Frontiers of Interactivism

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The interactivist model has grown to address issues over a wide range, from philosophy to neuroscience, from persons to robots. Nevertheless, there are multiple lacunae and innumerable frontiers that remain. I will develop this point with several examples, focusing in particular on biology (e.g., the emergence of the biosphere), language (e.g., the unacceptability of the syntax, semantics, pragmatics framework), consciousness (e.g., phenomenology and neurophysiology), and social emergence (e.g., the social ontology of persons and the multifarious elaborations of situation conventions).

Frontiers of Interactivism

Interactivism has developed via the exploration of modeling possibilities opened up by the alternative metaphysics of process, emergence, and normativity.

In part, this was forced by the incompatibilities between the early narrower model and related interfacing models with substance metaphysical assumptions: either the Interactivist model had to abandoned as inconsistent with what was "known" about other phenomena, such as language, for example, or else the Interactivist model had to be expanded to address those other superficially inconsistent phenomena.

Interactivism now constitutes a systematic theory and philosophy.

But it is far from complete; there are many lacunae and frontiers.

Frontiers of Interactivism

The historical analysis of philosophical assumptions that
constitute the current framework.

Process metaphysics and emergence:
    Richard Campbell
    Johanna Seibt

The emergence of the biosphere.
    Cliff Hooker
    Alvaro Moreno

Models of and guides to functional analysis in biology.
    Wayne Christensen

Multiple forms of representation.

Persuading the fields that current models are flawed.

Heuristic leaning.

Self directed learning.
    Wayne Christensen

Filling out the emotions model.

Consciousness and reflective consciousness:
    Phenomenology
    Central nervous system

Connecting the memory model with literature.

Connecting the learning model with literature.

Motivation

Folk Psychology

Development and construction

Development and knowing levels.
    Campbell and Bickhard

Rationality and Rational Thought

Emergence of the Social: Situation Conventions

Situation Conventions and Persons

Situation Conventions and Society

Situation Conventions and Economic Processes

Language and sociality.

Language and grammar.

Language and Persons.

Emergence of Persons.
    Jack Martin

Personality

Forms and Origins of Psychopathology.

Psychopathology and Psychotherapy.

Persons and Ethics.
   Robert Campbell
   John Christopher

Interactivism and Epistemology.

Interactivism and Philosophy of Mind.

Interactivism and Philosophy of Science.

Model and demo programs.
   Jean-Christophe Buisson
   Georgi Stojanov

Model and demo robotics.
   Tom Ziemke

Applied interactivism:
   Education
      Critical Principle Curricular Design
      Pichun Wu
   Psychotherapy
      Nurturing the Transcendence of Rigidity
   Robotics
      Intelligence and Cognition
      Motivation
      Learning
      Emotions
      And so on.
   Ambient Intelligence.
      Mikkel Sorensen

Interactivism and Cognitive Neuroscience

Interactivism and Neural Modeling
   Silent neurons
   Volume transmitters
   Graded release of transmitters
   Neurons as Endogenously Active
   Neurons as Oscillators and Resonators

Interactivism and Social Policy

Interactivism and Political Theory

Emergence of the Biosphere

The origins and emergence of DNA

Organisms, Species, Ecosystems as Benard cells of various
   biosphere dynamics.

The emergence of development and its role in evolution.
      Evo-Devo
      Jim Griesemer

Language

Syntax, Semantics, Pragmatics as usually defined presuppose
that language is an encoding phenomenon.

Syntax: well formedness of encodings
Semantics: encoding rules
Pragmatics: uses to which such encodings can be put

These definitions are not coherent within the interactivist
model:
E.g., what is meaningful about a sentence is the pragmatic
power of transformation that it can have in various
situation conventions.
What has truth value are the pragmatic consequences of the
use of a sentence in an utterance.

Language studies must be re-cast in terms of interactions upon
and within social realities.

Syntax emerges as functional constraints on the construction of
utterances.

This all needs to be much more elaborated than it currently has
been.
Bickhard & Campbell
Donald Favareau

Consciousness

Sorting out the phenomena and properties of consciousness
and reflective consciousness is just beginning
Including the diagnosis and undoing of multiple errors in the
literature
(Consciousness and Reflective Consciousness)

The central nervous system basis for (reflective) consciousness
is at best partly understood
Reticular system; Prefrontal projections to caudate to
reticular nuclei of the thalamus

Multiple considerations both in the philosophical and
psychological and neuroscience literatures.
O'Regan and Noë

Social Emergence

Situation conventions and the special form of institutionalized conventions constitute the emergence of social reality.

Modeling social, economic, and political dynamics within this framework

Understanding the history of social developments and emergences.
E.g., kinship — clan to
personal — feudal to
role — bureaucracy
forms of social organization

Socio-cultural constitutive influences on the emergence of persons

Society, culture, and history in relation to ethics.

A Non-concluding Conclusion

Interactivism is most centrally an exploration of the
  possibilities opened up by the abandonment of substance
  metaphysics in favor of a process metaphysics.

It seems safe to say that it is just getting started.