

Abstract

The article discusses the thesis about the genesis of consciousness posed by Terenc McKenna. It also shows how, in the light of the results of modern research in medicine, biochemistry and mathematics, this thesis can be tested empirically.

Keywords

T. McKenna, psilocibina, genesis of consciousness

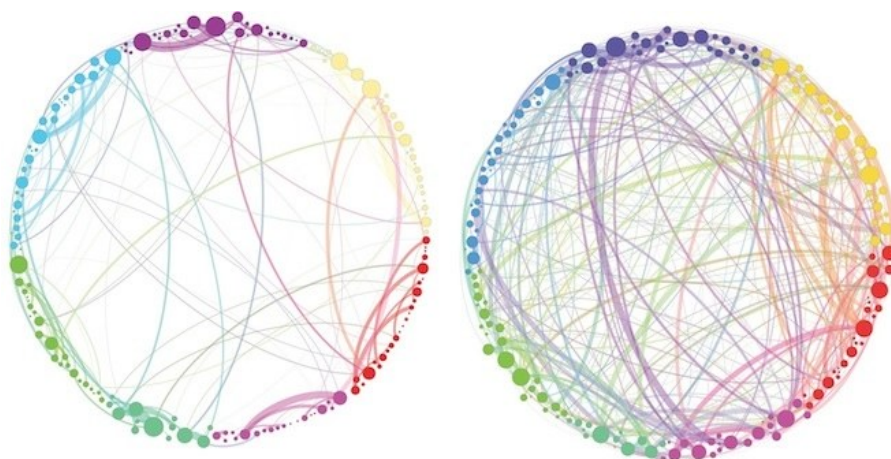
Genesis of consciousness and the possibility of empirical confirmation of the thesis¹

Life (or "game of life" or "time of the world") is a child playing with spreading cubes: children is the kingdom of this world, one and the same world of universe did not create any of the gods, nor any of the people, but he was, he is and it will be an eternally living fire, burning according to measure and going out.
Heraklit

About 12,000 years ago, further climate changes slowly removed hallucinogenic mushrooms from the diet of our ancestors, causing a series of profound changes in our species, for example a return to pre-fungal, brutal social structure that has been previously modified and / or stopped by frequent consumption of psilocybin.

Terence McKenna

Preliminary



Communication between brain networks in the right psilocybin (right) or a non-psychedelic compound (left) .PETRI ET AL./PROCEEDINGS OF THE ROYAL SOCIETY INTERFACE

In recent years, research into the structures and activities of various areas of the brain has given way to research on neurological networks: how cells and individual regions of the brain interact with consciousness shaped not by a given set of areas of the brain, but by interaction. Understanding the operation of such networks is not an easy task, but scientists are developing more sophisticated ways of characterizing them. One of these approaches has been described in Proceedings of the Royal Society's Interface Study, which concerns not only networks, but networks. (Petri, Expert et al. 2014)

Perhaps some aspects of consciousness arise from such meta-networks. To investigate this thesis, the researchers analyzed fMRI scans of 15 subjects after injecting psilocybin, the active ingredient of magic mushrooms, and compared them with scans their brain activity after receiving a placebo. The study of psychedelia was not a direct goal of the experiment. On the contrary, psilocybin creates the perfect test system: it is a way of changing consciousness. It should be noted, however, that Psilocybin (4-PO-DMT) - an organic

¹ The inspiration for this article was a short entry by Brandon Keim on Wired: SCIENCE GRAPHIC OF THE WEEK: HOW MAGIC MUSHROOMS REARRANGE YOUR BRAIN - <https://www.wired.com/2014/10/magic-mushroom-brain/>.

chemical compound from the tryptamine group, an alkaloid with psychedelic properties that occurs naturally in hundreds of psilocybin mushroom species, including in *Psilocybe cubensis* and *Psilocybe semilanceata* is on the list of illegal psychoactive substances in most countries. Despite the fact that in recent years there have been many studies indicating, among others, that psilocybin is a wonderful anti-depressant.

For example, in 2011, an experiment was conducted at Hopkins University in the US, where healthy volunteers were given psilocybin. This resulted in a significant improvement in the perception of reality by the respondents, and thus, in the improvement of the standard of living. Similar studies were conducted at the University of Tübingen. Fryderyk Schiller by Dirk Hoffmeister. Together with his two colleagues, Felix Blei and Janis Frick, they spent several months working on the biotechnology production of psilocybin. Finally, in August 2017, a team of researchers reported in the journal "Angewandte Chemie" that he actually found four genes that could be used to produce psilocybin in the laboratory. (Hoffmeister et al. 2004, 2007, 2011)

Current studies clearly show that even a single dose of psilocybin helps in depression over a period of several weeks, treats anxiety disorders, and probably also addictions and obsessive-compulsive disorders. Psilocybin restricts the activity of certain brain structures, such as the amygdala, which is considered the center of human anxiety. This has recently been demonstrated by a study at Imperial College London. The patients felt like their brains were restarted, says Robin Carhart-Harris, head of the study. Psilocybin, which is transformed in the body in psilobin, reminiscent of the hormone of happiness - serotonin, it seems not only to alleviate symptoms, but also causes long-term changes in the brain, changing the habits of thought and behavior. (Carhart-Harris et al. 2012, 2013, 2016) G.

Petri states: There are many things happening in a normal brain. You do not know what is going on or what is responsible for it. So you're trying to disrupt the state of consciousness a little and see what happens. Representation of such changes is visible in the graphic above. Each circle presents relationships between networks - dots and colors do not correspond to areas of the brain, but particularly rich in connection networks: with the brains in the normal state on the left and brains under the influence of psilocybin on the right. Expressing this in mathematical terms, Petri concluded that normal brains have a well-ordered correlation state. There are not many connections between networks. It changes after a dose of psilocybin. Suddenly networks cross each other like crazy, but not in a random way. There are new ways to organize your connections. (Petri, Expert et al. 2014)

Paul Expert from King's College London, says: We can speculate on the implications of such an organization. One of the possible side products of this greater communication throughout the brain is the phenomenon of synaesthesia. Synesthesia is an experience common to psychedelic experiences, overlapping sensations coming from different senses: tasting colors, feeling sounds, seeing odors, and so on. Petri notes that the above description is still just a simplified abstraction. The results of the analysis have been mapped on a circular, two-dimensional scheme. Expert believes that a more adequate way to visualize it should be three-dimensional, with connections between networks forming spongy / sponge-like / topography. However, this way of interpretation goes beyond the tools and methods that mathematics currently has. Researchers hope to refine their methods in future research and to follow the changes taking place networks in longer periods of time and using different types of medicines. "The most important problem in neurobiology is where awareness comes from," said Petri. And he added: "We do not know." Petri, Expert et al. 2014)

Although in principle the answer is above.

Terence McKenna

Terence McKenna was a writer, philosopher and ethnobotanist. He is a little known figure, and if he is already the author of numerous pseudoscientific theories: the origin theory of species and novel theory (Novelty theory), which assumes that time is a fractal wave with an increasing rate of discoveries that will cumulate rapidly in 2012. His concept is closely related to the combination of psychedelics, the philosophy of Gajanism and shamanism.

The most interesting is his concept of the origin of the human mind and culture. McKenna thought that at the time when the North African jungle was shrinking at the end of the last ice age, giving way to grasslands, the indigenous tribes of our primitive ancestors left branches and moved their homes to open spaces. Among the new products that constitute their diet, McKenna pointed to psilocybin-containing fungi growing among the droppings of grazing hoofed animals there. Psilocybin, which in small doses leads to increase the visual activity, in a little more it causes physical sexual arousal, and in high doses hallucinations

and glosolalia. According to McKenna, it was psilocybin that gave the evolutionary advantage to the tribes that use this diet. The changes caused by the introduction of this substance into the primate diet were many, for example synesthesia (smudging the boundaries between the senses) caused by psilocybin led to the development of spoken language: the ability to form vocal sounds of images in the minds of listeners. About 12,000 years ago, further climate changes slowly removed hallucinogenic mushrooms from the diet of our ancestors, causing a series of profound changes in our species, for example a return to pre-fungal, brutal social structure that has been previously modified and / or stopped by frequent consumption of psilocybin. (McKenna 2007: 285) By eliminating psilocybin from our diet, we have become susceptible to all sorts of neuroses. We've got suspicious towards each other and the world, which in turn made us almost psychotic rulers of the planet, ready to destroy it with the help of toxic waste of scientific industrialism. (McKenna 1995)

Arthur Koestler writes: Nature has given us a basket. God went on vacation. Our time is slowly running to the end. Believing that it is possible to search for ways of salvation in the laboratory may seem stupid and naive, but we are not alone in it, we follow Jung's trail. It reflects the ancient dream of alchemists about the elixir vitae. However, unlike alchemists, we do not expect him to live eternally or transform metals into gold, only to transform homo maniacus into homo sapiens. All this will be possible when a man finally decides to take matters into his own hands. (Koestler 1967: 339)

Experiment

We include a randomly selected group of chimpanzees psilocybin into the diet. Of course, significant effects can be expected after many years. But some partial effects should be noticeable after a year.

Other interesting effects may be assumed.

If a randomly selected group of volunteers, eg people suffering from depression, are included in the diet, you can expect very interesting effects after only a few months. For example:

- a significant improvement in mood,
-
- increased creativity and non-standard ideas,
-
- a significant reduction in aggressive behavior,
-
- an increase in empathic behavior and others.

Therefore, when psilocybin is included in large communities, one should expect a completely new community organization: satisfied with life, creative, non-aggressive, empathic, etc.

For the first time in history, this creates the opportunity to do something that has always seemed like a utopia.

Theoretical prediction

Theoretical considerations concerning the development of artificial intelligence and certain consequences associated with it are carried out. Among other things, it points to the possibility of dependence of humanity on intelligent machines. With more pessimistic scenarios it is said that people will become slaves machines, like in the Matrix. Even if that happened, intelligent machines would take care of providing us with the best possible existence. Artificial intelligence with such possibilities would have to be a model of rationality. But he would have only very high operational intelligence. If the thesis of McKenna's Subject of the genesis of consciousness would be confirmed empirically, it would also mean that intelligent machines are not able to reach consciousness, and thus they would not have emotional intelligence. They could not hate. That is why we would never become their slaves. But they could not sympathize or love. They would not have any feelings about people. But because it would be pure intelligence, that knowledge and its development would be an end in itself for them. Not only their own development, but also an attempt to discover the secret of human consciousness. And an attempt to discover why people love, feel joy, but also sadness. Maybe it would be the main one cognitive problem of super-intelligent machines. Therefore, regardless of the situation, they would look after us and try to provide us with the best possible existence not only in the species dimension, but also in the individual dimension. Our individual diversity and individual uniqueness and uni-

queness would be an extremely important theoretical problem for machines. That's why they would look after us in all possible ways. If they could feel, they would envy our emotional and emotional life.

The effect

Brave new world.

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