

Group Discussions in Biosemiotics

2009

Discussion of the paper

A Short History of Biosemiotics

([click here for the pdf](#))

1

----- Original Message -----

From: [Marcello Barbieri](#)

To: [Alexander Kravchenko](#) ; [Alexei Sharov](#) ; [Almo Farina](#) ; [Anton Markos](#) ; [Argyris Arnellos](#) ; [Bruce Weber](#) ; [Charbel El-Hani](#) ; [Claus Emmeche](#) ; [Cliff Joslyn](#) ; [Dario Martinelli](#) ; [Don Favareau](#) ; [Eugenio Andrade](#) ; [Fatima Cvrcková](#) ; [Frederik Stjernfelt](#) ; [Gérard Battail](#) ; [Guenther Witzany](#) ; [Han-liang Chang](#) ; [Howard Pattee](#) ; [Jean Umiker-Sebeok](#) ; [Jesper Hoffmeyer](#) ; [Joanna Raczaszek-Leonardi](#) ; [John Deely](#) ; [Kalevi Kull](#) ; [Koichiro Matsuno](#) ; [Luis Emilio Bruni](#) ; [Luis Rocha](#) ; [Marcel Danesi](#) ; [Marcella Faria](#) ; [Marcello Barbieri](#) ; [Mario Gimona](#) ; [Myrdene Anderson](#) ; [Peter Cariani](#) ; [Peter Harries-Jones](#) ; [Sergey Chebanov](#) ; [Søren Brier](#) ; [Stanley Salthe](#) ; [Stefan Artmann](#) ; [Stephen J. Cowley](#) ; [Stephen Pain](#) ; [Susan Petrilli](#) ; [Terrence Deacon](#) ; [Tommi Vehkavaara](#) ; [Tuomo Jämsä](#) ; [Winfried Nöth](#) ; [Yair Neuman](#)

Cc: [Catherine Cotton](#) ; [John Collier](#) ; [Kanters, Ria, Springer NL](#) ; [Paul Cobley](#) ; [Wendy Wheeler](#)

Sent: Sunday, March 15, 2009 11:55 AM

Subject: A Short History

Dear Colleagues,

The discussions of the past few weeks have induced me to update the *Brief History of Biosemiotics* that appeared at the end of my *Naturwissenschaften* paper (2008). The result is an article with a slightly different title (*A Short History of Biosemiotics*) that in many parts is similar to the previous history but which also contains a few substantial novelties.

The article has two main goals: (1) reduce the present confusion in our field (what Terry Deacon has called the “tower of Babel”), and (2) describe the conditions that allow the unification of all schools of biosemiotics in a framework that I call “General biosemiotics”.

I am now sending the paper in attachment, because I would like to submit it to your criticism before preparing the final version for publication. Many thanks in advance for your comments, whatever they are, and best regards to everybody.

Yours

Marcello

PS – Just one pre-emptive note. Peter Harries-Jones will probably reprimand me again about Gregory Bateson, so let me say this. I believe that Bateson was essentially a poet, and I do appreciate poetry. The statement “Information is a difference that makes a difference” to me is as clear as a Greek oracle, and of course it takes a ‘shaman’ to disclose, from case to case, the meaning of an oracle. You have insisted, Peter, that that statement is an “operative definition”, but that just shows that your love for Bateson knows no limits.

2

----- Original Message -----

From: [Jesper Hoffmeyer](mailto:jesper.hoffmeyer@me.com)**To:** [Marcello Barbieri](mailto:marcello.barbieri@natur.cuni.cz)**Cc:** Mailing List**Sent:** Sunday, March 15, 2009 12:25 PM**Subject:** Re: A Short History

Dear Marcello

To accuse scientific views one doesn't share of being proofs that one's adversary is misled by 'infinite love' for 'poets' and Greek oracles seems to me to be an unworthy way of expression and a violation of all good rules for academic exchange of views.

Our discussion cannot continue if such language is not put away.

Jesper

3

----- Original Message -----

From: "Cvrckova Fatima" <fatima@natur.cuni.cz>**To:** "Jesper Hoffmeyer" <jhoffmeyer@me.com>**Cc:** Mailing List**Sent:** Sunday, March 15, 2009 1:41 PM**Subject:** Re: A Short History

Dear All,

I am afraid that biosemiotics is in danger of evolving towards the only field I know whose sole aim seems to be defining itself and studying its own history. I somehow fail to grasp why this should be interesting at all, and maybe I am not the only one. I would thus suggest delegating this topic to a separate mailing list only for those actively interested (and please leave me out!).

Regards,

Fatima

4

----- Original Message -----

From: "Kalevi Kull" <kalevi.kull@ut.ee>**To:** "Cvrckova Fatima" <fatima@natur.cuni.cz>**Cc:** Mailing List**Sent:** Sunday, March 15, 2009 2:54 PM**Subject:** Re: A Short History

Dear Fatima and friends,

feeling similarly, it'd be good to point on a difference that'd make a difference. Namely, each and any field needs to understand the threads of the history of ideas that gave rise to itself. Understanding, of course, assumes a professional approach. Don Favareau's "Evolutionary history of biosemiotics" is good in this. On the other hand, any idea to classify the people of this current list into cells and to supply the cells with the names at the locks would be not only senseless, but I guess it is even dangerous, because it would inhibit the creative atmosphere everyone in the field likes so much. I expect nobody would like to do this.

Warm regards

Kalevi

5

----- Original Message -----

From: [Günther Witzany](#)**To:** [Marcello Barbieri](#)**Cc:** Mailing List**Sent:** Sunday, March 15, 2009 1:52 PM**Subject:** Re: A Short History

Dear Marcello!

Thank you very much for mentioning my approach in your article. Let me add some comments, because I think there is a fundamental misunderstanding of my approach:

a) In several articles and books I outlined that biosemiotics only makes sense from my point of view if it integrates a non-reductive view on three complementary levels of rules according to which signs are used, i.e. generated, transmitted, interpreted, etc. Combinatorial patterns of signs relate to syntax, meaning/function to semantics, and context wherein signs are used to pragmatics. My approach favors the primacy of pragmatics (without deleting semantics and syntax) because it represents the REAL LIFE WORLD OF SIGN USING AGENTS. This is no static world but pure processuality in which living beings are interwoven with continuous changing situations and interactional patterns. Without these living beings at the levels of cells, tissues, organs and organisms there are no signs, no codes. The subject of sign generation or code generation are living beings within pragmatic situational contexts in which they use signs to communicate. This means in a different situational set up the same signs can be used to transport different messages. Therefore I insist on the primacy of pragmatics because the syntactic or semantic analyses of sign sequences cannot destitute situational contexts out of sequence order.

b) As I have outlined in the chapter "Three-level semiotics and reduction effects" in my book "The Logos of the Bios 1. Contributions to a three leveled biosemiotics" (Umweb, Helsinki, 2006) there can be identified until now 6 kinds of abstractive/reductive fallacies if these three complementary rules either to syntax or semantics alone are reduced (such as classical metaphysics: a code as physical entity by itself). Because a code doesn't code as a language doesn't speak we have to look at the code generating AGENTS. Correctly you think on ribozymes or the ribotype which has some natural genome editing capabilities. In reality all these ribotypes descended from some viruses or virus-like agents all of them being competent to edit nucleic acid language/code according to their needs or - in the case of endogenised genetic parasites - according to the needs of the host organism. Therefore my position is: it's not the code but the code editing agents.

c) My approach has definitively nothing to do with a Darwinian perspective or a Darwinian biosemiotics or as Kalevi Kull stated my approach is a post-darwinian perspective.

d) Accordingly to this I'm definitively not part of the 4 schools of biosemiotics but as mentioned to you some years ago the foundation of a three leveled biosemiotics occurs in the realm of pragmatic action theory ("the meaning of a word is its usage" Ludwig Wittgenstein, Philosophical Investigations).

Thank you very much for your attention.

Best Wishes
Guenther

P.S. An overview on my publications you find at: www.biocommunication.at

6

----- Original Message -----

From: "Kalevi Kull" <kalevi.kull@ut.ee>To: "Don Favareau" <favareau@biosemiotics.org>

Cc: Mailing List

Sent: Sunday, March 15, 2009 4:48 PM

Subject: Testability in semiotics

Dear friends,

one cannot expect all the meanings of a word.

Don has raised a fundamental problem of testability in semiotic modelling.

No doubt it has a crucial importance for our development of experimental biosemiotics. (Which also has a relevance to the recent discussions between biosemioticians.)

Let's take the first example Jesper is using in the beginning of his "Biosemiotics" 2008 book - on a hare and a fox (p. xiii). He contrasts the biosemiotic and neodarwinian explanations. How to test, which of these explanations is the one worth to use? Further, same page - the statement that 'organisms strive' - how to test this?

I am convinced that it is possible to text between these models. However, in order to do so, one should be more careful than may be ever before in biology in making distinctions.

What's pretty clear - the testability requirements themselves are not the same throughout the sciences. Should biosemiotics use the standard statistical tests, we would result behaviourism, quite obviously - which is not the way to go. Instead, we may need to accept, e.g., weak non-deterministic refutability etc. types of qualitative tests. In order to get a meaning, the test has to allow its existence as such.

Best

Kalevi

7

----- Original Message -----

From: "Søren Brier" <sb.ikk@cbs.dk>To: "Marcello Barbieri" <brr@unife.it>

Cc: Mailing List

Sent: Sunday, March 15, 2009 6:35 PM

Subject: RE: A Short History

Dear Marcello

Though I critiqued Bateson's concept of information I do think that your characterization of Bateson does not consider the whole cybernetic background for his statement and how he develops it in his books. One must read Norbert Wiener first, who's works is the background for Bateson's definition of information as "a difference that makes a difference" for a cybernetic mind.

He attempted to link information, mind and meaning in a cybernetic and systems framework including the whole biosphere, as well as culture and social systems.

He characterizes cybernetics mind in "Steps to an Ecology of Mind" the following way:

"The system shall operate with and upon differences.

The system shall consist of closed loops or networks of pathways along which differences and transforms of differences shall be transmitted.

(What is transmitted on a neuron is not an impulse; it is news of a difference).

Many events within the system shall be energized by the responding part rather than by impact from the triggering part. The system shall show self correctiveness in the direction of homeostasis and/or in the direction of runaway. Self-correctiveness implies trial and error."

He developed this further in the book "Mind and Nature":

"A mind is an aggregate of interacting parts or components.

The interaction between parts of mind is triggered by difference, and difference is a nonsubstantial phenomenon not located in space or time; difference is related to negentropy and entropy rather than to energy. Mental processes require collateral energy.

Mental processes require circular (or more complex) chains of determination. In mental processes, the effects of difference are to be regarded as transforms (i.e., coded versions) of events preceding them. The rules of such transformation must be comparatively stable (i.e., more stable than the content) but are themselves subject to transformation. The description and classification of these processes of transformation disclose a hierarchy of logical types.”

This being just a short summary. I have made a somewhat longer characterization in Brier, S. (2008c): “Bateson and Peirce on the pattern that connects and the sacred”, Chapter 12 pp- 229-255 in Hoffmeyer, J. (ed.)(2008): 'A Legacy for Living Systems: Gregory Bateson as a precursor for biosemiotic thinking, Biosemiotics 2, London: Springer Verlag as well as in my Cybersemiotic book places I compare him with Peirce.

Peter is not satisfied with my view of Bateson, but still there s much more to Bateson than you are saying. I have encouraged Peter to produce an alternative coherent interpretation of Bateson from his many years of study of also many papers and manuscripts that most of us have not read.

Venlig hilsen/Best wishes
Søren Brier

8

----- Original Message -----

From: [Marcello Barbieri](#)

To: Mailing List

Sent: Sunday, March 15, 2009 7:12 PM

Subject: Re: A Short History

Dear Colleagues,

As for Jesper’s statement that I am violating all good rules for academic exchange of views, let me say this. If I have offended anybody, I do apologize. That was NOT my intention.

My intention was to speak clearly and openly about what biosemiotics is about, and I believe that clarity and openness are never offensive.

I offered my own reconstruction of the history of Biosemiotics, and if there are some factual errors in it, I am prepared to make amends. Witzany’s remark, for example, was well taken. I did not represent his position correctly and I will change the text accordingly. And of course I will do the same for any other mistake that is brought to my attention.

Yours

Marcello

9

----- Original Message -----

From: [Marcello Barbieri](#)

To: Mailing List

Sent: Sunday, March 15, 2009 8:03 PM

Subject: Re: Testability in semiotics

Dear Kalevi,

I have proposed only that the basics models of semiosis are testable, not that everything must be testable. In order to know that there are nuclear reactions inside the sun, you don’t need to go physically inside the sun to test them.

All I am saying is that every science is based on testable models, so if biosemiotics wants to be a science it too must be based on testable models. What is wrong with this?

You cannot have it both way: biosemiotics is either a science or it isn’t.

Why is it that this simple elementary criterion of truth raises so much hostility?

Think about it.

Marcello

10

----- Original Message -----

From: "Kalevi Kull" <kalevi.kull@ut.ee>

To: "Marcello Barbieri" <brr@unife.it> Cc: Mailing List

Sent: Sunday, March 15, 2009 8:29 PM

Subject: Re: Testability in semiotics

Dear Marcello,

there was no hidden irony in my proposal.

What I state is that one should not apply the methods of testing used in physics to test the models of linguistics or semiotics, because some of these methods of testing themselves often remove any possibility for semiotic phenomena. The methods of testing of biosemiotic models need a special attention.

So I propose colleagues "a test for a test" - to think and formulate the ways to test the two example statements from Jesper's book.

I think it is a very worthwhile task - because if we can demonstrate how to test these statements, we'll be equipped for most of the else biosemiotic models and we'll be able to demonstrate that this is not just a replacement of terminology what biosemiotics does.

With all good wishes

Kalevi

11

----- Original Message -----

From: [Marcello Barbieri](mailto:Marcello.Barbieri)

To: Mailing List

Sent: Monday, March 16, 2009 9:11 AM

Subject: New List of Correspondents

Dear Colleagues,

(1) So far, Fatima, Anton Markos and Ria Kanters have asked to be left out of the list. The present email therefore does not contain their names, so from now on please use this list for your replies (or remove their names from your previous list). Anybody else who does not want to receive our correspondence is kindly invited to say so. This would be highly appreciated because our list is strictly voluntary and we really want to keep it that way.

(2) Kalevi has said: "What I state is that one should not apply the methods of testing used in physics to test the models of linguistics or semiotics".

Again, Kalevi is putting words in my mouth. What I have said is that we should use the testing methods of SCIENCE, not of physics, and I have specifically underlined that sequences and codes require a new type of natural entities, that I call "nominable", and that do NOT exist in physics.

There is no better proof, in my opinion, that biology goes beyond physics, so why keep saying that I am invoking the tests of physics in biosemiotics?

I have repeated many times that I am committed to a scientific biosemiotics, not to physical biosemiotics, and to me that means that our basic models must be testable, or falsifiable.

And I insist on this because I am really convinced that this is THE issue on which biosemiotics will stand or fall. If people keep believing that in biosemiotics "anything goes", it will be the end of our field. That may well happen, but I am not giving up trying.

(3) The second volume of our Book Series has been dedicated to Gregory Bateson, and the title explicitly mentioned him as a "precursor" of biosemiotics. I have read all that book before approving its publication, and I totally agreed that Bateson has been a great precursor of our field. That's why I have mentioned him in the section "Precursors and contributors". So where is the problem? Why should we say that Bateson has done something else? The origin of religion (or more in general of Bateson's "sacred") is a great problem of biosemiotics, and Bateson has certainly had the merit of raising it. He has pointed the way, and our duty is to go beyond, otherwise he would no longer be a precursor but a founding father.

Best regards

Marcello

12

----- Original Message -----

From: "Kalevi Kull" <kalevi.kull@ut.ee>

To: "Marcello Barbieri" <brr@unife.it>

Cc: Mailing List

Sent: Monday, March 16, 2009 11:15 AM

Subject: hare and fox

Dear Marcello,

let me reword: the testing methods are not the same throughout the science (for instance, there are quantitative and qualitative ones, the latter in several cases not reducible neither replaceable by the former). The question is - what is the specificity of testing methods in semiotics? This concerns certainly much wider set of cases than yours.

With all best wishes

Kalevi

13

----- Original Message -----

From: "Stanley Salthe" <ssalthe@binghamton.edu>

To: Mailing List

Sent: Sunday, March 15, 2009 8:19 PM

Subject: Re: Testability in semiotics

Considering this idea of testability (falsifiability) as a hallmark of science, this seems a bit exaggerated to me. As an anthropologist once put it, "Science is sciencing." This, no-doubt overly vague definition, is at the other end of a polarity of views about science.

There is in biology a lot of science that is (a) just descriptive, and (b) involves the strategy of confirmation rather than the strategy of testing.

These could be arranged in a sequence describing steps in scientific practice, thus:
description -> confirmation -> testing.

In addition, we should be aware that testability has some serious problems as well. The major one is the Duhem-Quine thesis. In order to test a theory, we need to make some ancillary assumptions about the experimental setup, and to recognize that our equipment, if any, is also based on still other assumptions that will not also be tested. An actual example deployed by Richard Lewontin involves a proposed adaptation. It is generally accepted that finch-like birds have beak sizes approximately matched to the sizes of the seeds that they eat. A study was done, finding that the birds ate statistically significantly larger seeds than would be predicted on the hypothesis of beak size matching seed size. Rather than reject the idea of selection by seed size here, the authors cast about for some explanation. They then realized that their study was done during breeding season, and they proposed that the incoherence of results with theory was caused by the birds having to eat larger seeds so as to be able to spend more time hunting insects for their chicks. Well, in fact, a favorite theory need never be falsified if one is determined to find a way out of having to do so. It is well also to remember that testing usually involves various degrees of invasiveness, and that brings in a kind of uncertainty principle. Then, I think that, since semiotics is an interpretive framework, I cannot see how it could be tested, as opposed to, say, dyadic interactionism.

STAN

14

----- Original Message -----

From: [Marcello Barbieri](#)**To:** Mailing List**Sent:** Monday, March 16, 2009 11:11 AM**Subject:** Re: Testability in semiotics

Dear Colleagues,

Ok, now it seems that the very concept of testability (falsifiability) is under fire (Stanley), and more words are put in my mouth (when did I ever deny that there is a lot of descriptive work in biology?).

It is true however that I have not gone into many details, so it is probably my fault if some confusion has arisen. In order to make amends, let me try now to explain what I mean with the statement that the basic models of biosemiotics (not everything!) must be testable (falsifiable).

(1) Let me start with a straightforward comparison. Is the theory of evolution falsifiable? Yes, of course it is. It would be enough to find a human skull in Precambrian strata and the whole theory would collapse. If we agree with this common sense meaning of the term “testable”, let us turn now to the foundational principle of biosemiotics: the Thomas Sebeok statement that “life and semiosis are co-extensive”. Is it falsifiable? Again, yes. It would be enough to find a single example of semiosis in inanimate matter and our principle is dead. As a matter of fact, biosemiotics is NOT accepted today precisely because most biologists believe that that principle is false. Which does show how important it is to pick up that challenge and show that the origin of the genetic code truly was the origin of semiosis (it could turn out that a primitive signal transduction code actually came before the genetic code, but that just shows that the approach is open).

(2) Let us now take a second step. After the foundational principle, let us see if our two basic models of semiosis (the Sebeok model and the Code model) are falsifiable. If we do NOT change the meaning of the terms “interpretation” and “coding” we find that the Sebeok model has NOT been falsified in animals, and the Code model has NOT been falsified in single cells, which means that they are both testable models, and that each of them is valid in a different kingdom of life.

(3) After the two models of semiosis, let us move to the three types of semiosis (manufacturing, signalling and interpretive semiosis), Can we test them? Yes, we can, and all the evidence we have tells us that they exist. Can we test that protein synthesis is an example of manufacturing semiosis? Of course we can. If we find that specific proteins can be produced without a translation apparatus (a codemaker), the model is immediately falsified.

So here we are. We have (1) one foundational principle, (2) two models of semiosis and (3) three types of semiosis that are all testable or falsifiable propositions in the same sense that the theory of evolution is. This is ALL we need to say that biosemiotics is based on testable models, and is therefore a scientific theory, in the same sense that the theory of evolution is.

What is wrong with this? What is wrong with saying that we want to build biosemiotics on the same kind of foundations that the other fields of biology have? (and I am saying biology, Kalevi, not physics! Natural selection does not exist in physics, and neither natural conventions or codes).

I am NOT talking of testability in the Duhem-Quine sense. I am talking of the same type of testability that makes all the other fields of biology “credible”.

Isn't that what we all want?

Best regards

Marcello

15

----- Original Message -----

From: "Stanley Salthe" <ssalthe@binghamton.edu>

To: Mailing List

Sent: Monday, March 16, 2009 3:48 PM

Subject: Re: Testability in semiotics

A few comments on Marcello's --

“... (1) Let me start with a straightforward comparison. Is the theory of evolution falsifiable? Yes, of course it is. It would be enough to find a human skull in Precambrian strata and the whole theory would collapse.

I assure you that this test would be found to be vitiated by some 'error' having been made, or some ancillary assumption having been false. A definitive rejection of any testable concept that has been multiply corroborated would be nearly impossible.

“... If we agree with this common sense meaning of the term "testable", let us turn now to the foundational principle of biosemiotics: the Thomas Sebeok statement that "life and semiosis are co-extensive". Is it falsifiable? Again, yes. It would be enough to find a single example of semiosis in inanimate matter and our principle is dead. As a matter of fact, biosemiotics is NOT accepted today precisely because most biologists believe that that principle is false.”

This is not result of any test. Their feeling is more likely the common sense one that they don't see how biosemiotics can help them in solving the problems they are working on.

“... (2) Let us now take a second step. After the foundational principle, let us see if our two basic models of semiosis (the Sebeok model and the Code model) are falsifiable. If we do NOT change the meaning of the terms "interpretation" and "coding" we find that the Sebeok model has NOT been falsified in animals, and the Code model has NOT been falsified in single cells, which means that they are both testable models, and that each of them is valid in a different kingdom of life.”

I doubt that any formal tests have been done on these proposals. Both models have proven useful in carrying out observations. They are not being promoted as testable hypotheses, but rather as organizing principles for the construction of frameworks that are increasingly supported by confirming cases. They exist as confirmational programs, not testable hypotheses.

“... (3) After the two models of semiosis, let us move to the three types of semiosis (manufacturing, signalling and interpretive semiosis), Can we test them? Yes, we can, and all the evidence we have tells us that they exist. Can we test that protein synthesis is an example of manufacturing semiosis? Of course we can. If we find that specific proteins can be produced without a translation apparatus (a codemaker), the model is immediately falsified.”

You examples here again are not testable hypotheses, but rather classification schemes that can be used to organize observations.

“ So here we are. We have (1) one foundational principle, (2) two models of semiosis and (3) three types of semiosis that are all testable or falsifiable propositions in the same sense that the theory of evolution is. This is ALL we need to say that biosemiotics is based on testable models, and is therefore a scientific theory, in the same sense that the theory of evolution is.

The reigning theory of evolution (natural selection) is not treated as a testable theory, and is never attempted to be tested. It is an organizing principle for all of evolutionary biology. I actually did do a simple test myself once, and the idea 'passed' the test. But, I can assure you that if my 'test' had failed, my paper would not have been published. SOMETHING would have been discovered where I had made a mistake of some kind.

“... What is wrong with this? What is wrong with saying that we want to build biosemiotics on the same kind of foundations that the other fields of biology have?”

Nothing at all! Just drop the 'testability' talk, and all will be OK -- IF you discover something that molecular biologists could not have found unaided by semiotics.

STAN

16

----- Original Message -----

From: [Deely, John N.](#)**To:** [Marcello Barbieri](#)**Cc:** Mailing List**Sent:** Monday, March 16, 2009 12:34 PM**Subject:** RE: Testability in semiotics

(grammar corrected to remove repeat "category")

Marcello:

Your statement: "let us turn now to the foundational principle of biosemiotics: the Thomas Sebeok statement that 'life and semiosis are co-extensive' Is it falsifiable? Again, yes. It would be enough to find a single example of semiosis in inanimate matter and our principle is dead." — this (your statement, not Tom's) is a statement that strikes me, well beyond falsifiable, as simply false from the start. The error which places your statement in the logical category of false from the start category is set forth with perfect clarity by Susan Petrilli in the Sebeok Fellow Plenary Address which she delivered to the 33rd Annual Meeting of the Semiotic Society of America in Houston last October 17, and which I here quote from *The American Journal of Semiotics* 24.4 (2008), p. 6, boldface added: "**even if we accept Sebeok's proposition that there is no life without the action of signs, we have still to ask whether the converse of this proposition, 'no signs without life', is also true.**"

Indeed, Professor Petrilli called this "the crucial node" of her musement for the 7th Sebeok Fellow occasion, which she led up to with just the line of reasoning your false exemplification of falsifiability ignores (ibid.):

when Sebeok notes (1984: 21) that "life modifies the universe to meet its needs, and accomplishes this by means of sign action". Yet by feeling at the same time "strongly drawn to Wheeler's suggestion that the fundamental physical constants, the nuclear and cosmological parameters, and others, are constrained by the unbudging requirement that life evolve", is he not suggesting (even without realizing it) that the development of the physical universe prior to the advent of life was itself a product of semiosis? And is this not so even if that prior development, as Peirce suggested (W 2.404), "cannot be fully revealed or brought to light by any study of the sign alone, as such. [Even if] Knowledge of it must come from some previous or collateral source"?

The prospect of physiosemiosis at work as a *vis a prospecto* in the physical universe along side and entangled with the *vis a tergo* forces of natural selection in the order of Secondness is complementary, not antithetical, to biosemiosis. Your assertion to the contrary, by contrast, *is* a threat to biosemiotics, for it premisses biosemiotics to rest on an interpretation of Sebeok's view which is not logically entailed by the view itself, and which actually (luckily for biosemiotics) is neither foundational nor in any way essential to the biosemiotic project.

17

----- Original Message -----

From: [Marcello Barbieri](#)**To:** Mailing List**Sent:** Monday, March 16, 2009 4:15 PM**Subject:** RE: Testability in semiotics

Dear Colleagues,

In a way I am grateful to John Deely because he has shown the true face of pansemiotics (or physiosemiotics, as he calls it). Remember that pansemiotics and biosemiotics are antithetical: if semiosis exists in inanimate matter, it did not start with life, and viceversa.

The statement by Tom Sebeok that "life and semiosis are coextensive" does not seem to leave any room for doubt. Anybody takes it for what it actually means, i.e., that the origin of semiosis was also the origin of life. A pansemiotician knows very well that this statement is dead against pansemiotics, and could simply accept that Tom Sebeok was NOT a pansemiotician. But not John Deely.

What he is saying is that Tom Sebeok did not really mean that, he actually meant the opposite!!!!

And on what authority? On that of professor Susan Petrilli who affirmed that Tom Sebeok was probably making (without realizing it) a declaration of faith in pansemiosis

[", is he not suggesting \(even without realizing it\) that the development of the physical universe prior to the advent of life was itself a product of semiosis?"](#)

So here we are. Now think about it and draw your own conclusions.

As for myself I still believe that "life and semiosis are coextensive" is the foundational principle of biosemiotics (that goes by definition!), and that Tom Sebeok was meaning exactly what he was saying when he wrote it.

Best

Marcello

18

----- Original Message -----

From: [Marcello Barbieri](#)**To:** Mailing List**Sent:** Monday, March 16, 2009 5:47 PM**Subject:** Re: Testability in semiotics

Dear Colleagues,

The 2004 Gathering in Prague, five years ago, was the occasion for our first step toward unification. We decided that Biosemiotics is the union of biology and semiotics, and all people who accept Tom Sebeok's principle that life and semiosis are coextensive, are ipso facto biosemioticians.

I was hoping that the next Gathering in Prague, could have been the occasion for a second step toward unification. Biosemiotics is based not only on one foundational principle, but also on two models of semiosis and three types of semiosis, all based on testable models.

The unifying factor, in this case, should have been the principle that we accept all models and types of semiosis for which we have testable evidence (Stanley Salthe calls them "confirmational programs" or "classification schemes", but we all know that changing names doesn't change the substance).

It was in preparation of that second step that I circulated my Short History, but now I realize that the attempt has failed. I was expecting of course the opposition of the pansemioticians (Salthe, Brier, Deely, Stjernfelt etc.), but not that of the biosemioticians. But that's life, isn't it?

The syndrome that "anything goes" in biosemiotics is clearly winning and I can only take stock of it. From now on I think I am going to be very quite, and wait for better times.

Best regards to everybody

Marcello

19

----- Original Message -----

From: [Deely, John N.](#)**To:** [Marcello Barbieri](#) **Cc:** Mailing List**Sent:** Monday, March 16, 2009 5:16 PM**Subject:** RE: Pansemiotics

Marcello, I appreciate your expression of gratitude, but I have regretfully to inform you that it is quite as misplaced as your original logical blunder asserting that the dependence of living things upon semiosis implies that there can be no semiosis without living things.

It is a question of the logical implication of statements, my friend, which is not always the same as the question of the intention of whoever is making the statement. That life depends upon semiosis does not imply that semiosis depends life. It *may*, but not as a logical implication. I notice that you do not address the logical point at all. An acerbic, aggressive tone is not a substitute for logic or a good cover for illogicality.

Instead of facing or addressing the logical point at issue, you change the subject, and, to boot, resort to *ad hominem*. Not a good way to advance intellectual discourse nor even, in this case, an effective dodging of the point.

As to the subject to which you seek to divert attention from the logical failure of your initial claim, namely, pansemiosis, Frederik Stjernfelt and I have had an extended and friendly exchange which, had you read it, would have made clear to you that I am not at all a proponent of "pansemiosis", and in fact consider it a position to be panned.

If you are really are interested in how and why I consider pansemiosis to be an erroneous position (even apart from the fact that it is a position I have *never* held), I would refer you to "Let us not lose sight of the forest for the trees ...", *Cybernetics & Human Knowing* 13.3–4 (2006), 161–193. A commentary response to the review of John Deely's *Four Ages of Understanding* (2001) by Frederik Stjernfelt, "Let us not get too far ahead of the story ... : A history of realist semiotics?", review of in *Cybernetics & Human Knowing* 13.1 (2006), 86–103. In this reply, I spell out in detail why I regard the notion of "pansemiotics" as both unnecessary and untenable.

What you propose as "the foundational principle of biosemiotics", Tom Sebeok's statement that "life-science and sign-science are coextensive", is a statement with which I am in agreement as regards life-science (biosemiotics, thus); but it is simply not a statement that *entails* the proposition that any semiosis beyond the sphere of life destroys biosemiotics, which was the claim you made to which I simply replied that it is a logical *non-sequitur*. And Tom, too, was aware of this, which was *why* he asked me to write "Semiotics and Biosemiotics: Are Sign-Science and Life-Science Coextensive?", in *Biosemiotics. The Semiotic Web 1991*, ed. Thomas A. Sebeok and Jean Umiker-Sebeok (Berlin: Mouton de Gruyter, 1992), 45–75.

Winfried Noeth organized a symposium around this very question of "the semiotic threshold". You may be well aware of this symposium or, if not, would do well to have a look at. My own contribution to the symposium was titled "Physiosemosis in the Semiotic Spiral: A Play of Musement", published in *Sign Systems Studies* 29.1, 27–46, along with other papers from the event (International Colloquium "The Semiotic Threshold from Nature to Culture" organized by Winfried Nöth at the University of Kassel, Wz II, February 16–17, 2001). There is more literature on this point, though not yet a great deal. We are dealing here with what is indeed an "open question", but however the issue of physiosemosis comes finally to be resolved, it remains the case that it is a false claim to assert as you did: "find a single example of semiosis in inanimate matter and our principle [i.e., the principle upon which biosemiotics rests] is dead".

Biosemiotics is one of the most important developments in intellectual culture today. There is nothing to be gained by overstating the claim for its validity, any more than there was in overstating the claim of semiologists that only in the realm of culture do we find the action of signs. It was not by such a route that we got to biosemiotics in the first place, nor is it by reliance on such a claim that the future of biosemiotics depends. Just as semiotics is more than semiology even though semiology is a part of semiotics, so it may be that semiotics is more than biosemiotics even though biosemiotics is a part of semiotics. That is my only point. Whether there is semiosis beyond the living world or not, biosemiotics remains an important achievement. Nothing in biosemiotics is compromised or contradicted by the hypothesis that the development of the universe from its initial state where life neither did nor could exist to its later state where life first became possible and then actual involved semiosis in some virtual manner as an influence constantly re-arranging the relevance of past to present through future possibilities. That is not "pansemiosis". Not only is logic important to our pursuits, but so is a careful use of terms.

Your earlier email on testability failed in point of logic, your attempted reply fails in point of attributing "pansemiotics" to someone who has publicly (and in some length and detail) rejected the notion.

I hope this brings both calm and clarity to the discussion as we move forward from here.

20

----- Original Message -----

From: "Søren Brier" <sb.ikk@cbs.dk>To: "Marcello Barbieri" <brr@unife.it> Cc: Mailing List

Sent: Monday, March 16, 2009 8:43 PM

Subject: RE: Testability in semiotics

Dear Marcello (and John)

I am very pressed for time presently and have not had time to read your piece and give you a proper answer. Hope to do that soon. I am in the same position as John that I do not consider myself a pansemiotician, as I take Peirce seriously when he says that secondness must in principle be able to exist alone for his realism in his semiotic pragmatism to function.

I know you have my book. I went to great length to discuss this difficult problem in it and build that new position I call Cybersemiotics, which I think in the foundational evolutionary ontology is very close to John Deelys. But I am still not sure that I have understood him completely. But I am a bit disappointed to have my work reduced to a simple pansemiotism, like John is. We both invested a lot of effort in developing a position that is something else than the choice between the common scientific physicalism and pansemiotism.

I am glad that you have brought up the matter about this foundational framework, that was discussed in Nöth's conference, which I contributed to. I agree with you that it is at the heart of the understanding of what biosemiotics is or could be.

It is about the ontological foundations and it is a delicate and complicated question as you can see with your discussion with Deely.

I will try to reformulate your differences in this way: the question is that if life and semiosis are co-extensive, what does that say about the nature of the universe (or the nature of nature)? I have argued that a physicalistic ontology is not sufficient. Even if you did not have a semiotic view of life, I do not think it is sufficient. This is why some has moved to an organismic ontology including emergence.

"An organicist ontology was championed by Aristotle and held sway in Western thought for two millennia until the time of Galileo. After three hundred years of Galilean and Newtonian atomism, in the twentieth century there has been a return to organicism, notably in the work of philosophers such as Alfred Whitehead (1926) and influential physicists such as David Bohm (1980). " writes Hodgson <http://www.dse.unifi.it/marshall/hodg5.htm>

Claus Emmeche writes: However, it is only a sad consequence of the defeat of vitalism that some biologists still conceive the foundation of modern biology to be mechanistic, i.e., rooted in classical or quantum physics, rather than having its own autonomy as a science with a foundation, or a set of paradigmatic ideas, that are better described as being organicistic.[22] Organicism in twentieth century biology has been a sort of philosophical counter-movement, opposed to vitalism and mechanism.[23] <http://www.nbi.dk/~emmeche/cePubl/97e.defLife.v3f.html> . It includes an idea of separate levels of organization,. This is also your point Marcello as far as I can understand.

But the problem that John and raise is what kind of minimum ontology does one have to assume to support organicism in an evolutionary setting, which Aristotle did not have. This is where Peirce's semiotic evolutionary framework becomes interesting. It is a new - or John calls it a postmodern - philosophical frame that attempt to solve this problem and integrate science and logic in it in a semiotic realism. This where Peirce creates and apply his three categories, connects them to evolution and semiotics and thereby creates something that integrates Hegel's dialectical thinking as thesis and Aristotle as anti thesis into a new synthesis. It is that synthesis we try to understand and contribute to.

It is not antithetical to testability and falsification. I am all for your empirical foundation. It is a minimum requirement, but modern philosophy of science has show that it is far from enough.

I also think I have described the ultimate biosemiotic experiment on the level of animal behavior in several articles and in full length in my book. It is Iven Reventlow's work with building a statistical motivational model of the male Stickleback (small fish) behavior at the nest. I do not understand why it has caught so little attention especially from a biologist like Kalevi.

I salute the contributors in this discussion for having brought us to this deep and important question.
Søren

21

----- Original Message -----

From: "Stanley Salthe" <ssalthe@binghamton.edu>

To: "Marcello Barbieri" <brr@unife.it>

Cc: Mailing List

Sent: Monday, March 16, 2009 8:55 PM

Subject: Re: Proposal for pansemiotics

Folks -- I have recently discussed pansemiotics with John Deely, and have come to the following suggestion as to its meaning: pansemiotics implies that some form of semiosis exists throughout nature. As a triadic format, it would be an alternative perspective to the physical, which is based on dyadic interactions. Most of natural science as it now exists is based on the dyadic, physical model. As fronted by the pansemiotics program, semiotics becomes a challenge to the hegemony of the physical model. This challenge would not, I think, be very successful as a source of technologically useful information for our present culture -- but, who knows? I think it does imply a challenge to the metaphysical implications of dyadic science. Thus, we would have:

$$\text{Pansemiosis} = \{ \text{physiosemsiosis} \{ \text{biosemiosis} \{ \text{cultural semiosis} \} \} \}$$

This shows that pansemiotics is potentially a more powerful tool for understanding than physicalism, because physicalism does not have as deep a reach into existence, as shown for comparison by:

$$\text{Physicalism} = \{ \text{physical realm} \{ \text{material realm} \{ \text{biological realm} \} \} \}$$

and so does reach into, or find a base IN nature for the human cultural realm.

STAN

22

----- Original Message -----

From: "Søren Brier" <sb.ikk@cbs.dk>

To: "Stanley Salthe" <ssalthe@binghamton.edu>;

"Marcello Barbieri" <brr@unife.it>

Cc: Mailing List

Sent: Monday, March 16, 2009 9:04 PM

Subject: RE: Proposal for pansemiotics

Dear Stan

I do agree with your model

I think the next step must be to agree on a definition of what we want pansemiotics to mean.

As John and I would not call what you describe here Pansemiotics.

At least I connect pansemiotics with the idea that signs are the basic building blocks of the universe from the start! That the basic constituents of reality are signs. They are before elementary particle, forces, information and maybe even energy.

That is not my view.

Venlig hilsen/Best wishes

Søren Brier

23

----- Original Message -----

From: [Deely, John N.](#)**To:** [Marcello Barbieri](#)

(and Mailing List)

Sent: Monday, March 16, 2009 10:17 PM**Subject:** RE: Testability + Pansemiotics

Marcello, before you retreat into silence awaiting those "better times" when everyone will agree with you that stipulation should trump logic, and while you are still taking stock of the situation in which not everyone yet sees that your stipulations alone will give biosemiotics a sound foundation, let me make one further comment on the matter of "pansemiotics".

Peirce famously proposed that the universe, if it does not consist exclusively of signs, is at least perfused with signs. In the middle 20th century, the prevailing view was that only in culture do we find the action of signs. Beginning about 1963, Tom Sebeok introduced the notion that all animals are involved in semiosis, and he coined the term zoosemiotics to make his point. In the early 80s, Martin Krampen, in an article published by Tom, proposed that plants, too, are involved in semiosis, and he coined the term phytosemiotics to make that point. Human animals, all other animals, and plants too: the designation biosemiotics came into play to cover that view, the view that all of life involves semiosis, which was Tom's own view for sure. Might the action of signs extend even further, into the physical universe itself? Peirce seemed to think so; and I myself coined the term physiosesemiosis to pose the question of whether there might not be an action of signs involved in the development or evolution even of the physical universe before life.

So, in the mid-last century, the dominant view among those studying signs was that their action was confined to the world of culture. Tom Sebeok extended that view to include the whole realm of animal life. Martin Krampen extended the view also to plants, and Tom agreed with this extension. Today we still find some semiological throwbacks who cling to culture as the only sphere of semiosis: it is their dogma. Tom Short recently argued virulently against anyone who thinks that semiosis extends beyond the sphere of animal life: his dogma puts us back in the 60s. Biosemioticians are agreed with Sebeok that semiosis is co-extensive with the whole of life, but only a few regard this as dogma. For most biosemiotics still leaves open the question of whether semiosis extends even further. Peirce pointed out that this is not a matter of how we define signs, but a matter of what signs actually are; for how and where a thing acts depends upon what sort of being it has and is.

The view that the universe consists of signs wholly and exclusively is what is properly called *pansemiotics*. The view that the whole of the universe is involved in the action of signs is *not* pansemiotics, it is a part of semiotic inquiry that remains an open question. Sebeok was inclined to think that life may indeed mark the boundary of sign action, but he was not so foolish as to think that his opinion made it so, and he remained to the end open to if skeptical about the further question of a physiosesemiosis. Now, however, we have a third dogmatism being proposed. The first dogma of early semiology was that only humans use signs. The second dogma has been proposed by Thomas Short, that all animals but only animals are involved in the action of signs. Now we have a third dogma, that of Marcello Barbieri, that the action of signs begins where life begins and ends where life ends. Sebeok, by contrast, was never a dogmatist, and while he was himself inclined to agree with Barbieri, he was not inclined to dogma and to ruling out or even trying to rule out all further inquiry into the matter of what signs are and how (accordingly) they act. The question of physiosesemiosis is a legitimate question, and its answer depends upon what signs are, not upon what anyone asserts concerning their action. As Peirce said, it is a question for investigation, not for stipulation. Dogmas do not help semiotics grow, though they have at every turn impeded its growth.

Barbieri wants to hold that not only is life coextensive with semiosis, but so is semiosis coextensive with life. This may be the case, but it does not logically follow from the first affirmation. It is not necessarily the case. It depends upon the being proper to signs, which most, after Peirce (and Poinset before him), have come to see as triadic relations rather than any particular subjective quality of an individual being as individual. Anyone who wants to give thought to this question, according to Barbieri, must be a "pansemiotician" for whom "anything goes". But a pansemiotician is someone quite different, someone who thinks that there are *nothing but* signs.

By contrast, someone who thinks that the universe, while not consisting exclusively of signs, is yet perfused with signs and (consequently) the action of signs, is not a "pansemiotician" but simply a semiotician pondering a further question, and Barbieri's attempt at arbitrary stipulation does not make them so. Let us hope that this third dogma — the first in the 21st century — advanced in the discussion of signs will be the

last dogma proposed in semiotics. Logic has its place and stipulation has its place, but dogma has no place in a community of inquiry. Pansemiotics is the view that the universe consists exclusively of signs. Semiotics is the view that the universe is perfused with signs, to what extent remaining to be determined by the study of the action of signs consequent upon their proper being as signs.

It is interesting to note that semiosis always seems to exercise, in all the places where it is so far recognized to occur, a *vis a prospecto*, a kind of future influence, on present affairs. It leads to developments, often unexpected ones. Evolution after Darwin has usually been understood, as in Dawkins and Dennett, as a *vis a tergo*, and it certainly is that, both organic and inorganic evolution -- but perhaps not only that. Peirce's view suggests that the universe itself, from its beginning, involves not only brute Secondness, but also some sort of *vis a prospecto*. Semiosis is certainly this in the realm of organic nature. Might it somehow be so also in the realm of inorganic nature, and thus help to explain why the physical universe developed as it did, in such a direction as to bring forth life? Might semiosis not prove to be another name, at a clearer level of understanding, for what has heretofore been called evolution, involving all the *vis a tergo* forces of Secondness, yes, but assimilating them to an overall directionality? It is an interesting question, one to be investigated, one that poses no threat to but in fact complements the present pursuits of biosemiotics. And just as anthroposemiotics proved not to be the whole story of semiotics, so biosemiotics might prove to be less than the whole story of semiotics. That in no way diminishes or threatens the status of biosemiotics, and it is pure dogmatism to assert that it does. "Do not block the path of inquiry" was one of Peirce's mottos, and it is certainly the motto that best explains the development of semiotics so far.

So let us inquire: having seen that semiosis extends to the whole of life, might it be the case that it also extends still farther? A dogma to the contrary does not settle the question; dealing with the question does not make one a "pansemiotician". Barbieri is of course free to use words in the fashion of a Mad Hatter if he prefers, but that does not make them mean just what he wants them to mean, no more and no less, where inquiry is concerned. It is up to those Barbieri with dogmatic fiat labels "pansemioticians" to speak for themselves. For me pansemiotics is the view that there are nothing but signs in the universe, and I think that it is not a defensible view. I do not think Stjernfelt defends it, I do not think Brier defends it; but they can speak for themselves.

Even less defensible, however, is Barbieri's implied use of the term "pansemiotician" for anyone who will not put logic aside and agree with him that the coextensivity of life with semiosis is a proposition strictly convertible. That is Wonderland, where words mean just what we want them to mean, not the realm of inquiry where words are provisional guides both shaping and able to be shaped by further discovery. Leave unity based on dogmatic proclamation to the theologians. Semioticians have better things to do, and better ways to work toward agreement. It is inquiry, not proclamation, that has brought semiotics this far. Proclamation cannot be the measure of whether it has yet further to go. Sometimes silence is just what is called for, especially if what it silences is a dogmatic proclamation in the way of inquiry.

24

----- Original Message -----

From: [DON FAVAREAU](#)**To:** [Marcello Barbieri](#) (with reference to John Deely's letter)**Cc:** Mailing List**Sent:** Tuesday, March 17, 2009 2:48 AM**Subject:** This will anger many people that I think the world of...

Hi All!

Now I know that Marcello needs no help from me in defending himself, but I do feel the need - for the first time ever, actually - to step in "in my official capacity" as ISBS V.P. just to clarify that - as far as the Society as an organization is concerned, Marcello's position is - in its essence (if not in its particulars) - the one that the founding members did, in fact agree on: i.e., that the #1 goal of THIS Society (though not necessarily the goal of all of who are doing "biosemiotics") is the promotion of the project of developing a semiotics FOR USE IN BIOLOGY. What this means, among other things, is that the "official" line on anything outside of the biological realm is a public policy of AGNOSTICISM.

This was decided for strictly pragmatic (note: not pragmaticist!) reasons - and one can personally agree or disagree with the decision, but the fact remains that this was the decision taken, with the general thinking behind it being that it is quite a near-impossible task as it is to attempt convince biologists to widen their conceptual framework enough to begin to consider the possibility of putting their considerable intellectual and collective talents towards the investigation of true "sign" relations in biology. Asking for more than that at this time would be over-reach, and almost certainly result in total failure of this project's (ISBS's) goal of collaboration with biologists.

Now: it is obviously the case that biology is grounded in a physical universe and gives rise - in the human case - to things like family dynamics, political parties and football clubs. But the biologists that the ISBS is trying to reach are not studying the universe, family dynamics, political parties or football clubs - as real and vital and worthy of study as all those things may be.

And trust me: I know all of the objections to this. "You are perpetuating the very disciplinary boundaries that you should be trying to transcend"; "Biosemiosis could not take place in the absence of the conditions provided by physiosemiosis"; "Biosemiotics should be so much more than this" etc etc.

Of these three arguments, I believe that everyone in ISBS would certainly agree, at least, with the last one. And this is my very point: "Biosemiotics" and ISBS are NOT terminally coextensive. ISBS is a more narrow and specialized sub-project of biosemiotics, with more narrow and specialized goals. This does not mean, of course, that one cannot have larger biosemiotic goals and still be actively involved in ISBS. But it does mean that one can be an ISBS "interested-in-biology-only" member without holding larger biosemiotic interests or commitments. Indeed, that is precisely where we interface with a scientific community not our own - and such an interface is critical for this project of the ISBS - though it may not be for other biosemiotic projects of other kinds.

So, again, for better or worse (and I am sure many will say: "for worse!!!"), the public policy of ISBS is to remain agnostic towards the concepts of physiosemiosis, pansemiosis and, for the most part, anthroposemiosis - simply from a pragmatic adherence to the Zone of Proximal Development in learning theory: One does not convert the heathen pagan with a gift of the *Summa Theologica*. One starts with a picture Bible that subtly co-opts the local gods.

...once we get some shoes on those scientific savages, then maybe we'll talk about cosmological firstness...but I suspect that that is still many, many years away!

And, of course, this does NOT mean that we should not have these debates here or that they are somehow illegitimate "in" biosemiotics - that would be a ridiculous and unjustifiably presumptuous thing to claim, and I don't claim it - rather, I am ONLY saying that as far as the ISBS public policy is concerned, the Society as a whole commits itself to NO one "pre-" or "extra-" biological theory of any kind, and WILL not so officially commit, as it has been decided that this is the best way for this particular sub-project of biosemiotics to proceed.

Commence debate!

Don

25

----- Original Message -----

From: "Kalevi Kull" <kalevi.kull@ut.ee>
 To: "DON FAVAREAU" <favareau@gmail.com>
 Cc: Mailing List
 Sent: Tuesday, March 17, 2009 7:53 AM
 Subject: Biosemiotics with morning coffee

Dear fellow biosemioticians,

Isn't it so that the most powerful (and interesting) arguments are those of understanding?

Thus - is the coffee in the cup involved in semiosis? (Or, a more biosemiotic example - assume you are drinking water :-)).

Is the coffee (or clean water) alive? No! Are the molecules in my body alive (including DNA, proteins, potassium, and water, etc.)? No!

Biology, thus, is mainly dealing with non-living matter.

Why the structures in the organisms' bodies are not alive? Because life is not the molecules. Life is relational instead. Life is that huge set of RELATIONS that are conveyed (or herited).

(Since Saussure, these relations are called codes.)

Thus - is the coffee (and water) involved in life? Yes! Is the non-living matter involved in life? Yes.

Once life is semiotic - is the non-living matter involved in semiosis? Yes!

(And can you point anything that is not involved in human semiosis? Obviously no!)

Let's avoid political correctness at our morning coffee. Let's think on biosemiotics :-))

With very warm wishes to everybody,

Kalevi

26

----- Original Message -----

From: "Stefan Artmann" <Stefan.Artmann@uni-jena.de>
 To: "Marcello Barbieri" <brr@unife.it>
 Sent: Tuesday, March 17, 2009 10:33 AM
 Subject: Re: Testability in semiotics

Dear Marcello:

Just a link to the Oxford English Dictionary' entry on "coextensive", which shows that your interpretation of Sebeok's sentence is the correct one, of course.

This link will allow free access to the OED entry coextensive, a. for the next three days.

The link is:

<http://dictionary.oed.com/cgi/display/50043259?keytype=ref&ijkey=rd0gJNyd/9lPc>

Please note: if you encounter problems accessing the entry, please try copying the link (including any final full stop or period, but omitting spaces and line-breaks), and paste it into your browser, as the way some mail programs handle these features may cause clicking the link to fail.

Best regards,

Stefan

27

----- Original Message -----

From: [h h pattee](#)**To:** Mailing List**Sent:** Tuesday, March 17, 2009 2:27 PM**Thomas Aquinas** (~1224-1274):

"We must love them both; those whose opinions we share, and those whose opinion we reject. For they have all labored in the search for truth, and they have all helped find it."

How can a mere physicist who does not understand **what forces are** expect to know what semioticians think **signs are**? Deely says, "the answer depends on **what signs are**." I still don't have a clear answer to "Pattee's Test" of the simplest sign. My point was that **it is a problem of definition**. Let me repeat my test in more detail.

All I know is that a sign is a triadic relation, a **sign** (a distinguishable physical structure) that is recognized by an organized object called the **interpreter** or agent, with the result that another object called the **referent** is identified (associated with the sign). This is not a law-determined association but a structure-determined process with no physical necessity required of the physical structures or objects other than what is necessary to establish this arbitrary semiotic relation.

A chemist would define an abiotic specific **catalyst** (like an enzyme) as an organized molecule, a part of which (the "active site") recognizes (by its shape) a specific part of another molecule (its **substrate**) and as a result produces a new molecule (the **product**) which is then released so the process can be repeated. There is no necessary law-based relation between these arbitrary molecules (This is Jacques Monod's "principle of chemical gratuity").

Using these definitions, I see no logical or conceptual problem with calling the product molecule the **referent** of the substrate **sign** as **interpreted** by the organized enzyme molecule.

My question: Isn't this physiosemosis?

Here is where I disagree with Deely. He says, "**the answer depends upon what signs are, not upon what anyone asserts concerning their action.**" On the contrary, for me the answer depends **only** on what I have asserted in my definitions of substrate, catalyst, and product -- and sign, interpreter, and referent, and **especially their actions**. Otherwise, I have no idea "**what signs are**." According to Deely's definition I think my example **is** physiosemosis.

The problem is this: I don't like my "test" definitions! They do not help me explain life. I choose a more restrictive definition just because I want to explain the conditions that are required for evolution, which biologists and physicists agree most clearly distinguishes life from the non-living physical universe.

There are many arguments and much evidence that evolution requires the concept of **a coherent system of signs, a heritable memory, and open-ended variety (i.e., large information capacity)**, in other words, **a type of language**. Otherwise, without these conditions evolution as well as all other linguistic concepts like descriptions, instructions, messages, and meaningful discourse could not retain anything like their useful conventional meanings.

I'm sure that Salthe can come up with a definition of semiosis that is pansemiotic. I think my "test" definitions allow Deely's physiosemosis. If you like my linguistic definition, then life and semiosis are coextensive. Like all scientific definitions, the choice depends first on what questions you want to answer, and only then on the power of these definitions to express empirically testable and explanatory models that answer your questions.

Respectfully,
Howard

28

----- Original Message -----

From: [Stanley Salthe](#)**To:** [h h pattee](#)**Cc:** Mailing List**Sent:** Tuesday, March 17, 2009 3:42 PM**Subject:** Re:

Howard makes a strong argument here showing that biosemiosis involves -- depends upon -- physiosemiosis. He outlines the triadic relations involved clearly. What the pansemiotician (my version) wants to do is to undertake to show that such triadic relations are found elsewhere in the physico-chemical world, as a contribution to understanding the origin of life.

STAN

29

----- Original Message -----

From: [Søren Brier](#)**To:** [Deely, John N.](#) ; [Marcello Barbieri](#)**Sent:** Tuesday, March 17, 2009 3:04 PM**Subject:** SV: Testability + Pansemiotics

Dear John and Marcello

I see that John and I use the term pansemiotic the same way and both understand the theories we develop as something else. That is the reason we have given them specific names.

Søren Brier

30

----- Original Message -----

From: [Stanley Salthe](#)**To:** [Deely, John N.](#)**Cc:** Mailing List**Sent:** Tuesday, March 17, 2009 3:05 PM**Subject:** RE: Testability + Pansemiotics

Folks -- Regarding John's below,
(John Deely ...” Marcello, before you retreat into silence.....”)

Put more succinctly, John is asserting that some uses of 'pansemiotics' (e.g., Marcello's and mine) are wrong because it was first designated as the notion that only signs exist in the universe (whatever that might mean). The first use of words is often eventually defeated by the evolution of language. Words change meanings. We need a label for the idea that signs 'perfuse' the universe, and it seems to me that 'pansemiotics' (semiotics everywhere! partout!) serves that purpose just fine. John does not, that I can see, supply an alternative.

Making our way further into his posting, John suggests that organic evolution may have had a direction. One will not find any such direction embraced by evolutionary biologists, who are all neoDarwinians. Their theory of evolution is change (random with respect to needs) followed by selection by consequences. It is a theory of the evolution of population genomes, -- of MICROevolution. It has, and CAN have, nothing to say about MACROevolution, which is where it might be possible to discern directionality in evolution. In fact, two neoDarwinians themselves (Maynard Smith and Szathmary) have written a book ('The Major Transitions in Evolution') about macroevolution, presumably as a way to problematise it. Macroevolution shows an increase in complexity during the evolution of living systems on Earth. There is no known selection pressure that might give rise to such a tendency. Thus, there HAS been progress in biological evolution, but it remains unexplained by natural selection.

STAN

31

----- Original Message -----

From: [Søren Brier](#)**To:** [Stanley Salthé](#) ; [Deely, John N.](#)**Cc:** Mailing List**Sent:** Tuesday, March 17, 2009 3:38 PM**Subject:** SV: Testability + Pansemiotics

Dear Stan

John has called his model for Physiosemiotics and I have called mine for Cybersemiotics.

May I suggest that we use those names.

Søren Brier

32

----- Original Message -----

From: [Deely, John N.](#)**To:** [Stanley Salthé](#) **Cc:** Mailing List**Sent:** Tuesday, March 17, 2009 3:51 PM**Subject:** RE: Pansemiotics -- forget it, a diversion that adds nothing and detracts a lot

Stan:

I do not recall ever discussing with you the term "pansemiotics", a term, certainly, which I have never used and would never use in connection with my own work.

I do agree with you on the likelihood that some form of semiosis exists throughout nature, even before the living, but even that cannot properly be called "pansemiotics". For one thing, the action of signs is semiosis, not semiotics. Semiotics names the knowledge developed by studying that action. It can have subdivisions, but "pan-" hardly refers to a subdivision.

And the prefix "pan-" does not have a history in philosophy with which it is wise or useful to associate semiotics — as in "panpsychism", "pantheism", "panentheism", and the like. It conveys the connotation of "everything", of "nothing but", and your stipulations on the point are themselves Mad Hatter, if you think you are going to make the language evolve around this term as though there were no baggage from previous usages.

Whether semiosis occurs throughout nature — and it may not — there is no more "pansemiosis" than there is "pansemiotics". For the "causality" which follows upon the being of signs is far from the only causality at work in nature (as "pansemiosis" would falsely suggest), and semiotics is not the only or the whole of our knowledge of and ways of studying nature (as "pansemiotics" falsely suggests, Stan's velleities and stipulations to the contrary notwithstanding).

I consider the baggage carried by adding "pan" to "semiotics" to be completely counter-productive. **Semiotics** is the study of the action of signs, however far we find that action to extend or not to extend. Semiotics is not the whole of knowledge, it is not a "threat" to the scientific specialties, it complements those specialties and, as Tom said, makes us aware of the universal dependence of experience and knowledge upon semiosis without in any way gainsaying or denying the need for scientific specializations (even within semiotics) to learn about this or that part, this or that aspect, of nature or culture.

The only gain I can see (a dubious one at that) from bringing "pansemiotics" into discussion at all is to rule it out of discussion for anyone who does not think that semiosis names the whole of nature's interactions. It is one of those terms that can only create needless misunderstanding and useless controversy.

If you want to use it, Stan, I think you are making a bad — a very bad — choice, for nothing you have said so far under that label cannot be *better* said, and more clearly, by leaving that term out. Desuetude is the best location for the term "pansemiotics", and I am sure that is where it will wind up eventually. The best we can do in this regard is hasten the process.

"Desuetude", from the OED:

1. A discontinuance of the use or practice (*of* anything); disuse; protracted cessation *from*. b. The passing into a state of disuse.
2. The condition or state into which anything falls when one ceases to use or practise it; the state of disuse

John

33

----- Original Message -----

From: [Søren Brier](#)**To:** Mailing List**Sent:** Tuesday, March 17, 2009 3:52 PM**Subject:** SV: A Short History

Dear Marcello

I now read your piece and see that the discussion we had here with John and Stan was a most relevant critique to your conceptual foundation. John and I both claim that there exists positions between pansemiotics and a materialist/organicist evolutionary view that through emergence describes biosemiotics as a specific level of reality in which the full sign manifest in whole organisms (I am not sure if you want them to have a central nervous system); or just multi-cellular living systems including algae or starting on the level of single cell. Note we already have three such different starting points for a biosemiotics. Thus your section needs to be a bit more differentiated and I do hope that it will be accepted that John and each has actually developed a whole point of view or a framework and named accordingly. Though they seem to share important characteristics, we still have to see if we are in totally agreement or there are basic and important differences.

Venlig hilsen/best wishes

Søren Brier

34

----- Original Message -----

From: [Stanley Salthe](#)**To:** [Søren Brier](#)**Cc:** Mailing List**Sent:** Tuesday, March 17, 2009 8:47 PM**Subject:** Re: SV: Testability + Pansemiotics

Søren --

“...John has called his model for Physiosemiotics and I have called mine for Cybersemiotics. May I suggest that we use those names.”

The problem with physiosemiotics is that it is directed only to the physical realm.

It is the 'lowest', or more generally present, form of semiosis, as shown in my formulation:

{physiosemiosis {biosemiosis {anthroposemiosis}}}

I believe we do need a term for semiosis at this level, and that's a good one.

Concerning cybersemiosis, this seems to me too be redolent of mechanical systems. In my formulation, we would have:

{physiosemiosis {biosemiosis {anthroposemiosis {cybersemiosis}}}},

all of it exemplifying pansemiosis. This shows semiosis emerging ever more definitely embodied during development of the world.

STAN

35

----- Original Message -----

From: [Günther Witzany](#)**To:** [Kalevi Kull](#)**Cc:** Mailing List**Sent:** Tuesday, March 17, 2009 6:45 PM**Subject:** Re: Biosemiotics with morning coffee

Dear Kalevi!

Thank you very much for this comment!

Let me add:

According to Peirce, a sign (1) designates something (2) to an interpreter (3). Semiotics is therefore an irreducible 3-levelled relation of syntactic, semantic and pragmatic rules. Each of the 3 elements of the sign function already presupposes in its function the other two. According to Apel, all those who reduce this principally irreducible 3-levelled relation to 2 or 1 level, have fallen victim to an abstractive fallacy. The most common of these are (Apel 1974):

- Linguistic platonism of scientific models. Signs (1) without the corresponding reality (2) and without sign interpreter (3): Abstraction from the (apriori of the) linguistic community. The logic of science in the linguistic turn: the linguistic expressions or the explanatory model are the reality.
- Idealism of consciousness. (3) without (1) and without (2): Abstraction from the linguistic community; Descartes, Kant, Fichte, Hegel, Husserl: subjective/objective reason is the reality. Language is only a secondary means.
- Pansemiotics, metaphysical semioticism. (3) and (1) without (2): Semiotic idealism: signs and sign interpreters are reality. Everything is sign.
- Realism, materialism, pre-Kantian metaphysics. (2) without (1) and without (3): Reality is solely the physical-chemical laws of the material world. Sign use and sign interpretation are pre-scientific constructions.
- Positivism of the sensory data. (2) and (3) without (1): Leibniz, Locke, Berkeley, Hume, Popper. The material function of the sensory organs adheres to a universal syntax that is identical to the laws of physics and chemistry.
- Solipsism, realism, ontosemantics, constructivism, systems theory. (2) and (1) without (3): Subjectless, syntactic-semantic phase of the logic of science in Wittgenstein 1, Carnap, Russel, Tarski: Abstraction from (apriori of) the linguistic community.

All the Best

Guenther

36

----- Original Message -----

From: [Stanley Salthe](#)**To:** [Deely, John N.](#) **Cc:** Mailing List**Sent:** Tuesday, March 17, 2009 9:06 PM**Subject:** RE: Pansemiotics -- forget it, a diversion that adds nothing and detracts a lot

John --

“...Stan: I do not recall ever discussing with you the term "pansemiotics", a term, certainly, which I have never used and would never use in connection with my own work.”

I have the files to prove it. You gave your viewpoint (in detail, with extracts from your writing), and I gave mine, noting in the end that I would use pansemiosis in my own version because the term seems so apt for 'semiosis partout'.

“...I do agree with you on the likelihood that some form of semiosis exists throughout nature, even before the living, but even that cannot properly be called "pansemiotics". For one thing, the action of signs is semiosis, not semiotics. Semiotics names the knowledge developed by studying that action. It can have subdivisions, but "pan-" hardly refers to a subdivision.”

Yes. I use pansemiosis to signify a belief in semiosis everywhere (perfusing), while pansemiotics would signify the study of semiosis everywhere.

“...And the prefix "pan-" does not have a history in philosophy with which it is wise or useful to associate semiotics — as in "panpsychism", "pantheism", "panentheism", and the like. It conveys the connotation of "everything", of "nothing but", and your stipulations on the point are themselves Mad Hatter, if you think you are going to make the language evolve around this term as though there were no baggage from previous usages.”

Hmmm. This is worth dwelling upon, looking into.

“...Whether semiosis occurs throughout nature — and it may not — there is no more "pansemiosis" than there is "pansemiotics". For the "causality" which follows upon the being of signs is far from the only causality at work in nature (as "pansemiosis" would falsely suggest), and semiotics is not the only or the whole of our knowledge of and ways of studying nature (as "pansemiotics" falsely suggests, Stan's velleities and stipulations to the contrary notwithstanding).

I consider the baggage carried by adding "pan" to "semiotics" to be completely counter-productive.

Semiotics is the study of the action of signs, however far we find that action to extend or not to extend. Semiotics is not the whole of knowledge, it is not a "threat" to the scientific specialties, it complements those specialties and, as Tom said, makes us aware of the universal dependence of experience and knowledge upon semiosis without in any way gainsaying or denying the need for scientific specializations (even within semiotics) to learn about this or that part, this or that aspect of nature or culture.”

My point here is that the practitioners of science-as-it-is will certainly resist attempts to bring semiotics on board. I feel semiotics is antagonistic to science practice, which in its social role as servant to technology development, has a totally dyadic, mechanistic approach, and feels no need for anything else. My own interest in semiotics is as an opposition to scientific mechanicism.

“...The only gain I can see (a dubious one at that) from bringing "pansemiotics" into discussion at all ...is to rule it out of discussion for anyone who does not think that semiosis names the whole of nature's interactions. It is one of those terms that can only create needless misunderstanding and useless controversy. If you want to use it, Stan, I think you are making a bad — a very bad — choice, for nothing you have said so far under that label cannot be *better* said, and more clearly, by leaving that term out. Desuetude is the best location for the term "pansemiotics", and I am sure that is where it will wind up eventually. The best we can do in this regard is hasten the process.

Well, I am open to having a vote. In the meantime, we have no term to use to signify belief in semiosis being found throughout nature -- for the compound: {physiosemsiosis {biosemiosis {anthroposemsiosis}}}

STAN

37

----- Original Message -----

From: [Deely, John N.](#)**To:** [Stanley Salthe](#)**Cc:** Mailing List**Sent:** Wednesday, March 18, 2009 7:38 AM**Subject:** RE: Semiotics, Stan, is the generic term

Good. I am delighted you have "files to prove it": what they prove is that *you* used the term "pansemiossis" as a designation that *I* reject as *totally inappropriate* and *counterproductive* and *ill-advised* as way of "naming" semiosis as a process at work in nature even before the advent of life. "Panpsychism" was a term proposed to deny that there is any reality at all that is not living; "pantheism" was a term proposed to deny that there is any reality at all that is not God; "pansemiotics" is a term proposed to ... ?? besides raise in hearers/readers minds the idea that this speaker/writer thinks that the universe consists exclusively of signs??

"No, no", you say, and proceed to have to explain away everything you *don't* mean, when in fact simply to explain what you *do* mean is a task difficult enough and, Barbieri is right in this, a task that has not yet been brought to a wholly successful conclusion, wrong only in denying or seeming to deny that there remains an open question about the extent of sign action in nature, about whether it begins and ends with life.

It is about as useful as preferring the term "pragmatism" over "pragmaticism" when talking about Peirce's semiotic, which puts you in the position of *first* having to explain why Peirce's own view is incompatible with nominalism whereas most pragmatists from James to Rorty have an understanding of "pragmatism" that is compatible with nominalism. Start with pragmaticism and you start with where Peirce stands alone in the American movement as moving decisively *beyond* the epistemology and 'critical philosophy' of late modern thought; start with pragmatism and there you are, in a morass of explanations and considerations which are *multi passus extra viam* in the matter of understanding Peircean semiotic.

Except that *pansemiotics* is even *far less useful*, because while "pragmatism" was at least initially original with Peirce, using "pan-" to prefix semiotics resorts to a ploy that, far from original, has a long and disastrous "prehistory" that it is folly to ignore. My recommendation is to *recognize that fact, the historical element that makes the term "pansemiotics" certain to be counterproductive to intellectual discourse* over the question of whether there is an action of signs at work in nature, along with many other forces or causal lines, including chance. "Semiotics" is the name for that discourse over how far the action of signs extends, and "physiosemiossis" is the name proposed for investigating the question of whether there was an action of signs prior to life, just as "biosemiotics" is the name proposed for investigating the action of signs so entangled with the process of life (biological processes) as to prove essential thereto, and perhaps "cybersemiotics" should be recognized as a term for the action of signs in nature after culture, as impacted by culture (or as I would rather say: transformed by culture from within, inasmuch as culture is simply the species-specifically human extension of nature, as Sebeok first clearly said)>

Thus we don't need a "new name" or a "further name" to describe the study of the action of signs as putatively including physiosemiossis along with biosemiosis. We already have a name for that: **Semiotics**, the study of the action of signs wherever such action is at work. "Semiotics" is the term for the compound that you seek. Perhaps you overlooked it because it is so close-to-hand?

38

----- Original Message -----

From: [Koichiro Matsuno](#)**To:** '[Stanley Salthe](#)'; '[h h pattee](#)'**Cc:** Mailing List**Sent:** Wednesday, March 18, 2009 7:58 AM**Subject:** RE:

Folks,

I am simply ignorant of what pansemiotics is all about, though I shall be listening to if somebody calls me a pansemiotician. In the material world, however, there could be found the physical activities of referring to something and then producing something else. If these two activities are synchronous, it must be gratuitous to invoke semiotics in the practice of physics. In contrast, if these two are sequential, the aftermath would be a bit different. Physics is required to face the phenomenon as appealing to something other than physical laws of synchronous nature. Consider, for instance, chemical affinity long entertained in the practice of chemistry. It can refer to some atoms and molecules even not available in the immediate neighborhood. Chemical affinity can carry the capacity of mediating between the action of referring to and the consequential reaction of producing, without invoking living beings. Doesn't it look like a bit semiotic while neither physics nor chemistry needs help from semiotics?

Koichiro

39

----- Original Message -----

From: "Stanley Salthe" <ssalthe@binghamton.edu>**To:** "Koichiro Matsuno" <CXQ02365@nifty.com>**Cc:** Mailing List**Sent:** Wednesday, March 18, 2009 3:27 PM**Subject:** RE:

(Replying to Koichiro Matsuno)

Folks -- My own take on chemical affinity, following Prigogine, is thermodynamic. In a mixture of chemicals, the free energy of the system will be reduced by way of various chemical reactions. If we have A, B and C, and AB has greater affinity than AC, and BC has a greater affinity than AB, because of different proximities of the reactants, the immediate physico-chemical reactions will not reflect completely the possibilities for further adjustments. Thus, an A and C that hastily combined will still retain the possibility of further activities. C has further opportunity for action with respect to B, and so has A. So, the immediate activities of the system will have not well represented the thermodynamic tendencies, which is to reduce all free energy as rapidly as possible in every locale.

That can be said to be the 'meaning' of all these sequential transient unions (their 'final cause' being the Second Law). At every moment every locale faces the uncertainty of what has just transpired in its proximity, and is uncertain exactly where next to 'cash in' its remaining free energy, if any -- or if it can at all.

Thermodynamics is what makes the abiotic world 'pre-semiotic' or 'protosemiotic'.

STAN

40

----- Original Message -----

From: [Deely, John N.](#)**To:** [Koichiro Matsuno](#) **Cc:** Mailing List**Sent:** Wednesday, March 18, 2009 11:21 AM**Subject:** What the term "pansemiotics" is all about

Panpsychism was all about the denial that there is such a thing as nonliving beings. It is largely discredited over the history of philosophy. Pantheism was all about the denial that anything but God has reality, that reality consists of anything other than the Divine Being itself. Pansemiotics, therefore, if introduced according to, say, Peirce's rules for an ethics of terminology, would be the view that the universe consists of nothing but signs and their action, a view very bit as credible, or incredible, as panpsychism.

Stanley Salthe thinks that he can introduce this term now to name the view that there is an action of signs everywhere in nature. But that is not "pansemiotics", it is simply the view that semiotics can find an action of signs even in physical nature. The term serves no purpose that does not embroil its purveyors in associations and controversies that tend to discredit semiotics itself, and for this reason there is nothing to be gained, and much to jeopardized, by Salthe's quasi-Saussurean attempt to introduce it into mainstream semiotic discussion. Personally, I hope the mood will pass, and that the term "pansemiotics" will soon receive the complete ignoral it so richly deserves.

41

----- Original Message -----

From: [Stephen Pain](#)**To:** [Marcello Barbieri](#) **Cc:** Mailing List**Sent:** Wednesday, March 18, 2009 2:42 PM**Subject:** Re:

Since the 1940's (Mayr et al) the major strands of biology which had long been in opposition have been synthesised. This synthesis has been very accommodating, allowing those who were keen on Devo over Evo to carry on working, and vice-versa, those who prefer Evo over Devo. However, the disagreement, and it reminds one of a Yiddish tailor joke, is all to do with the cut. Each of these two camps, and they are camps, have their own standards – their own scissors so to speak. Now if I were to go to a Devo-Evo tailor and ask for a pair of trousers, and then trundle off to the Evo-Devo tailor for a jacket, I bet they wouldn't match! Yet, we can all agree that however unsightly it looks, it is still a suit. This is what the theory of evolution is like. Now, the methods, explanations, the models and all the resources needed to make the trousers, do resemble those used to make the jacket. We can all concur that wherever you make the trousers or the jacket, there will be resemblances in approach. But let us suppose we were to ask the tailors. Devo, how did you make those trousers? Well funny you should ask that, but I saw a pair already made, and I decided to make a few adjustments to it. So Devo? Who actually made them in the first place? Another tailor! Who? I am not going to tell you. Well I guess it was Evo. Then you go to Evo. Evo how did you make the jacket. Well I had a plan. A plan? Yeah, you know – you mean like a bauplan? No, but maybe. So where did you get the plan from? Uhhh, Devo. You can ask them many questions and each time you see that there will be an overlap of explanations. Now what is interesting is it is far easier to account for development than evolution because that has a readymade (template). Evo has to start from scratch. So Evo where did you get the needle from? I bought it. But who did you buy it from? I am not sure? Here comes the crux. Teleology. If we ask metaphysical questions of both tailors, we will soon hear very different stories, and there will be times surely we will think they are making them up. But should that affect our belief in the suit? What kind of suit do you get when two biosemiotician makes it?

As far as I can see it, there should be no problem. At the basal part of life, we have codes and signals. The signals are encoded genetically. From the pre-RNA world up to the porifera perhaps we have a syntactic form of representation (from the life form's perspective), then we move into the tri-system of representation the immuno/endocrino/neuro world. The sponge is aware of itself as a distributed excitation of collected responses to aversive stimuli, and as a premotor or hydraulic form. The jellyfish in its CPUs the marginals is the first creature that can affectively integrate information at a higher level than the peripheral/receptor level. We can test that. But how do we account for the movement from a signal to a sign? We surely need to be speculative, another set of tools from when we deal with signals.

Stephen Pain

42

----- Original Message -----

From: [Stanley Salthe](#)**To:** [Deely, John N.](#)**Cc:** Mailing List**Sent:** Wednesday, March 18, 2009 9:12 PM**Subject:** Re: What the term "pansemiotics" is all about

Replying to John --

“...Panpsychism was all about the denial that there is such a thing as nonliving beings.”

Panpsychism: All parts of matter involve mind. Its constituent parts are composed of mind.

Everything is sentient (but not necessarily conscious).

In my usage, replace 'mind' here with 'semiosis', to get pansemiosis.

“...It is largely discredited over the history of philosophy.”

Things 'come and go', and come again in different guise. Nothing is settled forever.

“...Pantheism was all about the denial that anything but God has reality, that reality consists of anything other than the Divine Being itself.”

Pantheism: Everything is part of an all-encompassing godhead.

I would say this isn't especially relevant. (Pan was the Greek god of nature.)

“...Pansemiotics, therefore, if introduced according to, say, Peirce's rules for an ethics of terminology, would be the view that the universe consists of nothing but signs and their action, a view very bit as credible, or incredible, as panpsychism.”

I see this as a non-sequitur. No one is asserting that physical forces and particles and their compounds do not exist. And no one would suppose that anyone is trying to say that.

“...Stanley Salthe thinks that he can introduce this term now to name the view that there is an action of signs everywhere in nature. But that is not "pansemiotics", it is simply the view that semiotics can find an action of signs even in physical nature. The term serves no purpose that does not embroil its purveyors in associations and controversies that tend to discredit semiotics itself, and for this reason there is nothing to be gained, and much to jeopardized, by Salthe's quasi-Saussurean attempt to introduce it into mainstream semiotic discussion.

Personally, I hope the mood will pass, and that the term "pansemiotics" will soon receive the complete ignoral it so richly deserves.”

In pursuing this I have tried to contact Frederik Stjernfelt, whose use of 'pan-semiotics' you have argued so much against. So far I have not been successful. (If anyone knows his e-mail address I would appreciate to have it).

So, John, your strongest argument so far seems to be that 'pansemiotics' is really unnecessary, because 'semiotics' neat covers all of semiosis, including:

{physiosemosis {biosemiosis {anthroposemosis {cybersemiosis}}}}

If there is general agreement on that, then there would be no need for a special inclusive label. If not, then some label for this inclusive concept is required, and I am not unpersuaded that the analogy to panpsychism (thus: all parts of matter involve semiosis) is a good one.

So, If I use 'semiotics', will all the persons on this list understand its broad range?

If not, they need prodding to remember that that idea is 'on the table', and a label (especially, perhaps an irritating one) would serve as a reminder.

STAN

43

----- Original Message -----

From: [Deely, John N.](#)**To:** [Stanley Saithe](#)**Cc:** Mailing List**Sent:** Wednesday, March 18, 2009 10:01 PM**Subject:** RE: One last time: NO to the term "pansemiotics"

How about "omnisemiotics", Stan, to express your view? That's just about as rhetorically powerful (in all the wrong ways) as "pansemiotics". I have no wish to go on about this unhelpful terminological suggestion. So one last time: I think to use "pansemiotics" as a substitute for semiotics in naming the full extent of the action of signs, whatever that may prove to be, is linguistic folly — folly historically, etymologically, and philosophically, all three. My own argument for "The Full Vista of the Action of Signs" I have spelled out in the new 5th edition of *Basics of Semiotics* just published by Tartu University; nowhere in that chapter, or anywhere else in the book, will you encounter the useless and counterproductive term "pansemiotics".

Really, I am at the end of willingness to further discuss this term, at least as long as there is nothing more than the stubbornness of a sole proponent to recommend it. The "label" as you call it is, in this case, not so much irritating as it is obtuse. I see nothing whatever in favor of trying to make "pansemiotics" a part of our vocabulary. It will certainly never be a part of my discourse, other than to reject it as appropriate to any other view than the view that the universe consists exclusively of signs and their action -- which is exactly what the word *connotes*, however much you don't want it to or stipulate to the contrary. Go ahead and dismiss Peirce's arguments concerning ethics of terminology as "non sequitur" if you like; and go ahead and push idiosyncratically for a general acceptance of "pansemiotics" to name your personal view -- if you want to go down in history as the Don Quixote of semiotics.

44

----- Original Message -----

From: [Deely, John N.](#)**To:** Mailing List**Sent:** Thursday, March 19, 2009 7:27 AM**Subject:** RE: controversy over the extent of semiotics

The attached essay, "Thomas Sebeok and the External World", originally delivered at Imatra, was subsequently published in *Semiotica* 150–1/4 (2004), 1–21.

It directly addresses the "state of the question", at the dawn of our century and time of Tom's passing, as to how far the action of signs (and hence semiotics itself as the study of that action), extends. I circulate it here as having some use in the context of recent discussions over biosemiotics and the question of a further physiosemiosis.

45

----- Original Message -----

From: [Stanley Salthe](#)**To:** [Deely, John N.](#) **Cc:** Mailing List**Sent:** Friday, March 20, 2009 4:04 PM**Subject:** RE: One last time: NO to the term "pansemiotics"

Here I answer John's enmity toward 'pansemiotics', which, it appears is based on his own construal of what Stjernfelt, in a review (in *Cybernetics And Human Knowing*) of "Four Ages of Philosophy", claimed was John's 'pan-semioticism', which is how he labeled John's proposal of signs perfusing the universe (with which I agree), which he, Stjernfelt, rejected. John, in reply, construed Stjernfelt as having construed his concept as claiming that there is nothing but signs in the universe. This interpretation was John's.

Thus, pansemiotics (e.g., in the way I have used it in a couple of papers) is to be rejected because John misconstrued Stjernfelt's negative interpretation of John's 'signs perfusing the universe' with the label 'pan-semioticism'. 'Pan-semiotic' was a pejorative term as used by Stjernfelt, and John rejected an exaggerated version of it as a label for his concept. So, in the end both Stjernfelt and John in effect rejected 'pansemiotics'! Now Jesper, in his recent book, pans the word 'pansemiosis'. But this change in spelling means a lot conceptually. There can usefully be no such thing as 'pansemiosis'.

Semiosis refers to the action of signs. 'Biosemiosis' refers to the action of signs in biological systems. Pansemiosis, then would be the action of signs everywhere, which, if not completely illogical, is certainly not very useful. There isn't anything called everything (not even in cosmology!). I have not (I hope) used the term 'pansemiosis'. Semiotics, on the other hand, is the STUDY of the action of signs. I have used (in two papers that I know of) the term 'pansemiotics' (and the adverb 'pansemiotically') to signify that sign action may be studied anywhere, including in abiotic systems (John's 'physiosesemiosis').

Turning now to John's posting,

"...How about "omnisemiotics", Stan, to express your view?

That's just about as rhetorically powerful (in all the wrong ways) as "pansemiotics". I have no wish to go on about this unhelpful terminological suggestion. So one last time: I think to use "pansemiotics" as a substitute for semiotics in naming the full extent of the action of signs, whatever that may prove to be, is linguistic folly - folly historically, etymologically, and philosophically, all three."

This seems rather strong given the above history. I agree that, if all semioticians agreed that semiotics includes physiosesemiosis, then there would be no need for a special term that emphasizes that full understanding, and then just 'semiotics' neat would then be sufficient.

"...My own argument for "The Full Vista of the Action of Signs" I have spelled out in the new 5th edition of *Basics of Semiotics* just published by Tartu University; nowhere in that chapter, or anywhere else in the book, will you encounter the useless and counterproductive term "pansemiotics". "

Perfectly legitimate. But are your views legislation?

"... Really, I am at the end of willingness to further discuss this term, at least as long as there is nothing more than the stubbornness of a sole proponent to recommend it. The "label" as you call it is, in this case, not so much irritating as it is obtuse. I see nothing whatever in favor of trying to make "pansemiotics" a part of our vocabulary."

But it has already escaped into the vocabulary! I don't even recall where I picked it up. Certainly not in your argument with Stjernfelt. It just seemed right to me.

"...It will certainly never be a part of my discourse, other than to reject it as appropriate to any other view than the view that the universe consists exclusively of signs and their action -- which is exactly what the word *connotes*, however much you don't want it to or stipulate to the contrary."

This was YOUR construal, no doubt used to reject forcefully Stjernfelt's labelling of your thinking. But your construal of the label just makes no sense. I think no sane person would think that there is nothing but signs in the universe, certainly not me!

"...Go ahead and dismiss Peirce's arguments concerning ethics of terminology as "non sequitur" if you like; and go ahead and push idiosyncratically for a general acceptance of "pansemiotics" to name your personal view -- if you want to go down in history as the Don Quixote of semiotics."

Rather grand pronouncements, I think, for a simple terminological misunderstanding!

STAN

46

----- Original Message -----

From: "Terrence Deacon" <deacon@berkeley.edu>

To: "Stanley Salthe", "Deely, John N."; Cc: Mailing List

Sent: Friday, March 20, 2009 5:05 PM

Subject: NO to the discussion of "pansemiotics"

Dear Stan and John,

I for one have begun simply deleting your discussions on this topic when they appear in my email.

I find most of this to be pretty sterile, and more ego than ergo. We all now know how each of you will use these terms, and from now on will employ the appropriate circumlocutions to deal with these terms if you are mentioned. The future history of usage of these terms and the comparative importance of the concept will determine the outcome, not this discussion.

I can't imagine that any related view concerning such a widened conception of semiotics will have much impact on the future of the field (though that too awaits the verdict of a later generation), so I think the whole issue is one of those arguments over possession of deck chairs on the Titanic.

I have respect for many of the contributions that each of you have made, but this discussion has diminished it. Time to move on.

Terry

47

----- Original Message -----

From: "Deely, John N." <jndeely@stthom.edu>

To: "Terrence Deacon"; "Stanley Salthe" Cc: Mailing List

Sent: Friday, March 20, 2009 8:22 PM

Subject: RE: NO to the discussion of "pansemiotics"

I regret that you addressed the message below to me, Terry, for I have already said that the discussion is over a useless term and has gone too far. It is a question of semiotics, pure and simple: what a sign is and how far the action consequent upon the being that makes a sign a sign extends. So where do you get off comparing that position to an argument over "possession" and "more ego than ergo"?

48

----- Original Message -----

From: Deely, John N.To: Stanley Salthe Cc: Mailing List

Sent: Friday, March 20, 2009 9:27 PM

Subject: RE: One last time: NO to the term "pansemiotics"

Stan, please remove me from any email list when you use it to pursue your obsession with this useless term

49

----- Original Message -----

From: "Dario Martinelli" <zoosemiotics@gmail.com>To: "Deely, John N." <jndeely@stthom.edu> Cc: Editorial List

Sent: Saturday, March 21, 2009 1:37 PM

Subject: Re: One last time: NO to the term "pansemiotics"

I've always thought that PANsemiotics was the semiotic analysis of fried food :)

Best to all

Dario

50

----- Original Message -----

From: "Stanley Salthe" <ssalthe@binghamton.edu>

To: "Dario Martinelli" <zoosemiotics@gmail.com>

Cc: Mailing List

Sent: Saturday, March 21, 2009 3:20 PM

Subject: Re: One last time: NO to the term "pansemiotics"

It has been my view that pangensis, following panmixia might lead to a panspermic fertilization of thought that would be exemplified in a panegyric by Pangloss, which would penetrate the panoply of any curmudgeon whoever.

Panurge

51

----- Original Message -----

From: Marcello Barbieri

To: Mailing List

Sent: Sunday, March 29, 2009 6:30 PM

Subject: A Revised Short History of Biosemiotics

Dear Colleagues,

I have received a number of requests for some corrections in my Short History of Biosemiotics, and I have accepted all of them. The new version that I am now sending in attachment does not contain, to my knowledge, any other factual mistakes, but I would like to be sure about this, and that is the sole purpose of this letter. If any of you has spotted or will spot an error, a distortion of the historical events or any other false or inaccurate or misleading statement, please let me know. You can send your advice with a public or a private email, but please send a single email. It goes without saying that if I do not hear from you I can assume that you do not have any corrections to suggest.

I am aware that many of you do not agree with my views, but please remember that this is not the point under discussion, here. At this stage, my goal is to publish a paper that all members of the Editorial Team have examined and have found free of factual mistakes.

I hope to have your help on this specific issue, and I am looking forward to your suggestions.

Many thanks in advance for them.

Yours

Marcello

52

----- Original Message -----

From: "Dr Wendy Wheeler" <w.wheeler@londonmet.ac.uk>

To: "Marcello Barbieri" <brr@unife.it>

Sent: Sunday, March 29, 2009 7:00 PM

Subject: Re: A Revised Short History of Biosemiotics

Dear Marcello,

I've begun reading your article and it looks incredibly useful and clear. I'm quickly emailing to ask if you want corrections to small errors in the English itself?

Can I ask just one question? I searched your essay for mention of recursion (along with Bateson), but you don't seem to mention it -- though you do him of course. We can see recursive forms throughout nature, so the recursive principle must form a part of the many 'themes' which can be played or read (by proteins?) from the digital DNA code.

Presumably this accounts for the ability of stem cell material to be expressed as different 'themes'?

I'd be most grateful for any light you can shed on this for me -- if you have time.

All best,

Wendy

53

----- Original Message -----

From: "Marcello Barbieri" <brr@unife.it>
 To: "Dr Wendy Wheeler" <w.wheeler@londonmet.ac.uk>
 Sent: Monday, March 30, 2009 9:00 AM
 Subject: Re: A Revised Short History of Biosemiotics

Dear Wendy,

I would be MOST GRATEFUL if you could do a little copy-editing and correct whatever errors you find in the English text. All I can do in return is to thank you personally in the Acknowledgements, but I want you to know that I am really appreciating your help.

As for recursion, yes, you are right, of course, but it is one of those issue that I had to leave out in order to keep the history "short". In a longer account I agree that recursion would have to be in.

Thanks again for offering a concrete and very valuable help!

Best,

Marcello

54

----- Original Message -----

From: "Günther Witzany" <witzany@sbg.at>
 To: "Marcello Barbieri" <brr@unife.it>
 Sent: Sunday, March 29, 2009 8:23 PM
 Subject: Re: A Revised Short History of Biosemiotics

Dear Marcello!

You did great work! Congratulation

The references I sent you (Wittgenstein, Austin, Searle, Habermas) are not integrated but may be interesting to readers because they represent current status in defining "language" and "communication", both central also for biosemiotics as you will agree.

Best Wishes

Guenther

55

----- Original Message -----

From: "Marcello Barbieri" <brr@unife.it>
 To: "Günther Witzany" <witzany@sbg.at>
 Sent: Monday, March 30, 2009 9:41 AM
 Subject: Re: A Revised Short History of Biosemiotics

Dear Günther,

I am very glad that you liked the paper, but please keep in mind that it is only a "short" history and it is bound therefore to have limitations. I asked you the references of your work primarily for myself, but in a longer account I agree they should be in. Thanks again for sending them.

Best,

Marcello

56

----- Original Message -----

From: "Søren Brier" <sb.ikk@cbs.dk>To: "Marcello Barbieri" <brr@unife.it>

Sent: Sunday, March 29, 2009 10:31 PM

Dear Marcello

Here are a few comments and suggestions to your paper's first part.

As mentioned On the list I think we have a problem of finding a common definition of semiotics.

I also want to point out that Habermas is influenced by Peirce: the effect of Peirce's work, through The Collected Papers and early posthumous publications, is not merely of historical interest though. His work is in many ways still alive in contemporary debate. Within pragmatism, the work of both Susan Haack and Christopher Hookway has a distinctly Peircian flavor. Susan Haack in particular has vigorously defended Peirce's claim to pragmatism against the anti-Peircean strain of Rorty's new pragmatism. A further influence in contemporary debate has been the presence of Peircian views in the Philosophy of Science. Peirce's views on science combine distinctly Popperian and Kuhnian views and Popper even names Peirce as one of the greatest of philosophers. Also within the philosophy of science, Peirce's theories of induction and probability have influenced the work of R.B. Braithwaite. Further, Peirce's theory of the economics of research is now coming to be understood as a potential response to problems like Hempel's Paradox of the Ravens and Goodman's New Puzzle of Induction.

In other areas, some modern epistemologists have embraced virtue epistemology, an attempt to conduct the theory of knowledge by defining the qualities of the knower or true believer rather than knowledge or true belief directly. Two of the leading players in this approach to epistemology, Christopher Hookway and Linda Zagzebski, both acknowledge the thought of Peirce upon their work, and as a precursor to their discipline. Also, Jaakko Hintikka and Risto Hilpinen et al. point out the debt that their long running project, to define semantic concepts like quantifiers and propositions in terms of zero-sum games, owes to Peirce's work. Apart from these strictly analytic influences, Peirce also exercises some influence in European philosophy. Particularly noteworthy is the influence of Peirce upon the Neo-Kantian philosophies of Karl-Otto Apel and Helmut Pape, which emphasize a more Kantian reading of Peirce's philosophy. Perhaps most important, though, is Peirce's influence upon Jurgen Habermas. Habermas uses and refines crucial elements of Peirce's account of inquiry in his own political and social philosophy. Particularly central is Peirce's notion of a community of inquirers. For Peirce, the community of inquirers is a trans-historical notion, acting as a regulative ideal for the growth of knowledge through science. Habermas adapts the Peircian notion of community in two ways. First, the regulative ideal becomes a more concrete notion ranging across actual communities and political and social dialogue occurring within them. Second, the scientific and epistemological purpose of the intersubjective community becomes a social and political purpose on Habermas' view. Clearly, Habermas uses Peirce's ideas in ways that move away from simple Peircian concerns. Nonetheless, Peirce's ideas are of importance to him.

form <http://www.iep.utm.edu/p/PeirceBi.htm>. See also

<http://habermasians.blogspot.com/2005/01/habermas-on-peirce-1.html> and <http://www.scribd.com/doc/7393681/Habermas-Understood-Peirce-V-Tejera> for instance

See also Karl-Otto Appel Charles S. Peirce: From Pragmatism to Pragmaticism (1981), and of course Umberto Eco's work

Thus Peirce has great influence in Europe.

Venlig hilsen/Best wishes

Søren Brier

57

----- Original Message -----

From: "Søren Brier" <sb.ikk@cbs.dk>To: "Marcello Barbieri" <brr@unife.it> Cc: Mailing List

Sent: Sunday, March 29, 2009 10:18 PM

Subject: RE: A Revised Short History of Biosemiotics

Dear Marcel and all

I have one major theoretical problem with your history of biosemiotics. It is written from a paradigm that considers a view build on cybernetic information theory and information science combined with a concept of codes made of none-biological entities and of the physical symbol coming from analytical philosophy. In the history of the sciences there are so far two recognized semiotics; namely Saussurian and Peircean. Those two goes into what we normally define as semiotics. All other semiotics are development on these two paradigms. As far as I know, no one has defined a new semiotics from scratch. What you, Howard and Terrance (in his last two articles) work with is well within the paradigm of the information processing paradigm of cognitive science and computer science in my view, as I have written extensively on. If you claim that it is not and you construct a new paradigm of code-semiotics, we need that described from the bottom with its metaphysics. Then - if we are gong to work towards a unified framework for various biosemiotic schools - we need a definition of semiotics that can encompass all three kinds of semiotics. That would be a whole new foundation. To me information science is a proto-semiotic level.

Venlig hilsen/Best wishes

Søren Brier

58

----- Original Message -----

From: "Marcello Barbieri" <brr@unife.it>To: "Søren Brier" <sb.ikk@cbs.dk>

Cc: Mailing List

Sent: Monday, March 30, 2009 10:35 AM

Subject: Re: A Revised Short History of Biosemiotics

Dear Søren,

You are quite right when you say: "I think we have a problem of finding a common definition of semiosis".

Absolutely true.

In all my previous correspondence I have found it very hard to communicate with you, and from what you say I realize that things are not improving.

I am however grateful for your comments, so many thanks for them.

Yours

Marcello

59

----- Original Message -----

From: [DON FAVAREAU](#)**To:** [Marcello Barbieri](#)**Sent:** Monday, March 30, 2009 9:12 AM**Subject:** Re: A Revised Short History of Biosemiotics

just skimmed this quickly in the e-mail, but it looks error-free so far! will print it out at school tmw for a proper read and let you know if I discover any typos! all best wishes! –

don

60

----- Original Message -----

From: "Stanley Salthe" <ssalthe@binghamton.edu>To: "Marcello Barbieri" <brr@unife.it>Cc: <sb.ikk@cbs.dk>

Sent: Sunday, March 29, 2009 9:58 PM

Subject: Re: A Revised Short History of Biosemiotics

Marcello -- A note on your evolutionary picture of : code semiosis -> interpretive semiosis.

If one takes a more general perspective (I hesitate to call it pansemiotic!) then we can see that your interpretive semiosis is what is attempted to be ascribed by some (myself, Brier, Deely, ?Taborsky, ?Merrell) to abiotic dissipative structures, which were, formally, the precursors of macroscopic living systems.

That is, we can see that abiotic dissipative structures have the SAME properties as living ones macroscopically and thermodynamically. They differ microscopically, with one having internal information storage, the other not, and this impacts their relative stabilities, as well as many more interesting properties.

Regarding the function of DNA coding in biological systems, it is interesting to observe reports from those folks who are now studying the genomes of large bodies of water. They pool the genes they find with little care for which microorganism holds which one (since that would be impractical), so they are talking about the genomes of ecosystems! It is in this sense that one can see the dissipative structure perspective more clearly. The microorganisms depend upon each other to supply crucial chemical species, and so the large body of water seems indeed to be functionally one 'living thing'. Yet its thermodynamics and hydrodynamics would be little different from a lifeless body of water of the same size.

On my view of 'meaning', it is beginning to appear to me that what is crucial in this is 'contextuality'. This has not had an acknowledged presence in physics discourse, although it has been covertly present, as, e.g., in the constants of equations. That is, physics has had a 'dyadic consciousness', even while using a triadic interpretive scheme involving initial and boundary conditions.

Howard would no doubt say that this view is violating the 'epistemic cut', and confusing the investigative apparatus with the observed objects. In fact, in my opinion, the cut can no longer be maintained philosophically, leading to operationalism, which was the precursor of a semiotic perspective in physics. Interpretation is already embodied in the techniques of observation.

Your criticism of this a approach is, I take it, that it would not introduce something new to science other than a re-interpretation. From my present perspective I have no rejoinder to that but, then, my interest IS 'philosophical'!

(None of this appears to impugn your crisp and clear code perspective, I think.)

STAN

61

----- Original Message -----

From: "Marcello Barbieri" <brr@unife.it>To: "Stanley Salthe" <ssalthe@binghamton.edu>

Sent: Monday, March 30, 2009 11:21 AM

Subject: Re: A Revised Short History of Biosemiotics

Dear Stanley,

All your points are worth discussing, of course, but we have already seen that a public debate can easily degenerate into personal fights, so I am grateful that you sent your comments privately.

At this stage, all I am concerned about is to publish a short history which is free of gross mistakes and which can provide the starting point for the second step towards unification.

The controversy between you and John Deely has been too divisive, and that is why I have taken the whole issue of pansemiotics out of the paper. I hope that you see my point, and please remember that it is a "short" history, so it doesn't have to mention everything. Many thanks for your comments, and best regards.

Marcello

62

----- Original Message -----

From: st3pen@yahoo.com

To: [Marcello Ba](#)

Sent: Monday, March 30, 2009 3:41 PM

Subject: just quick observations

The other is that it is the only code that exists (lines 49-50)

Howard Pattee pointed out, in the 1960s (maybe we should know who Howard is? His job?

L 53 (line 53)

Marcello would it not be useful to have a schema or map of biosemiotics and its various schools and relations, so people can see first hand the organisation?

I have attached a diagram which looks at coding from a learning and type perspective.

I believe that in zoosemiotics that the problem of the code is different as it is dependent on the sensation -to recognition of information - but founded of course on the genetic code.

Is there one code? I mean is there not a multitude of competing genetic codes?

Stephen

Learning Type	Code Level	Type
Higher Cognitive	Sign to Symbol	Framing / Representational
Lower Cognitive	Signal to Sign	Framing / Representational
Sensor-Motor	Cellular Signalling	Functional to Framing
Innate	Genetic Code	Functional

63

----- Original Message -----

From: "Søren Brier" <sb.ikk@cbs.dk>

To: "Marcello Barbieri" <brr@unife.it> **Cc:** Mailing List

Sent: Monday, March 30, 2009 5:30 PM

Subject: SV: A Revised Short History of Biosemiotics

Dear Marcello

Thank you. I believe the reason of communication problems is what Kuhn describes as incommensurability between paradigms. But I do support Popper in that it is possible to get to understand each other if one is willing to do the effort.

The basic problem is then if we should and could look for such a common definition of semiosis or realize that we cannot?

This is a question of on what level we agree on that the differences in the three paradigms starts.

Do the differences imply that there are also three basically different definitions of semiotics?

As I wrote to you and have said to Terrance, I do not consider cybernetic information theory and self-organization theory in itself a semiotics and the main part of my work has been an analysis of and argumentation on why after spending 20 years in cybernetics and system theory.

Where both structuralism and Peircean semiotics comes with almost whole philosophies including ontologies

I wonder what yours are and if you an Howard can agree on such a one.

Venlig hilsen/best wishes

Søren Brier

64

----- Original Message -----

From: [Marcello Barbieri](#)**To:** [Søren Brier](#)**Cc:** Mailing List**Sent:** Monday, March 30, 2009 6:26 PM**Subject:** Re: Short History with LINE NUMBERS

Dear Søren,

Yes, I did notice the two errors that you have spotted, thank you, but I plan to make all corrections later, when I have collected all suggestions.

The problems that you raise about a common definition of semiosis are real, but I do not want to discuss them now. At this stage, all I want to do is to collect comments on my short history, and see if we can agree at least on the main historical facts and on the major issues that divide the schools.

After that, we will see if there is a serious willingness to take a second step towards a scientific biosemiotics. Maybe somebody will agree and others will not. Time will tell. For the moment, thanks again for the suggestions. Best

Marcello

65

----- Original Message -----

From: [Deely, John N.](#)**To:** [Marcello Barbieri](#)**Cc:** Mailing List**Sent:** Monday, March 30, 2009 5:43 PM**Subject:** Short History with LINE NUMBERS

Marcello (et al.):

Thank you for this new draft, which is a great improvement. I was already half-way through reading when your numbered draft arrived, so I simply added the line numbers to the first transmission and made a comparison after finishing my reading and comments. The attached copy with some suggested revisions and comments (which I would hope might inspire some further revisions, to tone down the ideological component in the draft) has the same line numbers from 1 to 365, at which point insertion of a suggested revision makes my line 565 be your line 564, and the same happens at your line 366.

So: = 1 thru 365; then +1 – 366 thru 564; and +2 – 565 to end of text.

Since I am returning a copy of your text with some minor editorial suggestions and comments, I will here in the body of this email restrict myself to three major points.

1. The notion of "semiotic animal":

Your lines 181–183 absolutely contradict the literature existing to define or explain the expression "semiotic animal": see comments at that point.

But let me add here only that getting the notion of "semiotic animal" straight is quite important.

2. The coextensivity of semiosis with life:

The biggest improvement by far needed for your text is for you to abandon your dogmatic interpretation of Sebeok's view that all of life involves semiosis, advanced in lines 356–361.

Especially in line 357 where you gratuitously insert, without any need whatever (let alone any rational or logical ground) that semiosis exists "*only* in living systems". That is a hypothesis, but hardly one that is required for the study of biosemiotics. (Indeed, if you were working with Peirce's distinction between cenoscopic science, which semiotics is, and ideoscopic science, which biology is, you would perhaps see that it is even a *testable* hypothesis — in cenoscopic terms *at least*, and might not feel your irrational compulsion to make this proposition into a dogma.)

Here is my suggestion for removing the dogma from your paragraph, line 356–361:

(1) The first postulate is Thomas Sebeok's idea that "life and semiosis are coextensive", i.e., that semiosis exists in all living systems. This implies that semiosis appeared at the origin of life, regardless of whether there was (as Peirce and others have thought) an even broader action of signs. Biosemiotics is not concerned with that question; biosemiotics concerns itself only with exploration of semiosis in the biological world, to develop the evidence that semiosis is at least coextensive with the whole of life.

My suggestion is that you simply replace current lines 356–361 with this proposed formulation or one similar, i.e., everything which says what is essential to biosemiotics, which avoids becoming dogmatic in a way that risks to repeat what Sebeok called the "pars pro toto fallacy" of the early semiologists.

Your current lines 358–359, that "sharply differentiates biosemiotics from 'pansemitotics' and 'physiosemitotics', the doctrines that semiosis exists also in inanimate matter and therefore everywhere in the universe" — what is its purpose? Within biosemiotics, for example, we can if we want try to "sharply differentiate" phytosemiotics from zoösemiotics, but to what end? You lose nothing positive, but gain removing your text from logical fallacy and dogmatic pronouncement by deleting 358–359, lines which say nothing whatever that is essential to the project of biosemiotics.

Your lines 359–361,

It also differentiates it from 'zoosemitotics' and from 'anthroposemitotics', the views that semiosis is restricted respectively to animals and to human beings.

make you sound ignorant of the 20th century development, for *no one* (before T.L. Short in 2007) *ever* used the term zoösemiotics to argue that semiosis is restricted to animals, nor was the term anthroposemitotics introduced to argue for the (early semiological view) that semiosis is restricted to human beings.

Thus your lines 358–361 damage rather than strengthen your text, and can be eliminated with real gain and no loss. Furthermore, it is quasi-moronic to equate the term physiosemitosis with either the term pansemiotics or the term panpsychism. Consider.

3. Semiotics as the general term for study of semiosis.

Peirce, after Locke, introduced the term "semiotic" to designate the study of semiosis, and at the same time advanced as an hypothesis that this action could be found throughout nature. Subsequently, other terms have been introduced to designate specific foci of sign activity, and the main ones among these terms are anthroposemitotics, zoösemiotics, and phytosemiotics, then also biosemiotics to embrace all three. The term introduced in 1990, around which there are at present about 10 or so articles in existence, and which was the subject of a session in which I did not participate at the 2008 Annual Meeting of the Semiotic Society of America last October, was not "physiosemitotics" but rather *physiosemitois*, to address the question of whether an action of signs is possible prior to or concurrent with but beyond the varieties of biosemiosis. Since semiotics studies the action of signs, it must first be determined whether such an action is possible in inorganic nature before there can be a question of "physiosemitotics".

"Semiotics" was and remains the name for the general doctrine of signs, as a cenoscopic rather than idioscopic science. And just a biosemiotics does not render nugatory cultural semiotics, so neither would a prospective physiosemitotics render nugatory biosemiotics (as you repeatedly and illogically imply). "Panpsychism" is indeed a term which belongs in the same bin (a dust-bin, hopefully) with "pansemitotics". But neither of them deserves mention in the same breath with the simple question of whether there might be a "physiosemitosis" at work in the developmental process by which the physical environment developed over time in the direction of being able to support life.

I sincerely hope that you can assimilate these points into your own thinking, or at least into the wording of the next draft of your text. I also think that you are a little too strongly ideological in your way of presenting the "schools", but will leave comment on this to others more directly involved.

All the best, my friend, in your important and ongoing work promoting biosemiotics.

66

----- Original Message -----

From: [h h pattee](#)**To:** [Marcello Barbieri](#)**Cc:** Mailing List**Sent:** Tuesday, March 31, 2009 4:49 AM**Subject:** Re: Short History with LINE NUMBERS

Dear Marcello,

I have attached your history with the changes I suggest in bold, red, underline to make them easy to spot. Most of the suggested changes are about my own work and preferred terminology.

However, in my experience, your 2nd paragraph in the Introduction (lines 45-52) does not adequately represent the state of affairs, at least as seen by the physicists and molecular biologists I know. What scientists do you say argue that the genetic code is only a metaphor? You at least should give a reference. The same problem exists in lines 79-84. What do you mean by “a real language”? There are many kinds of real languages in organisms. What is needed is only a clear description of both the similarities and the differences between them.

To physicists, whether a model is “real” or “metaphorical” is of no interest whatsoever because all their basic concepts like particles, waves, spin, quarks and gluons, and even their mathematical expressions can be seen as metaphorical. The necessary requirement is only that the model defines testable observables. Many physicists and physical chemists in the 1950s recognized the informational nature of life and the necessity of a genetic code, and to my knowledge none of them raised the question of metaphor. Metaphor is a complicated, human language, context-sensitive figure of speech that is not clearly defined, and I don't think it is useful or persuasive to get into arguments about it.

The same goes for your use of “meaning.” This word has endless meanings itself, and will only lead to undecidable arguments. From a physicist's perspective, “information” is already a separate category that is enough of a problem. I don't see how you can use any semiotic concept without acknowledging that it belongs to the category of information. Semiotic concepts clearly do **not** belong in the category of the laws of physics that depend on matter, energy, space and time. No matter how you define semiotic concepts like symbols, codes, and referents, physicists must assign them to the broad category of information. The relation of energy-based laws to information has a long controversial history beginning with Maxwell's demon, which is the basic reason physicists are fascinated by the genetic code, and why I began thinking about the problem. Shannon's communication theory properly defines meaningless “information vehicles” but what information does not have meaning or function?

You are doing a fine job trying to manage such a diverse group. As I see it, physicists and semioticians are just approaching the problem from opposite ends, 4 billion years apart.

Best regards,
Howard

P.S. Here is some history that you might keep in mind, but not necessarily for your excellent brief history. I think the first necessity of some form of genetic code arose in the early 1940s from Beadle and Tatum's “one gene/one enzyme” hypothesis. How does one gene determine one enzyme without a code? Schrödinger was not the only physicist fascinated by the problem. Delbrück's ideas were a stimulus for Schrödinger's *What Is Life?* and that book in turn stimulated more physicists to worry about the relation of biological information to physics.

In the 1960s Alex Rich noted, “An important issue is biology is information transfer, i.e., how do we use the information in DNA and transfer it to other molecules to make the system work. Strangely, most biologists (almost all biologists!) were unaware in 1950 that the problem existed. . . . The first proposal for a code relating nucleic acids to proteins came from a rather good physical chemist, Cyril Hinshelwood in 1950.” The physicist and cosmologist George Gamow was one of the first to understand the necessity of codes. Francis Crick later stated that Gamow's ideas led him to consider immediately the all-important coding problem. It was Francis Crick who predicted the necessity of adaptor molecules that were necessary for the

arbitrariness of the code, removing it from the physical necessity of template binding.

Crick's most famous unpublished paper was, "On Degenerate Templates and the Adaptor Hypothesis: A Note for the RNA Tie Club." The tRNAs were discovered shortly after. The RNA Tie Club was a group of twenty physicists and molecular biologists (one for each amino acid) chosen by Gamow in 1953 to stimulate the exchange of ideas about the nature of the genetic code. Gunther Stent refers to the "informational school" of physicists and molecular biologists who knew that focusing only on molecular structure was inadequate.

Here are a few early References from my file. Unfortunately, they are too old to be in my computer.

F. H. C. Crick, J. S. Griffith, and L. E. Orgel, "Codes without commas" *P.N.A.S.* 43, 416-421, 1957

A. L. Dounce, *Enzymologia*, 15, 251, 1952.

G. Gamow, *Nature*, 173, 318, 1954.

G. Gamow, *Kgl. Danske Videnskab. Selskab Biol. Medd.*, 22, 3, 1954.

G. Gamow, A. Rich, and M. Ycas, *Advances in Biol. and Med. Physics*, Vol. 4, New York: Academic Press Inc., 1955.

G. Gamow and M. Ycas, *P.N.A.S.* 41, 1011, 1955.

J. C. Kendrew, "How molecular biology started," a review of *Phage and the Origins of Molecular Biology*, Cold Spring Harbor. In *Sci. Am.* 216, 141, 1967.

G. Stent, "That was the molecular biology that was" *Science* 160, 390-395, 1968.

H. Kalmus, "Analogies of language and life." In *The Scientist Speculates*, I. J. Goode, A. J. Mayne, and J. Maynard-Smith, eds., Capricorn Books, NY, 1965, pp. 274-279.

67

----- Original Message -----

From: [Marcello Barbieri](#)

To: [h h pattee](#)

Cc: Mailing List

Sent: Tuesday, March 31, 2009 9:31 AM

Subject: Re: Short History with LINE NUMBERS

Many thanks, Howard!

Your suggestions are perfectly ok, and I think that all (or almost all) of them will be included as they are in the final manuscript. Thanks again for your very useful collaboration.

Best

Marcello

68

----- Original Message -----

From: [Marcel Danesi](#)

To: [Marcello Barbieri](#)

Sent: Monday, March 30, 2009 9:04 PM

Subject: Re: Short History with LINE NUMBERS

Marcello:

I have never seen such a complete, authoritative, and instructive history of the field. Congratulations!

I would love to have it for Semiotica. It is up to you, because it can probably fit better in your own journal.

Bravo, bravissimo, avrebbe scritto il Rossini.

Marcel

69

----- Original Message -----

From: [Marcello Barbieri](#)**To:** Mailing List**Sent:** Tuesday, March 31, 2009 9:07 AM**Subject:** Not a new discussion, only an announcement

Dear Colleagues,

I said that I do not want to start another discussion, and I confirm that this is the case.

Allow me however to make an announcement in reply to John Deely's public statement that I am not representing the true spirit of Biosemiotics in my short history.

My reply consists of two points.

(1) John Deely is technically right when he says that the existence of semiosis in life does not exclude, in principle, the existence of semiosis in inanimate matter (physiosemiosis).

It is an historical truth, however, that the first step towards unification was taken in Prague, in 2004, when the representatives of various schools accepted Thomas Sebeok's principle ("life and semiosis are coextensive") as the foundational principle of biosemiotics. Ever since then, that foundational principle has been explicitly or implicitly accepted by all biosemioticians that have come to our Gatherings, by the founding members of the International Society for Biosemiotic Studies (ISBS) and by the promoters of the journal and of the Springer book series in Biosemiotics.

There is nothing wrong with this. It is a principle that has been freely accepted by a group of people who have exercised their right to proclaim a scientific concept as the basis of their discipline.

(2) John Deely has stated that Thomas Sebeok's concept that "life and semiosis are coextensive" is compatible with the existence of semiosis in inanimate matter. One of our colleagues has kindly informed me that the Oxford English Dictionary' entry on "coextensive", means exactly what so far all biosemioticians have always taken for granted, i.e., that semiosis exists in living systems and 'only' in living systems. As for the proposal that Sebeok did not actually mean to say what he said, I think I am interpreting the feeling of virtually everybody in Biosemiotics when I take Sebeok's words what they literally mean.

Let me repeat that this is only an announcement, not the beginning of a new discussion.

I want to assure everybody that I will continue to uphold and defend the foundational principle of Biosemiotics as well as the memory of Thomas Sebeok as a man who did mean what he wrote.

These two points are not negotiable. Many thanks for your attention.

Best

Marcello

70

----- Original Message -----

From: [Marcello Barbieri](#)**To:** [Catherine Cotton](#)**Cc:** Mailing List**Sent:** Tuesday, March 31, 2009 2:57 PM**Subject:** From the silent majority

Dear Catherine,

I am forwarding below just two letters to show you that John Deely is NOT representative of the silent majority.

Best

Marcello

71

----- Original Message -----
 From: "Joslyn, Cliff A" <cliff.joslyn@pnl.gov>
 To: "Marcello Barbieri" <brr@unife.it>
 Sent: Wednesday, April 01, 2009 8:15 AM
 Subject: RE: From the silent majority

Thanks, Howard is a real gem, I miss him (it's been over 20 years since I studied under him).
 Cliff

72

----- Original Message -----
 From: "Dr Wendy Wheeler" <w.wheeler@londonmet.ac.uk>
 To: "Marcello Barbieri" <brr@unife.it>
 Sent: Wednesday, April 01, 2009 2:19 AM
 Subject: Re: A Revised Short History of Biosemiotics

Dear Marcello,
 I'm about a third of the way through the new draft so far, and I think this is a terrific essay -- incredibly helpful, and just what we need to help people understand the schools of thought comprising biosemiotic thinking: very very helpful, also, for giving to postgraduate students who want to do something on biosemiotics and need to get a map (and history) of the field. I have found it very clarifying myself. Tomorrow I am teaching, so will get back to finishing it on Thursday. I hope this will be soon enough.
 All best, Wendy

73

----- Original Message -----
 From: <changhl@ntu.edu.tw>
 To: "Marcello Barbieri" <brr@unife.it>
 Sent: Wednesday, April 01, 2009 11:07 AM
 Subject: Re: From the silent majority

Dear Marcello,
 Thanks for your kind message and many congratulations to you on a job well done!
 Marcel Danesi is absolutely right in his laud and praise, and you deserve no less.
 I have followed closely the developments of the debate and read all your rejoinders, but I have refrained from joining the fray because of many commitments.
 All the best, Han

74

----- Original Message -----
From: [Witzany Günther Mag. Dr.](mailto:Witzany.Günther.Mag.Dr.)
To: [Marcello Barbieri](mailto:Marcello.Barbieri)
Sent: Wednesday, April 01, 2009 11:49 AM
Subject: AW: From the silent majority

Dear Marcello!
 Thank you very much for your message. From my perspective this is a discourse in metaphysics not in science within which I won't interfere. But (as usual) the Howard Pattee comment is excellent:
 "You are doing a fine job trying to manage such a diverse group. As I see it, physicists and semioticians are just approaching the problem from opposite ends, 4 billion years apart."
 Best Wishes
 Guenther

75

----- Original Message -----

From: [Deely, John N.](#)**To:** [Marcello Barbieri](#)**Cc:** Mailing List**Sent:** Wednesday, April 01, 2009 1:59 PM**Subject:** Not a new discussion, only an announcement about the sense to be given "non-negotiable"

Dear Marcello:

Thank you indeed for your "announcement" of 31 March that "the existence of semiosis in life does not exclude in principle the existence of semiosis in inanimate matter". Thus, the *scientific* study of biosemiosis is based not on the hypothesis that semiosis exists *only* in living matter, but on the hypothesis that *whether or not semiosis extends beyond the biosphere*, semiosis does exist throughout the biosphere.

With that matter settled, as you say, and in need of no further "new discussion", there remains only to determine how to construe the meaning of "non-negotiable" in the matter or your "two points", just to ensure that we all understand how "not negotiable" is to be understood for the purposes of a "short history" of ISBS intended to be one to which we can all subscribe.

1. The "historical truth"

The further hypothesis that semiosis exists *only* in the biosphere can be a matter of dispute, but it is no more a matter that can be decided by a vote than is the matter of whether natural selection exists. If it were true — *if I say* — that "the foundational principle" of our biosemiotics group is that semiosis exists *only* in the biosphere, then we would rest our existence not on a scientific principle but rather on an ideological assertion — that is, a dogma.

Please note, however little or much one cares for logic, that the ideological assertion that semiosis exists only in the biosphere, like any ideological proposition, can indeed be adopted as a matter of opinion, minority or majority, but it cannot be claimed as the *founding principle* of an organization which considers itself to be a *scientific* community of inquirers.

As a scientific enterprise, accordingly, at this stage of semiotic inquiry, whatever may be the personal opinions or ideological orientations of "the founding members of the International Society for Biosemiotic Studies (ISBS)" and of "the promoters of the journal and of the Springer book series in Biosemiotics", they cannot claim the dogma that semiosis occurs *only* in the biosphere to be "a scientific concept as the basis of their discipline", while they can indeed claim the hypothesis that "life is co-extensive with semiosis" as a scientific concept upon which they base their work (and this quite regardless of whether "semiosis is co-extensive with life").

So which are we to be: an ideological community doing science within that frame, or a scientific community working on the basis of a legitimate hypothesis? I was not present at the 2004 Prague meeting, but based on my knowledge of some at least of the persons who *were* there, I sincerely doubt your claim that each and every one present subscribed to the "co-extensivity of life with semiosis principle" **in the ideological interpretation** upon which you have so far tried to insist, though (as you have now conceded) without any scientific or logical need to do so. Many were of *your* opinion, but some also were not; and, as you have now publically conceded, "the existence of semiosis in life does not exclude, in principle, the existence of semiosis in inanimate matter", so why compromise the scientific character of the biosemiotic group and publications by trying to go beyond what logic and scientific hypothesis require in order to enforce an unnecessary ideological construal of the founding principle? Did the Soviet system, for example, cease being ideologically based whenever it was "freely accepted by a group of people who have exercised their right" to vote?

So how do you want yourself and our group to be known: as ideologues or as scientists? That is what is at stake and "nonnegotiable" in "Point (1)" of your memo.

2. The memory and heritage of Thomas Sebeok

Thomas Sebeok was many things, beginning with, in my estimation, being the single most important figure in the 20th century development of semiotics. He was also a very close personal friend, whence I can testify that one thing that Tom *never* was is an ideologue. And indeed ideology was something he abhorred. In the month before his death, we were in the process of trying to set up a few days together to meet for discussing

the question of whether semiosis can be cenoscopically established as co-extensive with physical nature, as including biological nature, or whether semiosis requires the presence of life in order to transpire (there being no doubt between us that semiosis becomes more fully actual even within the biosphere as one moves up the evolutionary scale from phytosemiosis to zoösemiosis, and thence also to anthroposemiosis, each level adding to while incorporating the semioses of the lower levels.) His personal view was that not only is life co-extensive with semiosis, but also that semiosis is co-extensive with life; yet this last he considered a personal opinion, not a demonstrated view, and not a proposition over which he was ready to close down discussion or to which he was not willing to give further consideration. It was a proposition he regarded as abductive rather than demonstrated, and one indeed in need of further discussion.

Tom always meant what he said; it was his opinion, concerning what he considered still an open question, that it was likely that life and semiosis share the same boundary, and that there was no semiosis prior to life. But he promoted biosemiotics as a *scientific* project, not an ideological one; and he personally oversaw editorially and endorsed the publication of views arguing additionally for a semiosis in physical nature itself. And he would never accept the attempt to transform his personal opinion into an ideological basis for the pursuit of biosemiotics, much as he welcomed the adoption for this pursuit of his opinion that semiosis must be extended *at least* as far as the origin of life itself.

We have come a long ways from the mid-20th century ideological position of semiologues that semiosis extends as far as the realm of culture and no further, and this is not the time uselessly and needlessly to repeat their blunder on new grounds. Tom was the Napoleon who led the charge to overcome that ideology, and he would not appreciate his personal opinion being elevated (or reduced) posthumously to the status of an ideological dogma for the ISBS. To do that is *neither* to uphold a scientific principle *nor* to honor the memory of Thomas Sebeok "as a man who did mean what he wrote", for indeed he *never* wrote as an ideologue, never as a man determined to block in any way the path of inquiry.

Now you conclude that "these two points are *not negotiable*". I most sincerely hope that by this (1) *you do not mean* that the ideological rather than the scientific understanding of life being co-extensive with semiosis is requisite for membership in ISBS, and that the opinion Tom held on the scientific question is the only opinion to be allowed within the ISBS (for that neither honors his opposition to ideology nor expresses an interpretation of his verbal statements that he would endorse); and that (2) *you do mean* that the scientific understanding of life as co-extensive with semiosis does not require that biosemioticians close down further inquiry as to what role, if any, semiosis might have had in the transformation of the physical environment from its initial lifeless and life-insupportable state to the condition where life became possible and then actual.

For only this "nonnegotiable sense (2)" is compatible with the aspirations and claim of ISBS to be a scientific organization, as indeed you yourself grant in conceding — *which is all that I have ever argued for in these recent exchanges* — that (to state the question without paraphrase, and wholly in words of your own): "the existence of semiosis in life does not exclude, in principle, the existence of semiosis in inanimate matter". Whence biosemioticians should be *free* (and free "*as a matter of historical record*") to adopt Tom's later opinion (which he himself did not regard as final and fully settled) as also their own, or also to consider with Peirce and others that semiosis may rather peruse the universe in its full extent.

So please allow me to correct the record, also without starting another discussion, on the only remaining point of disagreement, your inaccurate claim that you have made "reply to John Deely's public statement that I [Marcello Barbieri] am not representing the true spirit of Biosemiotics in my short history". A distinction is needed here. Insofar as the "true spirit" of biosemiotics is an ideological one, you so far have indeed represented that spirit in your "short history". But insofar as the "true spirit" of biosemiotics is a scientific one, your short history stands in need of revision to keep its wording from having an inescapable but unnecessary ideological component.

And, as I have earlier indicated to you (and presuming that you also set the record straight on the use so far of the expression "semiotic animal", of course), the transfer of your "short history" from the ideological side to the simply historical side of the record would not be hard to achieve. All that is required, mainly, is that your heavily ideological lines 356–361 be struck in favor of a strictly scientific version of what you call the "first postulate" of biosemiotics, something like this:

The first postulate is Thomas Sebeok's idea that "life and semiosis are coextensive", i.e., that semiosis exists in all living systems. This implies that semiosis appeared at the origin of life, regardless of whether there is or may be an even broader action of signs. Biosemiotics is not concerned with that question; biosemiotics concerns itself only with exploration of semiosis in the biological world, to develop the evidence that semiosis is at least coextensive with the whole of life.

With such a small and logically called for concession in wording as that, you would have or at least for sure be immeasurably closer to a "short history" of biosemiotics that all — those who share the opinion that semiosis goes no farther than does life, and those who consider this at least an open question — could endorse without mental reservation or compromise of intellectual integrity.

Really, all I have ever argued for from the first is that you should write up this "short history" for the next meeting in a way that reflects what you have yourself, at this point, freely granted: "the existence of semiosis in life does not exclude in principle the existence of semiosis in inanimate matter". Pretending otherwise is not science.

In any event, I hope you can see your way to a more properly scientific and equitable rewording, consistent with the legacy of Tom himself. And I would like to repeat my sincere admiration for the work that you have done and are doing in promoting biosemiotics both in meetings and in publications. You are doing a great work, which calls for the mild revision along logical and scientific lines in preference to ideological dogma from its own nature. Our community of inquirers faces at this point an opportunity for pure gain without loss, and in a direction Tom himself would heartily approve for the occasion.

All the best
John Deely

76

----- Original Message -----

From: "Anton Markos" <markos@natur.cuni.cz>

To: "Marcello Barbieri" <brr@unife.it>

Sent: Wednesday, April 01, 2009 3:23 PM

Subject: My sympathies

Dear Marcello

I feel really sorry that you must deal with this attack by John Deely. Somehow I cannot catch his point.

Best

Anton

77

----- Original Message -----

From: [Alexei Sharov](#)

To: [Marcello Barbieri](#)

Sent: Wednesday, April 01, 2009 3:19 PM

Subject: Re: From the silent majority

Dear Marcello,

I had a discussion with John a couple years ago and don't want to argue with him any more.

He just got mad at me. I always cite his paper in Sebeok's "Biosemiotics" (1992) as an example of a pansemiotic view which is incompatible with biosemiotics.

Stanley's position in pansemiotics is more mild, and I enjoyed communicating with him.

He just tries to expand the notion of semiosis beyond interpretation and coding into the domain of dissipative structures and autocatalysis. My view is that although dissipative structures and autocatalysis are indeed predecessors of coding, they are not semiotic yet and are relatively abundant in the non-living world.

Alexei

78

----- Original Message -----

From: "Myrdene Anderson" <myanders@purdue.edu>To: "Marcello Barbieri" <brr@unife.it>

Sent: Wednesday, April 01, 2009 4:55 PM

Subject: Re: From the silent majority

Maybe John has too much free time on sabbatical, and we know how he loves to write, posture, and play. Just fyi, in mid-april I will spend some days with Stanley to prepare something for Prague and also, hopefully, for *Biosemiotics*. I'm sure we'll be putting our heads together on this matter as well. And just btw, I will share more widely (and wildly, if this pans out), a reference found by my (Finnish) graduate student -- to an 1838 French treatise about habit, translated 2009 into English with title of OFF HABIT, I forget the details but have ordered copies already. Thanks for your level-headed and generous shareware, cheers, m

79

----- Original Message -----

From: [Cotton, Catherine](#)To: [Marcello Barbieri](#)

Sent: Thursday, April 02, 2009 9:56 AM

Subject: RE: From the silent majority

Hi Marcello,

Thanks for this. To be honest I find John Deely's tone a little uncompromising – but I'm used to reading between lines.

You should publish the paper wherever you think it will have the most impact for the field – though of course if it will receive a lot of attention it would be great to have it in *Biosemiotics*!

Best, Catherine

80

----- Original Message -----

From: [Marcello Barbieri](#)To: [Cotton, Catherine](#)

Sent: Thursday, April 02, 2009 10:17 AM

Subject: Re: From the silent majority

Many thanks, Catherine! Yes, I was planning to publish the short history in *Biosemiotics* because that is where it belongs. And I am very glad to have your support (I was hoping for that!).

Wendy Wheeler has offered to copy-edit it (see her letter below), and I accepted gratefully.

Best. Marcello

81

----- Original Message -----

From: [DON FAVAREAU](#)**To:** [Marcello Barbieri](#)**Sent:** Thursday, April 02, 2009 8:47 PM**Subject:** overdue feedback

hello my dear friend! I just spend 4 hours on this, so let me send it off as a document and go to bed! (it is now 2:45 a.m.) - a wonderful article! doubt if all the typos haven't already been pointed out. but here they are again! plus musings that you can take or leave, but know that they are well-intentioned! all best wishes! - don

GENERAL COMMENTS

This is a VERY good piece, I think, Marcello! You've done an EXTRAORDINARY job laying out the background in the first half and a MASTERFUL first step at setting the stage for a unified biosemiotics in the last quarter! I certainly hope that a better dialogue between the two primary schools can begin this year, and that a unified biosemiotics – if only an infant one - can be had in our lifetime. More about that on e-mail and in-person. Here are some quibbles, questions, suggestions and “peer review feedback” all mixed together in chronological order.

“Darwinian biosemiotics” (lines 159-160 and throughout):

I like the phrases “physical-constraint biosemiotics” and “evolutionary physical (-constraint) biosemiotics” very much , but I am curious why you have not dubbed this school “neo-Darwinian biosemiotics” instead of “Darwinian biosemiotics.” Darwin, of course, did not – could not! – endorse the Modern Synthesis, and, like Charbel and many others (definitely including Jesper), I am a great fan of Darwin’s thinking and would not like biosemiotics to be associated as “non-Darwinian” or “anti-Darwinian” – an implication reminiscent of our “the opposite of scientific is not scientific” imbroglio of a few weeks back. When one speaks of biosemiotics as disagreeing with, or departing from the far more limiting “neo-Darwinism” of the MS (as with the addition on natural conventions), it is a lot more clear to the generally educated reader what is and is not being said. Like you, I am hyper-sensitive to having biosemiotics mis-read as anti-scientific mysticism, so I am wondering if this might be a change you may consider making. Darwin is critical to both the code and the sign biosemiotics school, I believe, so I would not like to position ourselves “as opposed to” Darwinian theory (instead of neo-Darwinist reductionism).

“Sign biosemiotics”

Something sounds a little not-quite-right or inelegant about this as a title – I think, because as Deely noted, the word “sign” is already present in “semiotics” as a cognate. Mind you, I don’t have an alternative at hand...so I guess that it will have to do for now.

Lines 180-184:

This claim that pre-Sebeok, that there were attempts at developing a science of sign use in animals leaves out the whole rich history of early 20th century ethology (von Frisch, Lorenz, Tingbergen, Wilson, etc). More accurate, I think, to say that TS wanted to find out how deep the similarities and dissimilarities between animal communication and human language was (at least at first), and to rescue semiotics from the virtually all-anthroposemiotic approach of semiology. But maybe this is nit-picking.

Hermeneutic biosemiotics (Lines 265-298)

Great job capturing some pretty hard-to-pin-down ideas here! I’m going to want to quote your description in lines 286-287. So please send me the citation info when this is in print.

A question: Did Anton approve the wording “leaves behind the objective world of science” for his project? If so: ...wow! If not, you may want to run that by him! :)

Coding and interpretation (this discussion really begins at Line 588 and goes to 662)

With all due respect, this section has the most weak spots only in the sense that it invokes two HUGE and decades-long philosophical discussions that the writing reflects that you are not that fully conversant or up-to-date on. Please don’t take that as a personal criticism, just a textual one. Nor am I that up-to-date on these myself, so I’m not sure how much help I can be --- but I will try to remember what I learned from my Philosophy of Language and Philosophy of Mind classes all those years ago.

The first issue is the depiction of Frege’s *Sinn* and *Bedueten* as “outside objects” and “inside sense”, respectively (Line 626). As you note in Lines 621-625, there is a huge literature on “extension and intension” “denotation and connotation” with Kripke, Donaldson, Russell, Tarsky and way too many more weighing in, ponderously, about how words GET their meanings BOTH denotatively and connotatively, what grounds

their “truth value”, etc etc etc. Sparing an endlessly boring discussion (and one that I certainly am not the best qualified to engage in): The Morning Star/Evening Star discussion (Lines 618-621) is not so much about “internal” vs “external” meanings. To the ancients who made this (false) distinction between the MS and ES, BOTH meanings were “internal” to their minds (or more properly: their discourse) “about” an “external” reality. Frege was interested in showing (contra Mill), that “signs” such “proper names” cannot be reduced to a “pointing out a single referent” relation, but are always themselves immersed in a rich web of other meaningful relations as well (external as well as cultural or internal) – e.g., it is “the planet closest to the sun” “the planet that orbits Earth every 224 days” “the planet that has the least elliptical orbit in the Solar System” etc – whether or not any one individual knows these external facts to be true. Moreover, the majority of Frege’s use of these terms takes place in sentential logic, where the “proposition” of a sentence is its “sense” and the “truth-value” of the sentence is its “reference.” In short, Frege is a can of worms and I’m not absolutely sure that you even need him. (If it’s to prop up Lines 627-633, forget it – that there are *Sinn* without *Beduerten* and vice-versa is well acknowledged in Frege and all his commentators).

The second problem in this section’s even more slippery, and that is the whole idea of mentation as an “internal representation” of the world. THIS centuries-long discussion REALLY is a can of worms! Let me cut a long story short and say: (1) In contemporary Philosophy of Mind (and much of Cognitive Science), the “representationist” view is pretty much seen these days as obsolete and naive. Thought is not homuncular “pictures in the mind” and we are not separated from reality by a Cartesian screen (or a Platonic cave), with access only to our own ideas, as per Locke. (2) Countering this are a whole SLEW of philosophical schools (externalists, anti-foundationists, coherentists, distributed cognitivists, etc), Stephen Cowley being the person who could best bring you up to date on. (3) What makes the discussion doubly problematic here, is that Peirce (and by extension, the “sign biosemioticians”) are above all AGAINST this view of “eliminative representationalism” that has been attributed to them here, as the whole Peirce project rests upon a non-naive semiotic realism and a rejection of the Locke/Descartes “doctrine of ideas” for a more naturalistic “doctrine of signs” [your gadfly correspondent John Deely has written on this *ad nauseum*.]

All that said, I think that your *main idea* here about animal semiosis in Lines 634-641 is correct (it is, in a certain sense, the *umwelt* idea) – but that all of the main terms – “representation” “internal meaning” “external meaning” “interpretation” would have to be teased out and disclaimer-ed for a *philosophic* or a *cognitive science* audience to take seriously. This is a problem that we all face in biosemiotics, of course: the linguists, psychologist, roboticists, philosophers, cognitive scientists, developmentalists, sociologists neurobiologists, etc all have their OWN decades-long debates and understandings to draw on and we come on to their territory ill-equipped to speak their language (or, worse, to anticipate what notions they have already long vetted out and given up on). I don’t know what the general remedy for this is, save to plead ignorance when we are ignorant – but for this particular case, I think that it may be sufficient to at least note in a footnote that by “internal representation” you mean the experiential totality an organism’s full suite of biological sign processes, and not a homuncular “picture model in the mind”.

Conclusion

This is all very, very great! The only feedback that I feel duty-bound by conscience to give (and if you are duty-bound by conscience to reject it, then reject it) occurs at Lines 779-782. In short, my objection here is that you have (rhetorically, anyway) made a part the whole – and by, extension, minimized to nullity the other part. Simply adding “and signs” in the two mentions of “organic codes” would go a long way towards unruffling many feathers and would, I think, be in more of the unifying spirit of the entire piece. After all “code relations” ARE distinguished as ONE OF THE TWO major kinds of relations examined by biosemiotics – the other, of course, being “sign relations”. So since, as you so correctly show, codes and signs are NOT two synonymous words for the same phenomenon, and that the distinction between them must be kept in place – these lines, in effect, say that “biosemiotics is the study of codes...and codes...are what biosemiotics is really about.” And yet: Isn’t the point of the whole article that biosemiotics should be the study of (cellular) codes AND (multicellular) signs?

Conclusions – summaries – are where the important points in an article are made in their most lingering form. I hope that you can see your way to including signs and codes together here, and I REALLY hope that the “unification” between the two schools (that, remember, I have ALWAYS been a proponent of, and called for in the Introduction article) really does become a reality soon.

All best wishes on a wonderful article!

Your friend always,

Don

82

----- Original Message -----

From: [Marcello Barbieri](#)**To:** [Don Favareau](#)**Sent:** Friday, April 03, 2009 10:01 AM**Subject:** Thanks for your feedback

Dearest Don,

I am so very grateful to you for your comments! Many, many thanks, really!!!!

(1) Let me start immediately from your last suggestion: the recommendation to add “signs” to organic codes at Lines 779-782. I have already done it, and now the sentence is this:

“Here the only solution is to keep reminding people that the experimental field of biosemiotics is the study of organic codes *and signs*, that biosemiotics did predict their existence and continues to make predictions, that codes *and signs* exist at all levels of organization and that the great steps of macroevolution are associated with the appearance of new codes. This is what biosemiotics is really about.”

(2) Darwinian biosemiotics

I have not dubbed this school Neo-Darwinian biosemiotics precisely because I feel that its proponents (Howard Pattee and Terrence Deacon) are more near to the original Darwin than to the Modern Synthesis. In section 2-8, furthermore I say that Darwinian biosemiotics can give a modest but distinct contribution to a full blown biosemiotics, and that proves precisely that biosemiotics is NOT anti-Darwin.

(3) Sign biosemiotics

I know that the term sign is already contained in biosemiotics, but that is only a terminological point. The real point is that sign-biosemiotics regards the signs as the “agents” of semiosis, whereas code biosemiotics says that the real agents are the codemakers.

(According to John Deely, semiosis is the “action” of signs, whereas in my opinion semiosis is the “production” of signs). At any rate, there is little doubt that sign-biosemiotics puts the sign at the center of attention as you yourself have proved by asking me to add “signs” to “organic codes”.

(4) Hermeneutic biosemiotics

Yes, Anton did approve my account of his school. Here is his comment:

“1. Section 1-6 is the most brilliant characteristic of my (our) work I ever read – I mean it. If you want to make me even more happy, insert please also the quotation of our forthcoming book – I consider it to be more representative than the *Readers*.”

He has also added some technical notes, but has NOT objected to my statement that his project “leaves behind the objective world of science”.

(5) Coding and interpretation (Frege)

The fact that I mention “representations” does not mean that I endorse “representationalism”.

All I want to point out is an objective difference between coding (meaning based on sense only) and interpretation (meaning based on sense and reference). The fact that Frege distinction is a can of worms, is not the point. Many other people have proposed different terminologies, but that just show that the distinction is real, whatever solution you want to adopt for it.

And now for the MOST IMPORTANT of your points.

You cannot imagine how much I have loved your statement:

[“I certainly hope that a better dialogue between the two primary schools can begin this year, and that a unified biosemiotics – if only an infant one – can be had in our lifetime.”](#)

Quite frankly, Don, I think that this is only YOUR hope, not that of Jesper et al.

But that is enough for me, at this point, and I believe that you sincerely mean it.

Perhaps we are working only for another generation, but who cares?

Many thanks again!

And now let me sign myself as your friend

Marcello

83

----- Original Message -----

From: [Stanley Salthé](#)**To:** [Marcello Barbieri](#)**Sent:** Friday, April 03, 2009 4:01 PM**Subject:** Re: My sympathies

Dear Marcello -- I too found your historical summary to be quite interesting. And I do much appreciate your tolerance for my views, even though they are not directly supportive of yours (although not opposed either). As a natural philosopher, I am trying to take a more general view of semiosis. I find that in my project I have alliance with Søren and Deely, possibly Taborsky and (who knows?) Merrell. I have not been able to interact with Taborsky at all, since she is such a captious Peircean fundamentalist. Whenever I try to contact Merrell, he in a friendly way says something like: "Ok. Just wait and I will get back to you." As to John, I am surprised at the great fuss he makes about a label. It is no doubt a personality quirk, although it may relate to religious fundamentalism as you suppose.

Anyway, I am preparing to work with Myrdene on a paper about 'vagueness'.

Best

STAN

84

----- Original Message -----

From: [Marcello Barbieri](#)**To:** [Don Favareau](#)**Sent:** Friday, April 03, 2009 4:48 PM**Subject:** Summing up

Dear Don,

I know that you are terribly busy, but let me quickly come back to my "Short History" because there is something important going on.

First of all, you may ask "why now?", "was it really necessary?" Let me try to answer.

Remember Terrence Deacon when he said (March 2):

["We ARE still arguing over biosemiotic phlogiston. When I see the first unprecedented biological discovery to come of biosemiotics, then I will begin to think we are close to a science."](#)

Now, if an insider like Deacon thinks that, what is a normal biologist supposed to think of our field?

Believe me, Don. If we are to survive, it is absolutely essential to say loud and clear not only that Biosemiotics is a science, but TO PROVE that it is a science.

That was the purpose of the Short History, and thank God it seems that somebody is beginning to take notice.

Now for the second step. Can we move a bit forward towards a united science?

I was thinking that Anton Markos would have been the first to make such a move, but I have been disappointed. Anton is certainly on my side on the points that divide me from John Deely, for example, or from Jesper Hoffmeyer, but he has no intention of moving towards unity. Apparently he is happy with the recognition that he is the head of a school, and has no wish to change.

Ok, fair enough. Better a friendly disagreement than a forced marriage.

I was therefore resigned to go on along parallel lines as we are doing now, but I wanted to say in public

(1) why biosemiotics is a science, and (2) what are the conditions for a united field.

I found it my duty to do it, because that is the precondition for the survival of Biosemiotics.

That is what is at stake Don: "survival" of the whole thing (not of personal egos).

We may loose, of course, but I wanted to be sure that I have fired all my bullets first.

That's it then. Now you know.

Best

Marcello

85

----- Original Message -----

From: [DON FAVAREAU](#)**To:** [Marcello Barbieri](#)**Sent:** Friday, April 03, 2009 7:33 PM**Subject:** Re: Summing up

My dear Marcello,

Sorry that I am only getting around to checking my e-mail and finding all three of your latest messages now. We are entering our final three weeks of the semester here and things are even busier than usual!

Now: I 100% approve of both the article and the editorial! VERY WELL DONE! If anything, I was hoping that it would reach a wider audience than they already clued-in audience of *Biosemiotics* - but with the ability to download it off the web from any university with a Springer account, perhaps it may see wider distribution than if we were still back in the Paper Age! :)

On unification:

Begging your patience in waiting to see how all this will turn out: let me share with you some goings-on from the Danish-Estonian side of the fence. On the last day of the last Gatherings, I met Jesper and Kalevi for breakfast, and the question that they asked me was: "Do you think that Marcello's code theory can become a part of our kind of biosemiotics?" I told them that I definitely thought it could be, but that it would take some serious dialogue and working out from both sides to come up with a COHERENT framework that not only includes both frameworks, but probably also a third framework that satisfactorily joins them. We agreed then that J, K, Claus and I would try to meet in Glotterthal this May with the express purpose of reading all your works and discussing them in this light, before going on to the further step of seeing if you, in fact, wished for any such kind of synthesis yourself, upon which we could work together outside of the public light.

The Glotterthal meeting got cancelled because of various problems. What we decided instead is that I will go to Copenhagen during the last week of June, and we four will meet there to try to determine, as best we can, EXACTLY where the points of convergence and divergence are "from our side" - with the ultimate hope that such clarity would result in a paper (or at least a set of questions) that we could send you to begin a real and lasting dialogue for synthesis.

Perhaps one or more of them will conclude that the gulf between the views is un-crossable, and then it will be up to the others to proceed, to suggest certain points of negotiation between the schools, etc.

BUT at all points I am convinced that if a true unification is to take place, "the terms of the unification" will not and cannot come from one side alone, and that BOTH sides are going to have to be willing to modify at least some of their views to build a truly useable and theoretically strong "bridge" between the phenomena of code semiosis and sign semiosis.

The meeting in Copenhagen, in many ways, is a meeting to determine how much Peircean ground can be given up - which is why the school is meeting "within itself" before opening up its dialogue with you. But in that future dialogue, if it is to be a genuine synthesis, I do not see how it could be possible that some Barbierian ground may have to be given up, as well.

The idea EITHER that organic coding is "just what Peirce calls degenerate semiosis" OR that sign biosemiosis is "just coding plus memory and learning" are both, to me, far too simplistic and not a "unification" of the strengths of the two frameworks, but merely the token colonisation of one to the other.

So WHEN the dialogue begins between the schools, it is going to have to be much less antagonistic, heated, dismissive and dogmatic than it has been up till now. Your concession that the Peircean model may be applicable to the whole organism level is a magnificent first start, and must be met by a corresponding concession from the Peirceans that the organic code model may be the more appropriate model to the understanding of the single cell.

But again, were even these two concessions to be made, I do not see how either theory can emerge unchanged in some way, particularly at the "bridge points" - points which, conceivably, may not even be where we might think them now. To give just one example: say, just for the sake of argument that "signalling semiosis" - or perhaps only some subset of "signalling semiosis" for instance - may wind up being proposed as such a bridge point, in which case you would have to be open to the POSSIBILITY of modifying your

present categories. Similarly, with the adoption of the organic code genesis model, Jesper would be in the position of publically renouncing a framework that he has been advancing for several decades.

So the point is that such a unification will not be without some loss of flesh - the two sides will not emerge precisely the same as when they went in, is my guess, but even were that to be the eventual turnout, the key NOW is that: NEITHER of the two sides must not GO IN to the negotiations determined to give no ground and determined to emerge unchanged at the end of the process. That is truly Palestinian-Israeli thinking, and will result accordingly. (Nor is it really science, is it?)

I personally believe that a biosemiotics with a strong theory of cellular coding and a strong theory of animal sign use with the two levels joined in an explanatorily fruitful way would be hard for even the most die-hard "non-theoretical-biologists" to ignore. And I also believe that it will happen eventually - though whether or not we alive today would be the ones to bring it off, has been (up till now) much less certain to me. But let us begin to take these baby steps to see if, against all odds (again!) we can be the ones to make this happen. My guess is that it will be a long and not always very pleasant process, with many conceptual setbacks, frutrations, stalemates, and - yes - compromises at each step of the way. Even if things went magnificently smoothly and well, it may yet take the better part of the next five or six years in private dialogue before the two schools were ready to offer a publicly presentable synthesis. And, of course, the whole thing may fall apart at ANY time (even at the meeting in June, BEFORE any official "detente" is attempted --- it IS like international relations, yes?), in which case, we will just have to each keep on our parallel tracks, as you say, hoping for a more opportune intersection to present itself down the line.

I will fill you in on the results of the Copenhagen meeting in Prague. "Nothing has been settled; everything is on the move" and, as one of my favorite authors has also said, "the exploration of the new continent of meaning has just begun"! Perhaps we shall together stumble upon a New World as we try to map the route between Peirceland and Barbieriana!

Be well, my friend!

Don

86

----- Original Message -----

From: [Marcello Barbieri](#)

To: [DON FAVAREAU](#)

Sent: Saturday, April 04, 2009 10:58 AM

Subject: Re: Summing up

Dear Don,

A meeting in Copenhagen on the unification issue??? This is fantastic news, Don!

I know of course that it will not be easy and yes, you are right in saying that:

“it may yet take the better part of the next five or six years in private dialogue before the two schools were ready to offer a publicly presentable synthesis.”

That is a perfectly acceptable timetable for me, and in fact anything quicker would not guarantee a real synthesis. So, let's accept that for the next five or six years the two schools will go on along parallel lines in public, and will have talks about a possible convergence in private.

I am looking forward to hearing the outcome of the Copenhagen meeting when we meet in Prague.

Thank you again, Don. That was really excellent news! (and yes, I will keep it strictly private)

Best

Marcello

87

----- Original Message -----

From: [Marcello Barbieri](#)**To:** Mailing List**Sent:** Saturday, April 04, 2009 9:38 AM**Subject:** Very last announcement

Dear Colleagues,

I am afraid I have to ask your attention for one last time before closing down for good this first year consultation on our Journal.

As you know, in his last public letter John Deely has intimated me to change the formulation of the first principle of biosemiotics, and has actually supplied the text that I should put in its place.

The replacement was a formulation that does not close the door to physiosemiosis, because that would be an ideological position, in his opinion. Let me reply with three points.

(1) The ideology charge.

The principle that “life and semiosis are coextensive” is a scientific principle, not an ideology, and it is scientific because it is falsifiable (a single example of semiosis in the inanimate world would immediately falsify it). I have published papers by Stanley Salthe and Koichiro Matsuno that are in favour of semiosis in inanimate matter, precisely because I have no ideological prejudice against that view, and are prepared to put our first principle to all possible tests.

If John Deely wants to propose a test for physiosemiosis he is welcome, and I will publish it. But what he is saying is simply “don’t close the door to physiosemiosis”, and that reminds me of the similar request that I received two years ago from Dave Abel: “don’t close the door to Intelligent Design”.

(2) The historical truth

John Deely has written: [“I was not present at the 2004 Prague meeting, but based on my knowledge of some at least of the persons who were there, I sincerely doubt your claim that each and every one present subscribed to the "co-extensivity of life with semiosis principle" in the ideological interpretation upon which you have so far tried to insist”](#).

There were five people at that meeting (Hoffmeyer, Emmeche, Kull, Markos and myself), so it should not be difficult to compare notes with what is written in my diary. My proposal was this: “what unites us is the introduction of meaning in biology as a natural entity (against Intelligent Design) and we all accept the name biosemiotics for our united field (giving up other names) because we all accept Thomas Sebeok principle that life and semiosis are coextensive”.

That is on record, and there was absolutely no mention of the idea that we should leave the door open for physiosemiosis.

(3) What is at stake

Come to think of it, why should we close the door to physiosemiosis? And why should we close it to Intelligent Design, to creationism, to panpsychism, etc...? We all know why, of course.

We want Biosemiotics to be a science, and a science must be based on testable models, so it is essential that the very first principle of Biosemiotics is a true scientific hypothesis which is fully exposed to the risk of being falsified.

What is at stake, here, is the very survival of Biosemiotics as a science.

Thank you again for your attention.

Best

Marcello

PS – I cannot prevent John Deely from replying again, of course, but I want to be known that I will not reply to the reply, so John Deely can have the last word, if he wants to. I have said what I had to say and for me the story ends here. The first principle of biosemiotics is not going to be changed.

88

----- Original Message -----

From: [Jesper Hoffmeyer](#)**To:** [Marcello Barbieri](#)**Cc:** Mailing List**Sent:** Saturday, April 04, 2009 10:07 AM**Subject:** Re: Very last announcement

Dear all

I am presently at vacation in France and do not want to enter this debate, particularly not at this moment where I am enjoying the early spring in Provence.

So let me just state very briefly that as one of the 5 persons present at the meeting in Prague I never conceived of this as anything but an agreement among us concerning our co-operation on Gatherings in biosemiotics. I don't like using this kind of meetings as legal instruments, and even though I tend to agree with Tom Sebeok that "life and semiosis are coextensive" I don't conceive this as excluding physiosemiosis. After all who knows where the borders are for life?

I furthermore must add that I don't agree on the narrow definition of science as concerned only with falsifiable theories.

Best wishes from Provence

Jesper

89

----- Original Message -----

From: [Stanley Salthé](#)**To:** [Marcello Barbieri](#)**Sent:** Saturday, April 04, 2009 3:54 PM**Subject:** Re: Very last announcement

Marcello -- My only quibble with what seems to be your position here is that it seems to officially turn the back of biosemiotics on the problem of the origin of life, which necessarily had to arise from some pre-semiotic or protosemiotic system, which would have to be taken as physiosemiotic. I'm sure you would personally accept a paper on that topic, but is it wise to make a definite official closure? Of course, Darwin himself closed this door, and, in fact on ALL origins (despite the title of his famous book). Indeed, origins are not the strong point of any science, so this is not exceptional.

Concerning ID, what comes to mind in this context is the fact that we do not yet have a naturalistic explanation of the origin of the nucleic acid coding system, and I am surprised that religionists have not yet made a point of this. Possibly it would take too much knowledge on their part in order to attack on this front. On a lesser point, I have been meaning to question / (?) caution you on your insistence of excluding 'interpretation' from scientific biosemiosis. What I have in mind is the now widespread knowledge (of which I am not privy to many details myself -- see, e.g., the book 'Biological Emergence' by Robert Reid) of 'epigenetic mechanisms', including the amazing fact that some procaryotes can actually read one gene in both directions! It seems to me to suggest that the cell may be playing its genome much as a pianist plays a piano!

Best,

STAN

90

----- Original Message -----

From: [Marcello Barbieri](#)**To:** [Stanley Salthe](#)**Sent:** Saturday, April 04, 2009 4:36 PM**Subject:** Re: Very last announcement

Dear Stanley,

(1) I am NOT turning the back of biosemiotics to the origin of life! On the contrary, I am saying that the origin of life took place when the first molecular machines started copying and coding. i.e., when they started making the first semiotic operations in the universe. That is why I am saying that the origin of life was also the origin of semiosis.

(2) I am NOT excluding interpretation from scientific biosemiosis. I am excluding it only at the cellular level, where “coding semiosis” is enough to explain everything that we observe. I am definitely accepting interpretation in animals, where I explicitly talk of “interpretive semiosis”.

Please don't put words in my mouth!

Best

Marcello

91

----- Original Message -----

From: [GMail](#)**To:** [Marcello Barbieri](#)**Sent:** Sunday, April 05, 2009 2:46 AM**Subject:** Re: Short History with LINE NUMBERS

Dear Marcello,

First of all, forgive me, please, for my opinion!

The standard of your gravity for me is your question «Who is code-maker?» . I think about «A Short History of Biosemiotics» similar way also. Unfortunately, I have a lot of questions concerning this article.

It is so serious that we appointed to April, 13th special session of our Seminar on Biohermeneutics devoted history of biosemiotics. Unfortunately, now I have no time, to write about your article, but I think that biosemiotic history is presented very special way in your paper.

From my point of view to begin biosemiotics history it is necessary from fairy tales on animals, animals and plants in heraldry, Christian understanding of a life (including, in the Middle Ages).

Special questions – a question on the relation on reflexes of a brain by I.P.Pavlov (the Nobel Prize 1904) and to semiotics by Ch. S.Peirce, influence L.S.Berg on R.Jakobson (cf. Patrick Seriot), roles G.Gamov in presentation about a genetic code. It is separately possible to speak about a role of a science and philosophy of Silver age in Russia in formation of biosemiotics, in particular, ideas by genetist N.Koltzov.

I have been surprised, when have learnt that G.Sermonti (Rivista di Biologia 87, 1994 p.7–8) the beginnings as introduction to my article conversation about «Ikonostasis» by Florensky. The question on history of biosemiotics in Russia demands separate conversation. So, Vadim A.Ratner has published in 1960 big books about linguistics of a genetic code (1966 – 182 pages)/

In a word, I wish to write about yours article, however, now I have no time to make it. I will try very much to make this job a bit later.

With the best regards to you and Margaret!

Sincerely yours

Sergey Chebanov

92

----- Original Message -----

From: "Søren Brier" <sb.ikk@cbs.dk>

To: Mailing List

Sent: Saturday, April 04, 2009 8:34 PM

Subject: RE: Very last announcement

Dear Marcello

As many other biosemioticians I have worked with philosophy of science for many years. I have further taught it in the sciences, the social sciences and the humanities on bachelor, master and Ph.d. level for more than 20 years. It has also been a part of my research ever since I wrote my masters in ethology.

Now, I will not object to use the Popperian definition of testability - or rather falsification - as a minimum demand for nomothetic scientific theory, but a lot of qualitative analysis is not governed by ideas of laws unless you consider phenomenological and hermeneutical theory and method theories of laws. Thus we leave them out and they are an important part of semiotic theory and practise in humanities and social sciences. The other problem is to what degree ontological assumptions as well as theories of the extension of scientific knowledge are a part of defining being "scientific". In my opinion all you need to assume ontological to be scientific is to claim a minimum realistic ontology like: We believe that the world does have some independent habits or invariants that can meaningfully be examined by systematic empirical methods.

You do **not** need to assume:

1. Universal laws.
2. That laws do not change over time.
3. That reality is mechanical.
4. That mental forces or mind do not exist in nature.
5. That a belief in a divine transcendental being is ruled out by science.
6. That the universe is physically closed.
7. That the universe's basic nature is physical.

Actually for an evolutionary biosemiotics believing that life, mind, conscious awareness, semiosis, signification, interpretation and self-conscious linguistic communication all arise in the course of natural development and history such ontological assumptions as the seven above might be a serious constrain for the development of testable theories.

Thus science is **not** to close the door to creationism, panpsychism, physiosemiosis or any other theory if they propose testable theories. Science is to keep an open mind about the nature of reality and try to test them or at least let the followers of the theory themselves produce empirical investigation for our possible evaluation. To Popper science is an ongoing revolution producing bold but falsifiable theories about the world.

We are not supposed to get fixated in "normal science".

The history of science and philosophy of science has shown that Popper's theory is far too simple and it takes much more than one simple falsification to bring a theory down. But that is another matter.

I do support Marcello in that theories should in principle say something empirical about the world that can be methodically investigated. But it is also a very important aspect of being scientific, not to say more than one empirical basis can acclaim for. Thus we need to go lightly here and not rule out possibilities on beforehand. But this would also be one way to interpret what you mean Marcello. Is it the right one?

Let us think of the significance that it is not much more than 10 years ago, we thought we had a profound theory for the whole universe and its most fundamental building blocks. Now we recognize something called "dark matter" as real and astro-physics says that it comprises at least 80% of physical reality!

But we are not really sure what it is

Venlig hilsen/Best wishes

Søren Brier