

# Metathoughts

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## Abstract

I started this document on 10th of August 2016 because I wanted to write down meta-thoughts which formed during my PhD studies. These thoughts, which I termed metathoughts due to their nature, touch upon the very basic nature of computation, how it connects to reality, whether computation can produce consciousness, whether computation can produce intelligence, about the whole existence as a computational model (to achieve what?), about the whole existence as a simulation (to simulate what?), about the future of humankind in connection with its computation tools, the future of science and a new way of science. The intention of this document is mainly to give the thoughts a clearer structure, to refine and clarify them in the process of writing them down and to be able to share those thoughts and ideas.

"Thou shalt not make a machine in the likeness of a man's mind" -  
Dune (Book 1)

## 1 Philosophical thoughts on computation and existence

- What connects our view of computation to reality? Where does computation occur in reality? is our notion of computation even applicable to reality? what is computation? what is computation in nature? does computation even occur in nature? is reality discrete or continuous?
- I have the feeling that the way we regard computation works well for our very limited computer tools but has absolutely no connection to reality and that we must look at computation from a complete different approach to connect it to reality.
- The way we look at reality is not suitable to touch the most fundamental questions. We look at it separated from it. We must look inward ourselves, there we will find answers. This is contrary to existing scientific approaches. Thus a new way of scientific working has to be established.

The problem of existing science is that it piles up endless heaps of complexity which is tractable only for specialcases and leads to further distance and separation from reality.

- When we have conceived a new way of science and a new way of thinking of computation which has actually a connection to reality this will bring us closer to the concepts of "reality", "the creation", "self-consciousness", "existence", "truth" and "god".
- I believe the future of simulation is that at some point we will create our own creation to run simulations thus ascending to gods. Maybe this is what god is: an entity which created this creation (within a much bigger context/universe) with the intention of "simulating" "something". But what is it that is simulated? A few religions and tell about a cycle of creation and destruction, which would amount to running replications of the same simulation...
- calculating device (brain) and consciousness (soul) = true intelligence

## 2 New Kind of Science

TODO add table 4 in black swan book from position 5578

## 3 Cascading Simulations

At some point in the existence of a free-will intelligence, it starts to asking for the future. First using religion, then mathematics, then finally computer simulation. But the problem is that such a simulation is too weak to forecast the future because out of simple computation no free will is born. thus the solution of the free-will intelligence is to put itself in a simulation-environment as a seed of free will. this simulation will then play through every decision branches and thus be able to predict possible futures. because within such a simulation the same thing can AND WILL happen at some point, we arrive at cascading simulations within simulations. thus we are at one level of this cascade where our direct outer level is god.