

DANGER MODELING:
Meaning-generation in three dimensions

Hongbing Yu

Toronto Metropolitan University

August 4, 2023

Outline

- Rationale
- Models in, models out
- Modeling, coupled with semiosis
- Danger modeling
- A future focus

Rationale

- Warning signs are among the most primordial and relevant vehicles for meaning.
- The Sebeokian concept of modeling underscores “semiotic agency” (Sharov and Tønnessen 2021) and promises to be a highly integrative framework for studying meaning-generation.
- Humans have evolved into complex superorganisms that not only live by “existential modeling” and “semiotic modeling” (Yu 2021) at same time, but also deeply entangled in our own semiotic webs while probing into and creating possibilities of new meanings.

Models in, models out

“a model can be defined as a form that has been imagined or made externally (through some physical medium) to stand for an object, event, feeling, etc., known as a referent, or for a class of similar (or related) objects, events, feelings, etc., known as a referential domain. An imagined form can be called, simply, a mental form; a form made externally to stand for a referent can be called an externalized form.” (Sebeok and Danesi 2000: 2)

“The ability to make models is, actually, a derivative of semiosis, defined simply as the capacity of a species to produce and comprehend the specific types of models it requires for processing and codifying perceptual input in its own way. Semiosis is a capacity of all life forms; representation, on the other hand, is a unique capacity of the human species, which develops during the neonate and childhood periods.”
(Sebeok and Danesi 2000: 5)

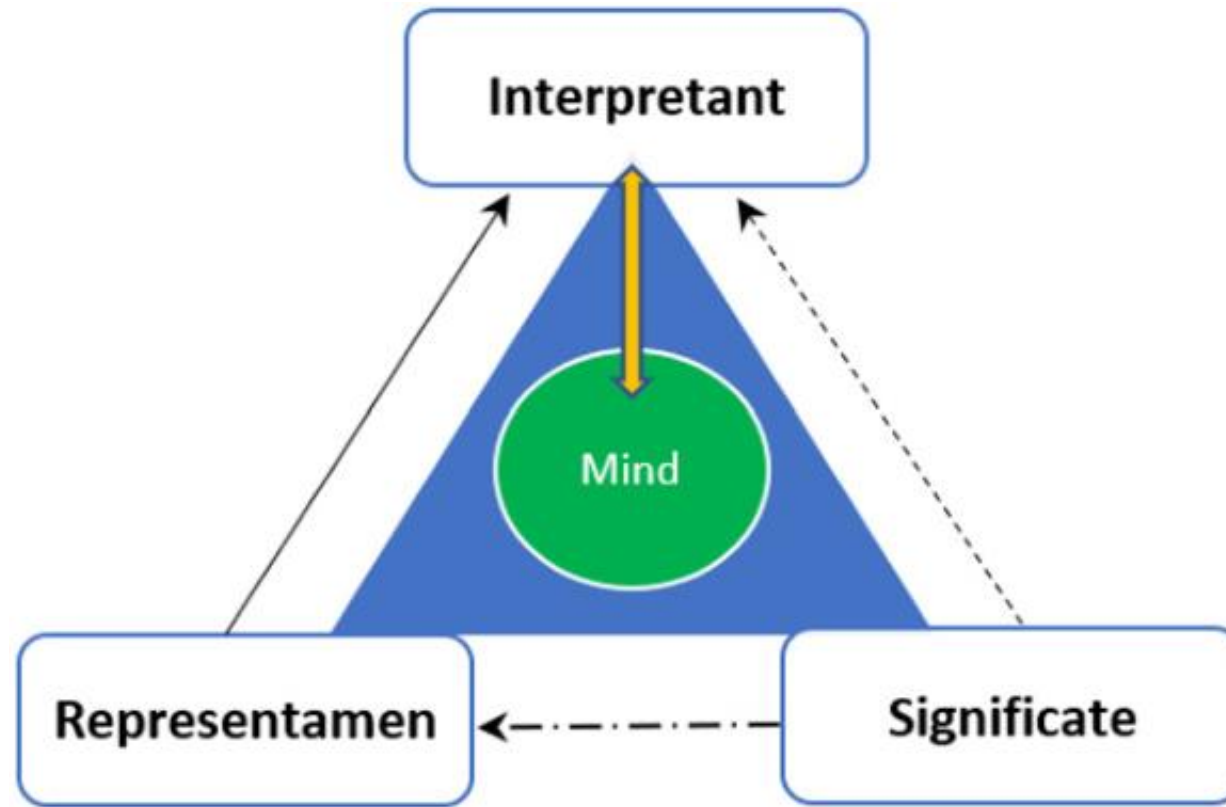
“Tweaking”

Models are not signs (or their Saussurean components), but any experienceable forms of meaning that have a signifiatory potential, i.e., the potential of turning into signs. Models and signs are thus essentially and functionally different: models supersede, whereas signs signify. To be specific, “models indicate an ever-present presence as the result of supersession, whereas signs always exist only inasmuch as they imply a signifiatory or semiotic relation.” (Yu 2021: 650)

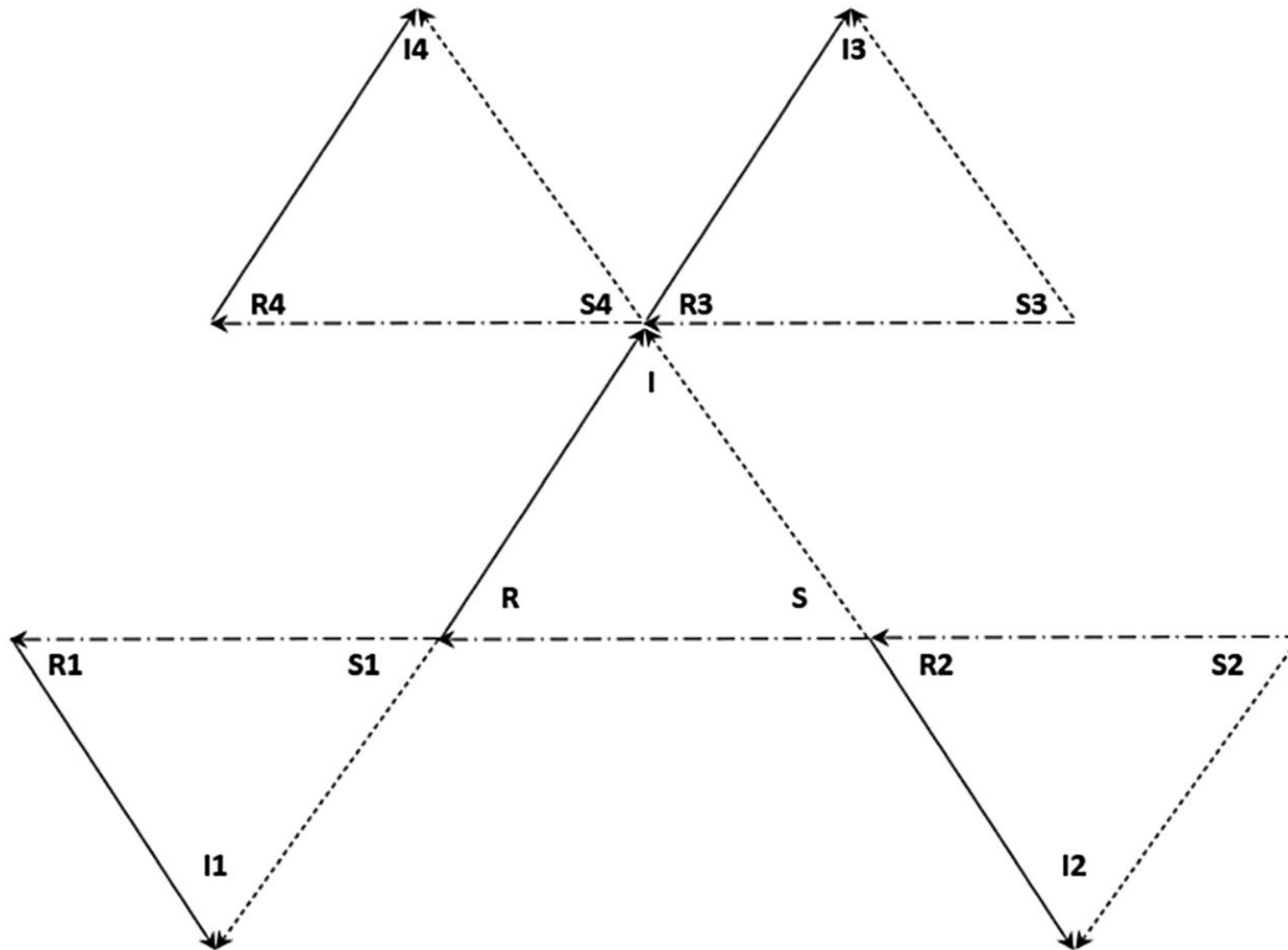
Modeling, coupled with semiosis

In any act of modeling, models supersede and are brought to the front for salience, accessibility, and operability, whereas in the meantime the “modeled” (or signified before the signs became models) recedes and “exists” in the background, inaccessible and inoperable (Yu 2021: 647).

“Modelity”

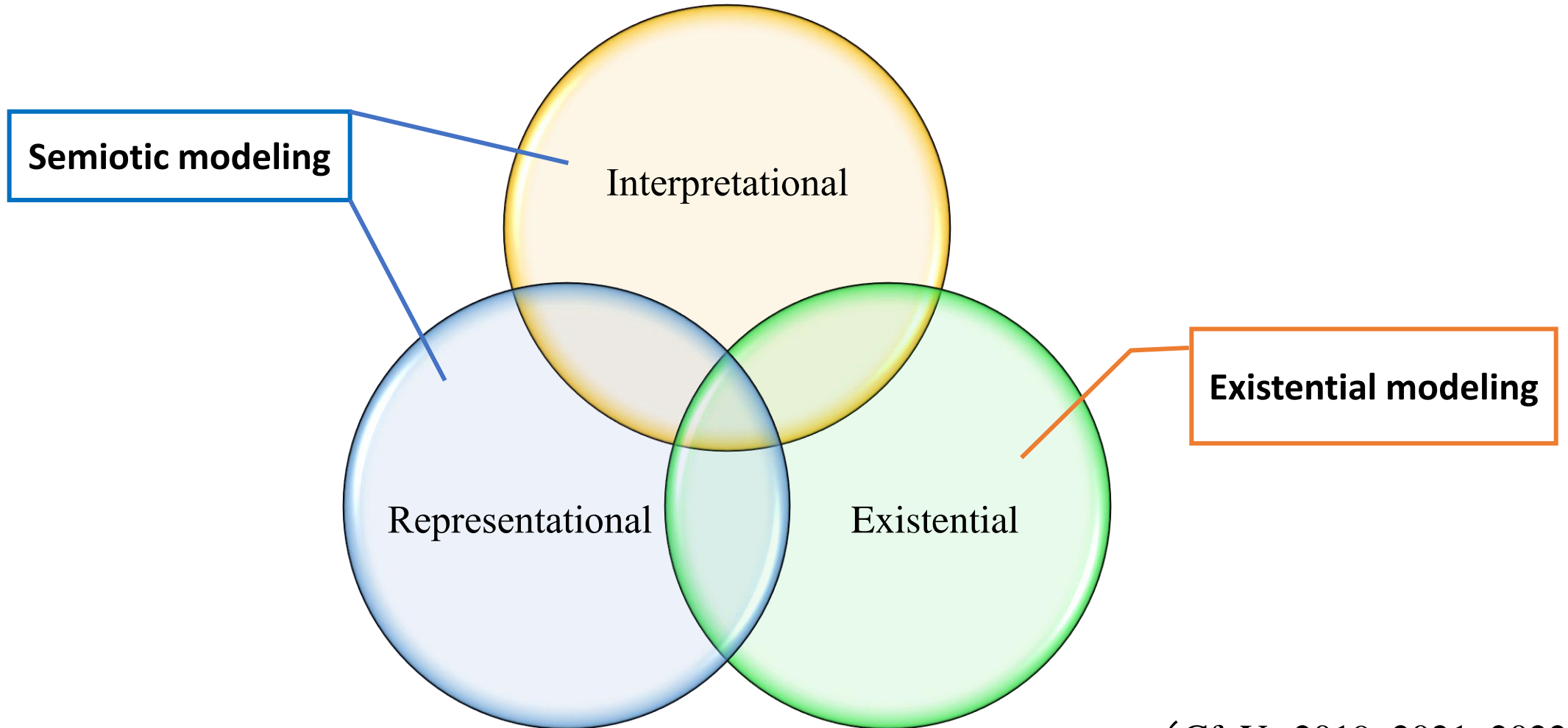


Revised Peircean triad of semiosis. (Yu 2021: 405)



The growth of signs and semiosis. (Yu 2021: 407)

Meaning-generation in three dimensions



(Cf. Yu 2019, 2021, 2022)

Danger modeling

“Two types of people often foresee danger: those who have learnt from experience, very much to their own cost, and the astute, very much to the cost of others.”

The Pocket Oracle and Art of Prudence

Baltasar Gracián (1601-1658)

There are generally two ways of danger modeling: learning through the effects of one's own actions and social/observational learning. Both rely on existential modeling, because every one of us lives in the ever-presence of our own Umwelten and it is not possible to live in a complete vacuum of existence.

Bloomsbury Advances in Semiotics

WARNING SIGNS

THE SEMIOTICS OF DANGER
MARCEL DANESI



BLOOMSBURY

OSTI.GOV

U.S. Department of Energy
Office of Scientific and Technical Information

Search 3+ million Department of Energy research results

- Submit
- Search Tools
- Public Access
- PID Services & Dev Tools
- About
- FAQs
- News

OSTI.GOV / Technical Report: *Communication Measures to Bridge Ten Millennia*

Communication Measures to Bridge Ten Millennia

- Full Record
- Other Related Research

TECHNICAL REPORT:

View Technical Report (2.29 MB)

<https://doi.org/10.2172/6705990>

SAVE / SHARE:

- Export Metadata
- Save to My Library



Abstract

The Department of Energy created the Human Interference Task Force (HITF) in 1980 to investigate the problems connected with the postclosure, final marking of a filled nuclear waste repository. The task of the HITF is to devise a method of warning future generations not to mine or drill at that site unless they are aware of the consequences of their actions. Since the likelihood of human interference should be minimized for 10,000 years, an effective and long-lasting warning system must be designed. This report is a semiotic analysis of the problem, examining it in terms of the science or theory of messages and symbols. Because of the long period of time involved, the report recommends that a relay system of recoding messages be initiated; that the messages contain a mixture of iconic, indexical, and symbolic elements; and that a high degree of redundancy of messages be employed.

Authors: [Sebeok, Thomas A.](#) ^[1]

[+ Show Author Affiliations](#)

Publication Date: 1984-04-01

Modeling and semiosis interlay and interplay, taking turns in creating and pushing forward meaning-generation in three dimensions. The dimensions are the domains of meaning-generation, providing affordances for semiotic agents to create meanings.

The Three Dimensions: Further comments

What matters in differentiating the dimensions and treating them under the lens of modeling is that they not only pertain to meaning-generation, but also introduce a counter-intuitive perspective that questions some old epistemological dogmas.

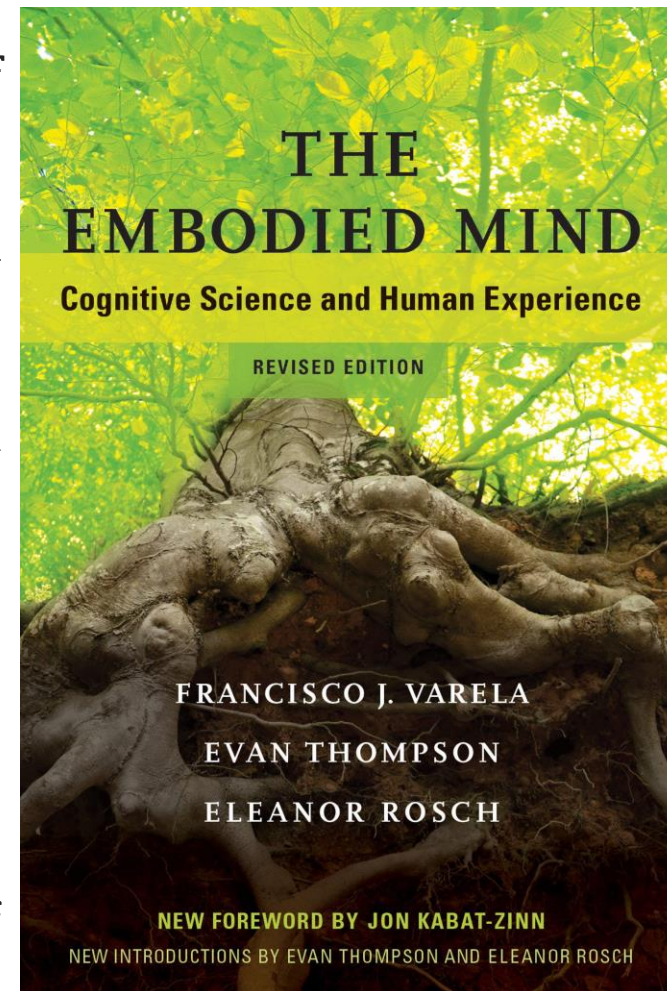
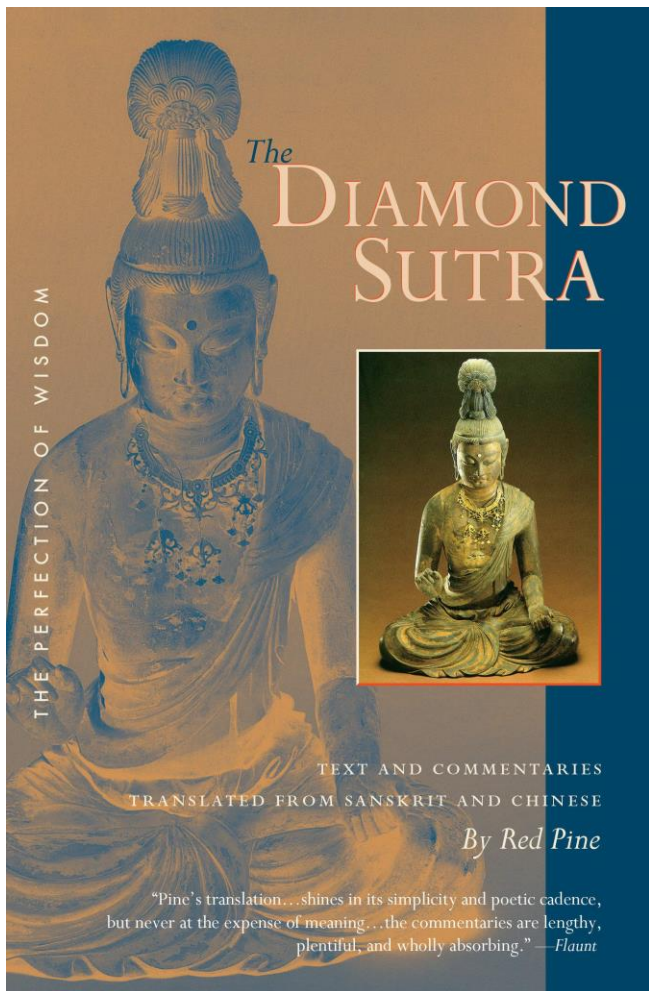
Reality = illusion
Illusion = reality

Because ‘Tathagata’ means the suchness of all Dharmas. If someone still says: ‘The Tathagata obtained Supreme Enlightenment,’ (I tell you,) Subhuti, there is no Dharma by means of which the Buddha did so, (because), Subhuti, that Enlightenment was by itself neither real nor unreal. This is why the Tathagata says that all Dharmas are Buddha's Dharmas. Of all dharmas, there is not a single one which possesses a self, a personality, a being and a life.

《金剛般若波羅蜜經》
究竟無我分第十七

17. Ultimately there is no self
(All Dharmas Are Non-Dharmas)

The Diamond Sutra



The commonly held “reality-vs-illusion” dichotomy, which we are all too familiar with, should perhaps be replaced with one: “reality-forming”, or “infinite modeling” in the same spirit as Peirce’s infinite semiosis. What is important is the function of the “reality-forming” or “infinite modeling”: it is about niche construction in the broad biosemiotic sense, which entails not only the Umwelt niches, but also cultural and cognitive niches.

“Reality,” understood in biosemiotic terms, “can hardly be any more than one of the various models that we, as modelers, incessantly make by building or extracting out of pre-existing models that may eventually trace their origin to the modelers’ enacted Umwelten.” (Yu 2021: 650–651) Thus, the plurality of danger modeling is inevitable in the struggle for existence on various temporal and spatial scales.

In biosemiotic terms, “all living organisms are semiotic agents capable of sensing and information-driven adaptive behavior. Thus, even the smallest creatures such as bacteria, the most abundant organisms on Earth, are agents” (Sharov and Tønnessen 2021: 96)

“I see the art of semiotics as transcending the limits of science and, at once, bringing the inaccessible into sight – using and enabling (what we model as) causal mechanisms that use empirical relations. However, these mechanisms are merely aspects of modelity – they are means with a partial role in how we pick up on the thingishness of things (and how it changes). Witness the green/grue triangle: in humans, even simple “perception” is run through as collective life is shaped by history, culture and groupings which allows each of us to build queer – and, I would say, overlapping ‘little worlds’. Though, it is not often said, languaging is necessary, not sufficient for culture (which is, of course, necessary to languaging). And there we meet, Little John.”

(Critical response from Stephen Cowley, Aug 1, 2023, 5:12 PM EST)

DANGER MODELING: *Meaning-generation in three dimensions*

References will be provided upon request.

hongbing@torontomu.ca

Yu, Hongbing. “The peculiar case of danger modeling: meaning-generation in three dimensions”. In Alexei Sharov, George Mikhailovsky, Richard Gordon, and Joseph Seckbach (eds.). *Pathways to the Origin and Evolution of Meanings in the Universe*. Beverly: Scrivener Publishing in partnership with Wiley & Sons. Forthcoming in 2023.