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[ Applying second-order thinking : "Deep Learning" techs ] 📖 ✍️

“Coding/programming” involves creating a relation/function between an input and an output, implementing a pre-designed behavior in the machine that can be automated.

ANN/PDP used in an associationist way (“Deep Learning”) does this “automatically”. This is why one of the first applications of LLMs is to automate programming, leading to \*exponential productivity\* of the Computer Tech Bros.

We are therefore now confronted not only with automatic computing machines (based on a technology that almost no one really understands), but with pseudo second-order computing machines: an apparent calculation of calculation (quasi-calculation<sup>2</sup>).

"Pseudo" second-order, because unlike living beings, the mechanic second order does not have the associated \*recursive dimension\* inherent to the living process,

in the same way that pseudo second-order cognitivist thinking lacks the ambijjective gesture (which is a reminder of this forgotten non-linear dimension of knowledge).

(cf. )

[https://x.com/ki\\_cog/status/1747216814294097971](https://x.com/ki_cog/status/1747216814294097971)

It is important to remember here that the work of (the forgotten) Church, in the \*Church-Turing thesis\*, was to define “calculation/computation” based on...

recursive functions! Which we quickly hastened to put under the carpet, a bit like creativity in science: it is only implicit and for “informed experts”.

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