The Physiology of the Noosphere: Segment 1

Francis Heylighen: For something to become conscious, it needs to circulate to what is called the global workspace in the brain. The brain consists of lots of modules that each are specialized in particular things, and normally information comes in. For example, you see something, it enters your visual cortex. It goes through several layers. It is interpreted. You recognize the thing that you saw, and you say, "Well, okay. That's a cat," and you know it's a cat. But all the intermediate stuff, so the pixels that enter your eye up to the conclusion, "This is a cat," it's a subconscious process. You cannot stop it. You cannot intervene with it.

But if now you want to start to think, "What should I do with that cat? Is that a wild cat? Should I approach it? Should I maybe check whether it's a cat of one of the neighbors?" Now you need to keep this concept of cats awhile in your working memory. That means you need to continue circulating in your brain while different other parts of your brain start examining it. So, that is the idea. That is, you need to keep something in working memory, and working memory in the brain is not at all trivial because the brain functions through neurons that get activated, and activation cannot stay in place. A neuron that gets activated passes on its activation to a next neuron to a next neuron to a next neuron. It doesn't remain activated.

If you want to keep something in your working memory, the activation needs to circulate. That means it needs to come back to the same place by going around and around in the brain. And while it's going around, it is what is called being broadcast. It means all these other parts of the brain can now examine it, can now add something, can take something away. It can say, "No, it's not going the right way. It should go this way." That is this phase of reflection or examination. And that is a phase I think which is especially relevant to the Noosphere.

That is, somebody has an idea, let's say a new theory about the origin of COVID, and then the idea starts circulating. That means it's passed on from person to person. It goes in different media, and then people can start examining it critically. And that is this phase of circulation and examination, which I think is essential for consciousness. If it's not being examined, it's not conscious.

It may be very creative, it may be very smart, but you just take the result as it comes. And you can't say, "Why did I come to this result?" Intuitively you have understood something. You've had a great idea, but why that intuition? What were the elements you used to come to that idea? You don't know. Consciousness is, one, you start examining it, and that requires that it creates some kind of a stability circulation that allows other parts of the brain to examine it.

David Sloan Wilson: Well, I mean, in a sense, I agree. I agree. In fact, if we want to cut to the bottom line and ask, "How do we solve the problems of our age such as COVID or any massive problem?" It has to be a very deliberative process of, in my terms, variation and selection. We have some target, which is stopping the COVID virus. We have to examine, "How are we going to do this?" That's variation that's in around the target. And then we have to replicate best practices and do that again and again and again.

So, that's a conscious process of evolution. As I would put it, and we need more of it. Much, much more of it. So actually, that's kind of the bottom line, as far as I'm concerned. I'm guessing we all agree about that? Was my little description something that you would also agree with as a conscious process of solving a problem such as COVID?

Shima Beigi: Yes. I think the bottom line, basically the moral of the story here, is that the world we live in right now is becoming more and more complex. And for it to be functioning at a level that we can call it sustainable will require a global kind of agreement on having critical thinking on the kinds of means or thought processes or ideas or ideologies that are being spread around. Especially right now that we live in the age of Internet and the web, being supported by the web.

So bringing more awareness and I think consciousness, not necessarily in the consciousness research meaning, that is becoming conscious of what we're putting out there or becoming more aware of the processes that are contributing to emergence of a phenomenon such as COVID-19, should become a general practice. That we should become more conscious of the need to have conscious thinking processes and conscious conversations. So this is something that I would like to add to how you summarized this conversation so far.

FH: I know this concept of conscious evolution, which is that instead of waiting until natural selection and variation for us decides what the next step of evolution is, that we start thinking about different possibilities and selecting for ourselves. So what we are proposing in our paper is kind of a subset of that. That is that we are looking at cultural evolution or mimetic evolution in the Noosphere, because ideas evolve in the Noosphere, and that we want to intervene in that evolution by finding some way to promote what we call the healthy ideas, the healthy thoughts, and to suppress, or at least make it less likely, that the unhealthy thoughts would spread.

So the typical example we gave of the unhealthy thoughts are all these kinds of conspiracy theories that tell you that you should not under any circumstance be vaccinated because the vaccines contain chips or are dangerous or whatever. Or the healthy form of thinking is a kind of scientific thinking where you have certain hypotheses of what will cause the virus. You test the hypotheses. And if it turns out that the hypothesis is correct, then you implement the policy.

So it is conscious evolution, but conscious evolution at the level of the meme. So at the level of the ideas that circulate in the Noosphere. To do that, we need to become more conscious of how these ideas are being propagated. What makes it that an idea will become popular, will spread in the Noosphere, and why an idea may not spread even though it would be a good idea.