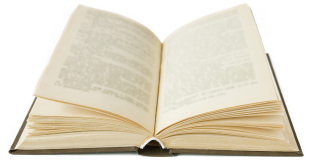
Biosemiotics as a bridge between biology and Geisteswissenschaft



Kalevi Kull
Department of semiotics
University of Tartu, Estonia

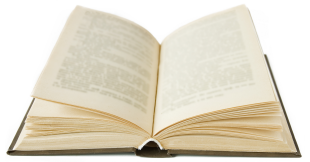
Lausanne, March 15, 2019

possibly common between disciplines

biol

- metaphors
- (math) models
- objects

hum



XX century

- Biology and humanities were detached

Indeed,

- biology → humanities = biologization

- humanities → biology = anthropomorphization

Could it be otherwise?

Yes, if

- biology would include

learning and communication

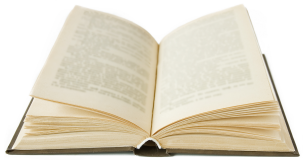
(as attributes of life)

- humanities would include

prelinguistic meaning-making

(as a general feature of human behavior and communication)

common object ?



Has it been understood?

Yes,

in 1896, a psychologist James Mark Baldwin (& Conway Lloyd Morgan & Henry Fairfield Osborn) stated, while modelling evolution, that

- not only “environment selects” = natural selection
- but also “organisms search and choose” = organic selection

Evidence: learning enhances evolution (“Baldwin effect” –
the taxa with organisms that learn better show quicker evolution)

However, the XX century

Biology

- Could not find the mechanism of inheritance of the products of learning
- Since 1930s – Modern Synthesis, neodarvinism
  - All adaptations from natural selection, everything in genes
- Since 1970s – Hardening of synthesis
  - Sociobiology, evolutionary psychology, egoistic gene

Humanities

- Could not find the primary source of meaning, the locus of meaning-maker
  - Meaning is based on syntax

XXI century

Epigenetic turn

- Non-genetic inheritance
- Power of natural selection is low in testing the possible combinations of DNA
- Baldwin is back

Biosemiotics

- Mechanisms of prelinguistic meaning-making
- Organisms' learning and communication as permanent organisers

Thus, now we understand again that

- **language assumes the preexistence of meaning**, being an advanced form of meaning-making (meaning may not require syntax, meaning is based on choice = interpretation)

- **organisms *are* habits and artefacts**, formed by interpretation, decision-making and learning (organism is not a metabolic machine, organism is a multi-agent with ability to search and interpret)

So, biosemiotics is

- a biology that asks **what do organisms know**
- the humanities that take into account the **life of our intentional bodies**

while using the model:

Life = meaning-making = knowing = semiosis

Bridge between disciplines (is made of) a model that covers a common object

a biosemiotic model

- which includes

learning and communication

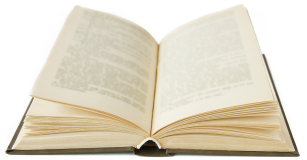
prelinguistic meaning-making

common object

(as attributes of life)

&

(as a general feature of human behavior and communication)



Many thanks for your interest!

Reference

Favareau, Donald; Kull, Kalevi; Ostdiek, Gerald; Maran, Timo; Westling, Louise; Cobley, Paul; Stjernfelt, Frederik; Anderson, Myrdene; Tønnessen, Morten; Wheeler, Wendy

2017.

"How can the study of the humanities inform the study of biosemiotics?"

Biosemiotics 10 (1): 9-31.