2066 (2010).

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# Introduction

This book is aimed at a number of different targets. The reason it exists is because I and a number of people with whom I have discussed the matter, think that the implications of biosemiotics are important but have not reached some of the people who need to hear about them. So, firstly, the volume is aimed at an audience outside biosemiotics and semiotics, in the humanities and social sciences principally, who might welcome some comments on the possible benefits to their subject area from a relatively new field. It is possible that they misconstrue that field as being concerned only with matters of relevance to certain parts of the sciences and/or that the field is none of their concern. Possibly, they have an impression of biosemiotics as something esoteric. Hopefully, they will find some of the argumentation in biosemiotics to be convincing for their own intellectual concerns. In my own discipline – communications, comprising media, language and cultural studies – theory such as that represented by biosemiotics has not had a prosperous time in the academy over the last couple of decades. The publishing bonanza attendant on ‘postmodernism’ nearly 30 years ago seems to have represented a last gasp of ‘grand theory’ in the arts, humanities and social sciences. So, if this volume is read by anyone who aligns themselves with those latter fields of interest, I will be happy. If they see this book as supplementing their interest in theory, contributing a couple of biosemiotic ideas to their existing repertoire, leading them to a few interesting references, or – the philosopher’s stone – they become converts to biosemiotics: I’ll be extremely happy.

In addition to the more modest aims, here, the volume is also targeted at fellow workers in biosemiotics. It is hoped that it will promote discussion regarding what biosemiotics’ ongoing implications are and how we might best represent them to fields contiguous to, and far beyond, our own. Because biosemiotics is peopled by a truly transdisciplinary section of scholars, from both the sciences and the non-sciences, there are bound to be some differences in our self-conception as a group. Some biosemioticians are devoted to the task of introducing a greater sense of the phenomenon of ‘meaning’ in biology. Others see the task of biosemiotics as widening the scope of an already broad church, semiotics, so that it does not mistakenly pursue the semiosis of human animals as divorced from that of other organisms. Yet

another is to erode, or at the very least, to make more porous, the boundary between living nature and culture, the sciences and the humanities. As such, it is a challenge to the view of humans as ‘exceptional’ in nature. The second two largely represent the project in the current volume, although establishing the serious investigation of meaning in nature, through the sciences, would no doubt hasten this project; at the very least, it would assist it. In short, this book is devoted to illuminating the extent to which biosemiotics constitutes an “epistemological break” (Althusser 1969) with ‘modern’ modes of conceptualizing the world (including the ultra-modern posing of so-called ‘postmodernism’ – see Deely 2003, 2009a). It shows biosemiotics to be a significant departure from those modes of thought that neglect to acknowledge continuity across nature, modes which install culture at the centre of their deliberations and can only produce an understanding of culture which reflects that first move. This is the general cultural implication of biosemiotics. And it should be added that culture is here defined in the broadest possible way, as constituted by the practices in a whole way of life (Cobley 2008), including such routines as eating habits, table manners, sport, exercise, washing, water storage, vestments, architecture, lighting design and so forth. As will be seen, however, biosemiotics does not simply shed light on the ritual overlays on cultural practices that seem to be rooted in physical needs; it has some particular implications for those areas of culture where there is ‘purely’ aesthetic behaviour, apparently devoted to no survival aim whatsoever, such as storytelling, decoration, music and sculpture.

Biosemiotics offers the prospect of a renewed cultural analysis by dint of its steering a path between over-interpretation and reductionism. Some phenomena that are ‘dead’ for physics are evaluated in biosemiotics as embodying sign processes. At one end of the spectrum of biosemiotics are those understandings which emphasize the fluidity and growth of semiosis, attributing various degrees of agency to the most lowly of interpretants. At the other end are those understandings which identify the action of more rigid codes in nature. *Off* the spectrum at respective ends are, on the one hand, ‘New Age’ visions which recognize no thresholds of semiosis and see in all natural entities the presence of ‘intelligence’ or, worse, ‘god’; and, on the other, the view dictated by absolute mechanism and Laplacean determinism in nature. In the sphere of culture, there is a series of binaries that biosemiotics abolishes or modifies by treating life as continuous and by discerning semiosis across the realm of nature; namely: individual/collectivity, agent/subject, verbal/nonverbal, human/non-human, mind/matter, culture/living nature.

The issues of continuity of matter and mind, as well as the spurious separation of nature and culture, have had, in the scheme of things, very little purchase in cultural analysis. These big issues for science have simply not translated well in the terms of the humanities. One reason for this, of course, is the way that science has offered all manner of hostages to fortune to cultural studies, from social Darwinism, through Lysenkoism, eugenics, sociobiology and the development of the nuclear bomb, not to mention science’s masculine bias and other institutional factors that have vitiated its claims to knowledge. As such, observations including Kuhn’s (1970) on the philosophy of science or Lyotard’s (1984) report on knowledge pronouncing an era of incredulity towards the grand narrative of scientific progress, have become the

common sense of the humanities. Yet there seems to be a chance, greater than any offered hitherto, to bridge the gap between the two cultures through semiotics as it has been reinvigorated by biosemiotics. Certainly Sebeok (2000) felt this.

The roots of the opportunity to bridge the two cultures can be found in general semiotics. Semiotics' levelling of the cultural playing field which provided the impetus to investigate semiosis (initially, only potentially) across all realms of life reaches its full fruition in biosemiotics. On the one hand, biosemiotics is the name given to a particular area of the entire venture of semiotics. On the other hand, the impossibility of escaping nature entails that all semiotics, however focused it is on cultural material and however much it attempts to bracket nature and cosmological considerations, is biosemiotics. A flavour of this relation between semiotics and biosemiotics is offered by Sebeok's (1986a: 60) statement – a statement that dictates the argument of the present book – to the effect that “A human body is thus an inextricably complex text that has been encoded and determined by the combined action of nature and nurture (or that minuscule segment of nature some anthropologists grandly compartmentalize as culture)”. A more uncompromising formulation on the matter is difficult to imagine. Biosemiotics has also made it easier to draw together the concerns of the sciences and those of the disciplines concerned with culture by providing an approach that is more ‘culture-friendly’. As Deacon (2012a: 541) remarks,

It's time to recognize that there is room for meaning, purpose, and value in the fabric of physical explanations, because these phenomena effectively occupy the absences that differentiate and interrelate the world that is physically present.

While the study of culture continues under the impression that the natural world and the sciences devoted to studying it are geared to completely different realities from culture, then that study may be doomed to an eternal loop. Biosemiotics promises a means to interrupt that loop.

In light of this massive task, it should be noted that the current volume has a modest purpose. It attempts only to amplify some aspects of biosemiotics and to present a view of some cultural implications. The picture of biosemiotics offered here is necessarily limited and is not meant to constitute a comprehensive survey (for the closest approximation of that, see Favareau 2010a). There is, for example, no discussion of von Baer, Baldwin, Bateson or Rothschild in respect of one end of biosemiotics' history; nor is there due consideration of the major contemporary endeavours of Sharov, Pattee, Markoš et al, at the other end. Moreover, by no means all biosemiotic ideas are covered in this book. Space and focus dictate that consciousness, genes, function, need, the *Wirkzeichen/Merkzeichen* nexus and distributed language, for example, are not discussed. Nor are the constant debates in biosemiotics – for there are many – represented here, apart from in the discussion of code and interpretation. Nevertheless, I have stood on the shoulders of giants in order to gain even my limited purview in the service of identifying cultural implications. To some extent, this book merely offers a series of footnotes to points “clearly and radically” (Kull 2007: 15) stated by Jesper Hoffmeyer as long ago as 1996. It also draws heavily on arguments put forward by Kull, Deely, Petrilli and von

Uexküll, while relying heavily on the insights of Deacon; above all, this volume is guided by the work of biosemiotics' consolidator, Sebeok. It should be noted, too, that while the current volume aims to shed light on culture from the angle of biosemiotics, already the likes of Sebeok, Hoffmeyer and Deacon are themselves no slouches in providing insights for the understanding of culture through their superlative pellucid communication of complex ideas. Biosemiotics' cultural implications can be found separately in their work, too.

The present volume, then, draws together, in correspondence with its chapters, the following implications:

Implication 1: Potentially, this is the age of biosemiotics. There is now a consolidated and focused literature in the field.

Implication 2: Semiotics holds the key to understanding culture, but semiotics' project is most fully realized on a biosemiotic basis.

Implication 3: Humans are certainly 'special', but they are neither simply 'different in kind' from the rest of nature or 'different in degree'. Humans' modelling explains the foundations of culture.

Implication 4: The human's agency is not unique in the natural world. The human is a natural subject.

Implication 5: While ethics might be sustained in the short-term by a willed programme, ethics is a natural phenomenon arising out of human modelling.

Implication 6: The idea of 'codes' is a human invention. If codes occur in nature, they do not behave as they do in cryptography.

Implication 7: Humans are subject to constraints. The nature of these constraints shapes human evolution but can curb some freedoms while producing specific cultural results.

Implication 8: The arts and the humanities are natural and indispensable to the process of expanding all human experience and knowing.

This last implication, regarding 'knowing', should be taken as central to all of the argument in this book. Biosemiotics does not propose for one instant to subsume the richness of culture into a series of natural mechanisms; for the simple fact is that biosemiotics does not characterize nature as mechanical. Importantly, biosemiotics investigates how organisms 'know' their world. As will be seen, the branch of biosemiotics named 'cybersemiotics' has, in particular, attempted to theorise this 'knowing' and affords considerable credibility in 'knowing' to aspects of culture rather than just the sciences.

Of course, it is possible that the themes of this volume centre on a set of arguments which, globally, have less purchase than they do locally. This book is written from a resolutely Western perspective. In that perspective, humanism, liberalism and Eurocentrism have been powerful in establishing an understanding of culture as divorced from nature and indeed, with culture as primary, the wellspring for what is natural. Moreover, in the Abrahamic religions of the West, nature is cast in the service of God and humans. Most recently, Siedentop (2015) has argued that Western history has been seen in terms of the long instatement of moral beliefs, ultimately with the individual in the organizing social role. Secular liberalism already had its

forerunner in medieval questioning of the relation of church and state prior to the Renaissance. What Siedentop shows is that individual liberty became a fundamental *natural* right in Europe, enforced by a number of judicial and ideological measures as insurance. Grounding the individual in a putative state of affairs of *nature* no doubt contributed to the shoring up of culture and social life against any need for protracted contemplation of humans' provenance in a wider conception of nature. Thus, it might be that the 'anti-humanist' perspective which this book identifies in biosemiotics may actually be a mere figment, the necessity of which is created by the specific context of the West's insulation of culture, in the guise of the individual, from the demands of wider nature. Certainly, the opposition 'culture/nature' is an English construct which does not necessarily obtain in the same way in other languages. Whether biosemiotics' abolition of the opposition can produce a sound basis for identifying demonstrable universals, distinct from the universals posited in Eurocentrism and colonialism, is a possibility to be pursued outside the pages of this book.

What follows, then, is eight chapters and a conclusion. Chapter 1 serves as a much truncated literature review. However, as it declares at the outset, the literature of biosemiotics has grown so large and covers so many complex inter-related and interdisciplinary perspectives, that it is only possible here to draw out from the literature a narrative which serves the purpose of this volume. Chapter 2 offers a sense of the place of biosemiotics within general semiotics. Because the institutionalisation of thought is often uneven, contradictory and sometimes promotes confusion, the chapter seeks to unravel for the reader some of the tangled connections in sign study.

Chapter 3 discusses how human modelling is essential to biosemiotics' answering of Darwin's question regarding whether humans are different by degree or in kind from other animals. In particular, it discusses how biosemiotics reconceptualises the nature of language and how it effectively abolishes exceptionalism. Chapter 4 has related human concerns and presents the ways in which agency and subjectivity, learning, surroundings and otherness are figured by biosemiotics.

Much of biosemiotics' implication for culture pertains to the possibilities inherent in semiosis and the constraints which allow crystallisation of semiosis into more or less stable phenomena. Chapter 5 is concerned with a very human possibility: ethics. It argues that the customary conception of ethics as a willed programme overlooks some salient problems and that, in light of biosemiotics, ethics can be seen to derive from 'involuntary' projections. Chapter 6 is concerned with the constraining power of invariance in semiosis. It tracks the concept of 'code' and discusses the character of invariance in the idea of 'organic codes'. Chapter 7 continues on the theme of constraining factors and considers the merits of the concepts of 'repression' and 'constraint' in respect of what gets left out or passed over in the dynamism of semiosis across nature. Finally, Chap. 8 discusses the cognitive, modelling drive of the arts and humanities, finding them crucial to the maintenance of human experience, the preservation of memory and the enhanced 'knowing' of the world.