

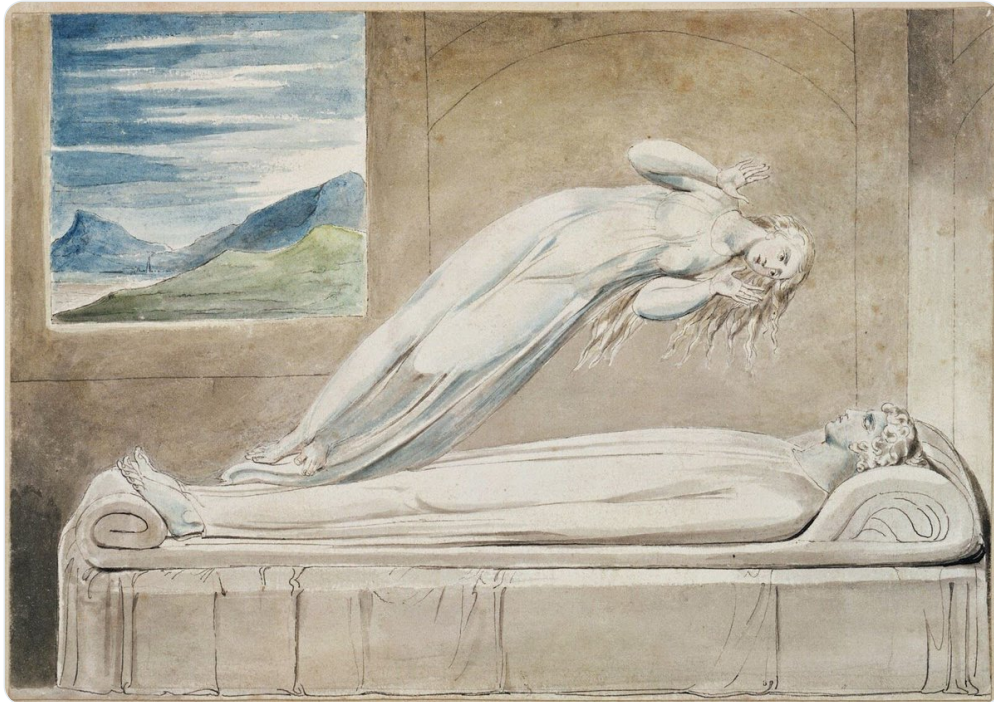


Christophe Rigon / Soto  - **Scybernethician** @ki_cog

Oct 6, 2024 · 32 tweets · [ki_cog/status/1842867327034941782](https://twitter.com/ki_cog/status/1842867327034941782)

[Relating Tekhne and Episteme (Enacted Biocognition) through Implicit Processual Memory]  

Understanding technicity/Tekhne imply to understand modern technologies as the production of machines *externalizing and concretizing our normative, first body then mind, gestures*.



This understanding allows us to shed light on the nature of technical artifacts, notably automatic computing machines, and their power to shape our embodied minds, but also to highlight certain crucial keys to better understanding ourselves and extending our self-knowledge.

Aristotle in his *Nicomachean Ethics* describe how Tekhne (skill & craft) embodies a practical approach to acquiring knowledge through practical experience and skillful practice.

He contrast it with Virtue (Arete): craft knowledge pertains to production (poiēsis), thereby distinguishing it from practical wisdom (Phronēsis), which is itself concerned with action (Praxis). Tekhne is focused on production while Virtue is focused on action itself.

The products of Tekhne exist separately from the activity, while virtuous actions are (recursive) ends in themselves. By doing good to others and to the world, one do good to himself. This can be called "intelligent selfishness".

Technological machines acts as externalized and concretized repeated and habitual sensorimotor gestures (cf. André Leroi-Ghouran, Lokta and Stiegler's "exosomatization"). They are "transjective" (Vervake): they relate synthetically the object/subject distinction.

They simulate socially the normative action of a body. Their industrial development is like a normative "social body" in action, an implicit collective disciplinary biopolitic of the society (the explicit dimension being the symbolic and linguistic political and legal spheres).

Gestures, sensorimotor enactions, are the prototypes of abstract thinking realized through the abstraction of language and its generalized categories and concepts but also verbs and adverbs (Cf. Lakoff & Johnson, Rosch).

Language is in fact more a coordination of actions (cf. Maturana) than a naive realist representation of the world-out-there (phenomenological "natural attitude").

Technical artifacts are re-presentation of actions (Cf. Havelange, Lenay & Stewart).

The rise of the normalized mechanical thinking (the Cartesian-Baconian epistemological quasi-"double cut" between body and mind and between subject and object, that I call a process/form transduction) has given rise not only to modern science

but also to modern capitalism through the mechanization and reproduction in the machines of our productive intensional gestures. Men were "functionalized", while the "function", with its associated utilitarian reductionism, was instituted as the paragon of scientific reason.

In the twenty century, a second reifying double cut occurred, this time technical: the Shannon-Turing-von Neumann one, severing the semiotic (computers are semiotic machines) from matter and from meaning (Shannon, von Neumann) through applied performative languages,

leading to a techno-cultural collective abstraction (the "virtual reality") and consensual illusion (the "cyberspace"). This is the second key historical "form/process transduction":

the mechanical gesture of calculation (Turing) is transducted into an electronic equivalent through Boolean binary logic, while abstract "communication" was transducted as "information" (Shannon),

giving rise through our interaction with it to a brand new imaginary and techno-socio phenomenological domain .

Gestures and their procedural (I prefer "processual") knowledge/knowing are the implicit dimension of our biocognitive body memory. They are the invisible operative and motor polarity (Cf. Merleau-Ponty) shaping our intentional act (Cf. Brentano, Husserl),

whose enaction is the re-presentation of the past through, not images or words, but through immediate experience and action:

"The phenomenology of body memory" By Thomas Fuchs





The phenomenology of body memory

Memory comprises not only one's explicit recollections of the past, but also the acquired dispositions, skills, and habits that implicitly influence one's present experience and behavior. Thi...

https://www.academia.edu/21615358/The_phenomenology_of_body_memory

So this conception leads to understand why Tekhne has been more and more, through our social evolution and complexification, in the blindspot of our Episteme, to a point that the numeric automatic machines seems,

as an industrialized utilitarianist illusion controlled by private powers, to autonomize themselves as a new procedural institution facing our democratic declarative legal system.

But this is just an illusion as everything that is thought or said about their properties is in fact thought or said about our interaction with them: these apparent properties are enacted and the product of our interaction with them:

they are just sophisticated but "stupid" mechanical electronic machines. This is what I call the "Technology-by-itself" fallacy.

The real interesting question is how do they produce this astounding illusion on us? There is something epistemologically critical, and maybe vital, to understand here.

"Connectionist" (I prefer "PDP", more explicit and neutral) models, which are the heart of "Generative Artificial Intelligence" (LLM) are second-order performative models,

because computers are second-order machines (machine²): they are machines simulating abstract machines (Cf. Turing's *abstract* machines).

These models exhibit very interesting cognitive-like general properties like generalization and categorization through examples, and show us how to tackle the problem of induction (Hume).

They simulate biocognitive *processual parallel and distributed memories*, in opposition of the classical *localized "memory"* of computers, i.e. how homeostatic biological micro-processes can re-enact high level metastable biocognitive functions from past experience

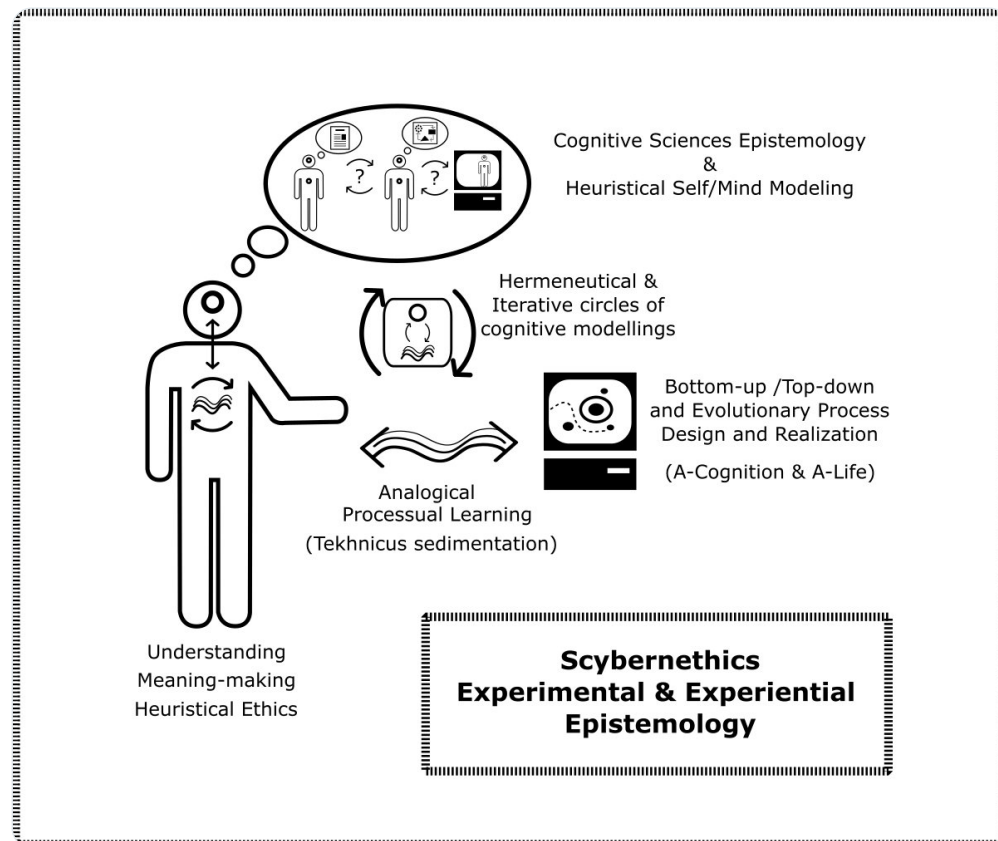
by modifying the relations between the elements, and this analogically/simultaneously at multiple levels of organization by resonance.

In summary, they show us operationally/processually, in analogy with our own processual knowledge, how we can think our own thinking processes, *iteratively* (not "generatively"),

as evolutionary, parallel and distributed. This is at the root of ethical know-how/practical wisdom.

In my scybernetics experience, I have slowly enacted what I call the "Tekhnicus" awareness, which is an reverse cognitive engineering of this gestural externalization to re-embody/remember it, putting us in ana-logical relation to our own deep processual experience

through the observation (passive) and coding (active) of complex artificial cognitive simulations coupled with a reflexion on the sciences of cognition epistemology. This lead me to develop an "experimental and experiential epistemology".



To conclude: there is no cognition without (bio-socio-techno) memory, a fact that the actual so called "real-time" collective imperialism of automatic machines, coupled with increasing techno-socially "programmed" persons, try to deny.

@threadreaderapp unroll

...