



Christophe Rigon / Soto - @ki_cog@mstdn.social [@ki_cog](#)

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[Why LLMs can't be "semantical"]

Computer "sciences" (technologies) were born from the disappointed dream (Gödel, 1930) of mathematics to find an absolute foundation on formal bases (Principia Mathematica, Whitehead & Russell, 1910-13, 1925-27).

Their current evolution (LLMs) is a new arc to escape this limitation and simulate their quasi-autonomy, not by logical proofs but by empirical effectiveness only, functionalist and operationalist, as sufficient reason (as Turing & von Neumann did): it's true because it "works".

This unbalanced historical & empirical epistemological dynamic in turn threatens the general cultural and noological balance, at the risk of a deleterious and abstractive, indeed extractive, shift of singular individual subjectivities.

But this conception come up against, in addition to her obvious disembodiment, the same Godelian limitation: "Semantics is irreducible to syntax (the real point, Gödel added, of the incompleteness theorem)" (Dupuy, The Mechanization of the Mind, p 141-142)

, supported on the logical side by Tarski's 1933 theorem on the undefinability of truth.

LLMs can be understood as performative "language games" (Wittgenstein), that encourages a nuanced understanding of the ways in which language is used and interpreted in the context of artificial intelligence & natural language processing, but also in science worldview.

That's why we need to expand our current rationality by integrating an enactive, embodied and hermeneutical perspective of sciences and technologies of cognition, to rebalance the actual mismatch between knowing and doing, both implied in meaning and sense making.

Fin.

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