

LSU PHIL 4941 / Spring 2016 / John Protevi

<http://www.protevi.com/john/PhilMind>

Classroom use only.

Lecture notes on Evan Thompson, *Mind in Life: Biology, Phenomenology, and the Sciences of Mind* (Harvard University Press, 2007).

PART I: THE ENACTIVE APPROACH

CHAPTER 1: "Cognitive Science and Human Experience"

Complaints that CS ignores emotion, affect, and motivation; that it ignores experience (e.g., *cness*).

Three paradigms and their metaphors for mind in CS: cognitivism (digital computer); connectionism (neural network); embodied dynamicism (dynamic system).

Cognitivism: thought is nonconscious, skull-bound, symbol manipulation; this sets up the explanatory gap, "mind-mind problem," or hard problem.

Connectionism: emergent patterns of activity in neural networks: pattern recognition is paradigm of intelligence (as opposed to deduction, as in cognitivism).

Embodied dynamicism: dynamic: temporally extended trajectories in phase space; embodied: skillful know-how in situated embodied activity.

Enactivism bridges embodied dynamicism and phenomenology. "laying down a path in walking." 5 ideas: 1) organisms are autonomous agents; 2) nervous system is autonomous dynamic system (input is modulation of ongoing autonomous activity), so it doesn't "process information"; 3) cognition is skillful know-how in sensorimotor coupling with environment; 4) world is relational domain enacted by organism; 5) experience is not epiphenomenal.

"Neurophenomenology:" Naturalizing phenomenology, but also refining the targets of CS by means of phenomenology. Meeting on ground of "deep continuity of life and mind."

CHAPTER 2: "The Phenomenological Connection"

Must include PH for two reasons: 1) *cness* and subjectivity in lived experience; 2) embodied PH as in Husserl and M-P.

Chapter forecast: 1) PH method of “phen reduction”; 2) three phases of PH: a) static = formal structures of cness: intentionality and time-cness as constitution (disclosure) of objects; b) genetic = study of sedimentation, habit, and so on in affect, motivation, attention; c) generative = study of cultural / historical / intersubjective “life world”

Phenomenology with an attitude. Natural attitude = commonsense realism; phenom attitude = bracketing of NA to study world as it appears; hence we study correlation of subjectivity and world-disclosure. Skill of attending to the manner of givenness to experience. Transcendental phenomenology: that point of view that enables study of the a priori structures of subjectivity as it constitutes meaningful experience.

Intentionality. Not just object-directedness but more generally, openness to the world. (Moods as disclosive but not object-directed.) Experience as flow of intentional acts (not mental states with content). Hence distinction of presentation and representation (re-presentation). Transcendent objects are given, as transcendent, within experience, but we can only see this by adopting transcendental stance. (And we can connect this to subpersonal dynamics / attractors, and so on: self-organization of autonomous systems can still allow – is the basis for – interaction with objects in the world [of the system].)

From Static to Genetic Phenomenology. Static PH attends to formal structures (e.g., perception as mastery of sensorimotor patterns). Genetic PH looks to how those structures have developed out of previous patterns of experience. So the subject now has a developmental trajectory, a life history with habits, interests, and so on; a living body in an intersubjective life-world. Passive genesis = involuntarily being affected by something; we are open to world as being able to be solicited by things, events, etc. Here we see sensibility or sentience as receptivity. Associations are not mechanical, but meaningful. Attention to habit is important.

From Genetic to Generative Phenomenology. Historical (cross-generational) build-up of experience. The “life-world”: the everyday world; it’s not an intentional object but is a pregiven ground or horizon of activity. Generative PH also allows focus on socialization of children.

CHAPTER 3: “Autonomy and Emergence.”

Forecast: autonomous system is self-determining; it’s not input / processing / output, which is formula of a heteronomous system. Rather the paradigm is conversation. Emergence: self-organization and circular causality or “dynamic co-emergence.”

Dynamic systems. State spaces, trajectories, singularities, attractors, metastability.

CHAPTER 4: "The Structure of Behavior"

Forecast of chapter: "Form" is M-P's term for "dynamic co-emergence" in the three orders of matter, life, and mind. Each contributes to individuation, though in an ascending order. Reviewing MP in connection with recent work sets the stage for the enactive strategy of addressing the explanatory gap by connecting mind-in-life to neurophenomenology of subjectivity and consciousness.

Explanatory gap (how do the two members of the pair relate to each other, and / or how does the former produce, cause, or even allow for the latter. That is, there's an epistemological problem caused by the positing of ontologically foreign member of a pair:

Cartesian dualists: matter and mind (p 6)

Cognitivists (6-7):

1. phenomenological mind-body problem: how can a brain have experiences
2. computational mind-body problem: how can a brain do reasoning?
3. "mind-mind" problem: subpersonal computation and subjective experience (aka Chalmers's "hard problem")

Connectionists (10) don't add any new resources; there's still a gap between computation and experience.

Embodied dynamicists (12) shift the focus from the computation-experience pair to the problem of relating "experientially non-accessible [i.e., unconscious] embodied and embedded cognition and emotion" to experience.

Enactivism offers the hope that by using the notion of autonomous systems in working from the ground up ("deep continuity of mind and life) we can make progress on the explanatory gap. (Because there's no posited ontological gap that poses an epistemological problem.)

FORM AND CIRCULAR CAUSALITY

Comportement = "how you comport yourself, how you handle yourself, how you go about your business." It's a third term between consciousness and nature. Consciousness here is intellectualist; nature is mechanist. So MP is after comportment as structure or form, that is, an emergent whole, not decomposable aggregation. That holds for biological and psychological phenomena.

So a global organismic response is qualitative varying in response to quantitative changes in environment. The changes are triggers for autonomous responses, not causes of mechanistic reactions. So there is sense-making relative to the values of the organism; "biological autonomy brings about norms," is ET's phrase.

Organism and milieu are the two poles of comportment, which is thus a dynamic patterned whole of situation and response rather than stimulus and reaction (which is a mechanist reading). But it's also not some unaffected realm of freedom either (intellectualism is a mistake as well).

Contemporary concepts for MP's ideas: 1) morphodynamics; 2) enactive brain-body-world emergence.

THE PHYSICAL AND LIVING ORDERS

Physical form (e.g., a soap bubble, a convection current, a crystal) emerges as qualitative discontinuity in a material substrate, establishing a dissipative structure.

Living structures (organisms) emerge from the physical order, establishing equilibria with regard to virtual conditions brought forth by the system. Here we see autopoietic self-production and maintenance, enacted worlds, and establishment of norms, so that living cognition is sense-making. "Virtual conditions" means that it's only in relation to an organism's needs that sucrose becomes food instead of a mere chemical.

There would be some very interesting connections to be made here with Simondon's process philosophy take on this: an individual is such as an ongoing process of individuation always in touch with a pre-individual or metastable field.

THE HUMAN ORDER

Here we have the introduction of symbols: relating to things and to other symbols, thus allowing varying symbolizations or representation of the "same thing," which is cashed out phenomenologically as what remains invariant under perspectival variation and which is graspable by other subjects. Human symbols are directed at "use-objects," that is, those things with culturally constituted meanings, so we arrive at "perceived situation – work" as the human milieu. That is, we can perceive intentional action of others (a clue here is infant face recognition and interaction capacities which come online reliably and early). This new milieu is emergent relative to living structures.

CONSCIOUSNESS AND THE STRUCTURE OF BEHAVIOR

"Form" is supposed to be able to bridge the gap of purely interior mind and purely exterior nature. Living things are natural, but they are not purely exterior atoms linked by mechanical causality to other atoms; rather, they have an interiority, that is, a point of view in which they establish values and norms. And mind is not pure interiority, but a mode of engagement with an enacted world.

Autopoiesis as structure of living (the cell as a physical autonomous system) means we see dynamic co-emergence of interiority and exteriority. But there is an asymmetry; since the latter now is an enacted world, it's only so on the basis of the former as self-establishing norms of interacting with the enacted world. The organism brings forth or enacts its world (in other words, you could say it establishes a milieu by its sense-making rather than merely existing in a surrounding environment).

Consciousness is no longer a separated interior space of freedom and symbol manipulation, but is the structure of comportment, a "perceptual and motor attunement to the world." A world that includes the perception of the intentional action of others as they relate to culturally significant symbols.

NATURALISM AND THE PHENOMENOLOGICAL ATTITUDE

I'm just going to quote ET here:

"MP argues that naturalism need the notion of form ... but this notion is irreducibly phenomenal. Hence naturalism cannot explain matter, life, and mind, as long as explanation means purging nature of subjectivity, and then trying to reconstitute subjectivity out of nature thus purged." (81)

This is not an argument for idealism but for a transcendental perspective, that is, asking for the identification of which (scientific) practice are the conditions under which an object is constituted or disclosed to any human perceiver.

Pheno-physics or math description of qualitative discontinuities, made possible by math advances beyond the time of Husserl and MP, mean that "form" is not just "perceived." Indeed "the perceived is explicable by math models that link brain processes and behavior at morphodynamic levels" (85). Here we see neurophenomenological revelation of isomorphisms of experience and brain dynamics, which enables ET to hope that his book can "integrate the orders of matter, life, and mind," while "accounting for the originality of each order." I think it's fair to call this a naturalism, but it's not a mechanism; you have to have rethought "nature" away from mechanical causality of dead matter without having gone over to vitalism or panpsychism.

Autonomous systems. Autopoiesis is paradigm of biological autonomy. Membrane – metabolism mutual presupposition and recursivity. Sensorimotor self and immune systems as network: "organism as meshwork of selfless selves."

Information and meaning. Info is context-dependent and agent-relative. From this perspective, DNA is not a blueprint but a database that is involved in a cellular process in which information is dynamically constituted. Autonomous systems do not have internal representations of the world; rather they constitute / disclose their world.

Emergent processes. Upward and downward causality. Global order emerges from and constrains component behavior enabling system-level effects.