

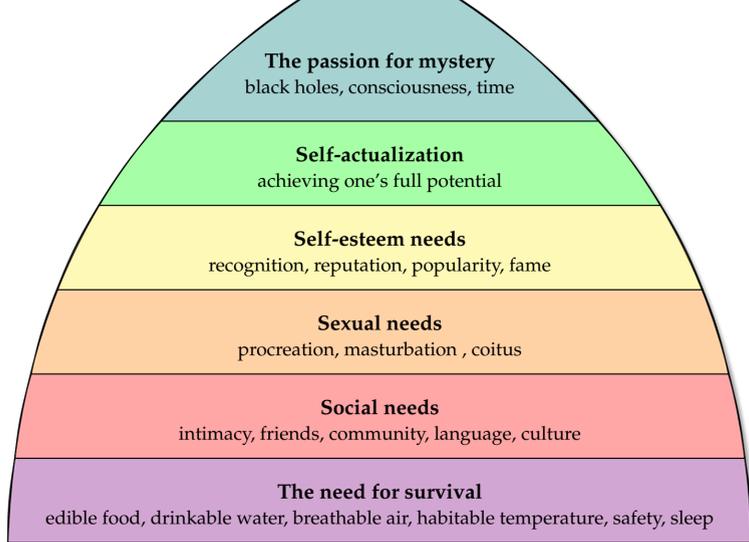
# MAGIC MUSHROOMS AND THE PASSION FOR MYSTERY

Published at: <http://www.archania.org>

July 24, 2017

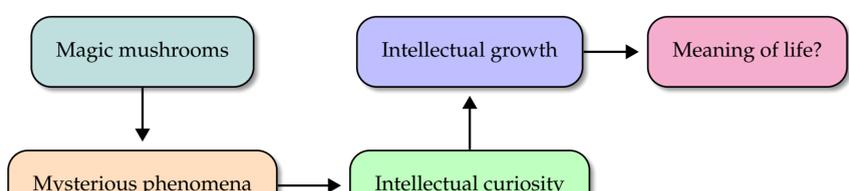


Research has shown that children are much more curious about phenomena that appear inconsistent and ambiguous to their prior knowledge, than about phenomena that appear consistent with their prior knowledge<sup>[1]</sup>. You can read more about this in **this article**. Adults generally also seem to be more curious about mysterious phenomena, than about dry facts. Many adults are for example interested in black holes, which are highly mysterious celestial bodies. People are often also interested in other mysteries; such as how/ or if consciousness arises from the brain, how photons can behave both like particles and waves, how time changes according to the theory of relativity, and why the universe had a lower entropy in the past. However, people are not necessarily interested in mysterious phenomena, unless their more basic needs are met. Therefore, the passion for mystery could be depicted as laying on top of the other layers in a modified version of Maslow's hierarchy of needs.



**Figure 1:** Modified version Maslow's hierarchy of needs, where physiological needs and safety needs are combined in the need for survival. A new category for sexual needs is added above social needs, and a new category for the passion for mystery is added above self-actualization. The lower levels of the pointed arch need to be at least partially satisfied before we get eager to fulfill the higher levels.

Magic mushrooms tend to make everything appear more mysterious<sup>[2]</sup>. They might therefore also make us more curious about everything. A study from 2011 at John Hopkins Medical Institutions also found magic mushrooms to increase the personality trait known as openness to experience<sup>[3]</sup>, and one of the facets of this trait is intellectual curiosity. By making everything appear more mysterious and thereby fostering intellectual curiosity, they might also restore a sense of purpose to individuals that feel like life is without any meaning or purpose.

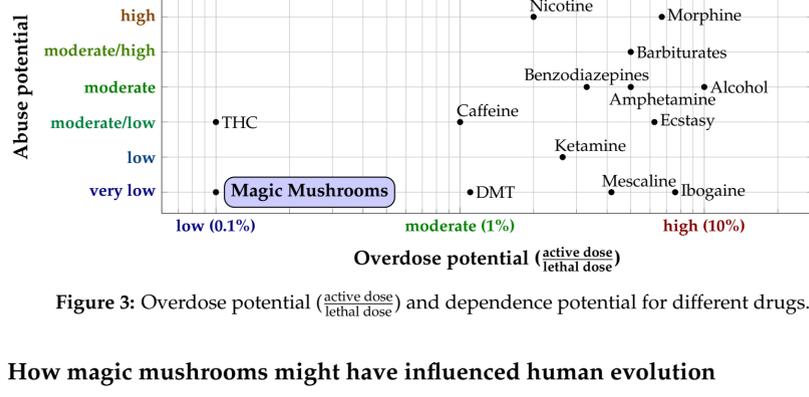


**Figure 2:** Magic mushrooms tend to make everything appear more mysterious<sup>[2]</sup>. Mysterious phenomena seem to be one of the things we are most curious about<sup>[1]</sup>. Curiosity motivates us to find explanations, which again facilitates intellectual growth. Could this be the meaning of life?

We have made great technological advances the last centuries, but many people also feel that our society has lost a sense of purpose. Life shouldn't just be about working during the day and watch television during the evening, or about drinking alcoholic beverages that promote superficiality in the weekends. Such a life seems completely empty to me. A sense of purpose might be restored to our society with increased consumption of magic mushrooms. Most people don't get bad trips when they eat magic mushrooms, they get enlightening spiritual experiences. You are however well advised to use magic mushrooms in surroundings you feel comfortable in, as people tend to connect to their surroundings on a much deeper level when under the influence of psilocybin. In the Marsh Chapel Experiment at Harvard University<sup>[2]</sup>, almost all of the students that participated in the experiment and were given psilocybin reported profound religious experiences. The goal of the experiment was to see if psilocybin could facilitate religious experiences in religiously predisposed individuals.

## Abuse potential and toxicity of magic mushrooms

Magic mushrooms are approximately a hundred times less toxic than alcoholic beverages<sup>[4]</sup> and they have a much lower potential for abuse<sup>[5][6]</sup> (Figure 3). So it doesn't make much sense that magic mushrooms currently are illegal in most countries while alcoholic beverages are legal.



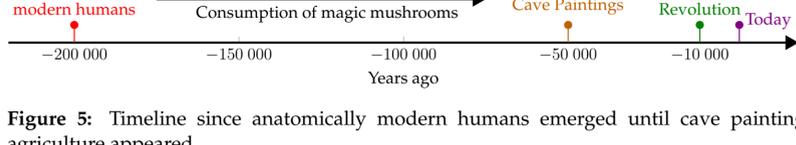
**Figure 3:** Overdose potential ( $\frac{\text{active dose}}{\text{lethal dose}}$ ) and dependence potential for different drugs.

## How magic mushrooms might have influenced earliest evolution



**Figure 4:** How our evolution might have occurred under the umbrella of magic mushrooms.

The first proof of an abstract and symbolic language can be found in cave paintings that are approximately 50 000 years old<sup>[7]</sup>, but anatomically modern humans appeared about 200 000 years ago<sup>[8]</sup>. So the development of our abstract and symbolic language might have been proceeding during the first 150 000 years of our history, from the emergence of anatomically modern humans 200 000 years ago until the appearance of cave painting 50 000 years ago (Figure 5).

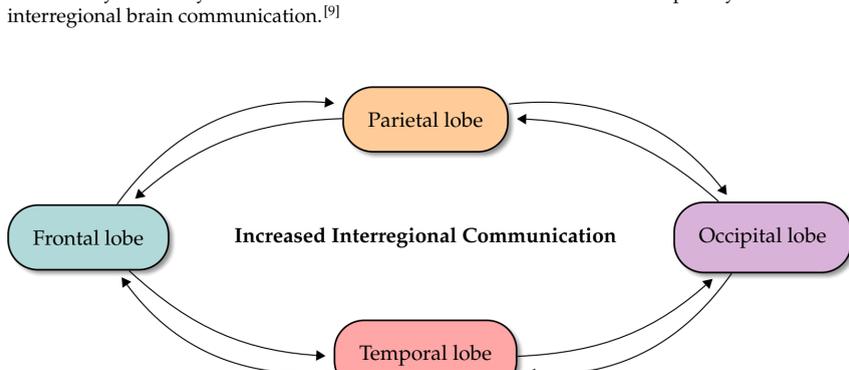


**Figure 5:** Timeline since anatomically modern humans emerged until cave paintings and agriculture appeared.

Anything we eat regularly can affect our health, and therefore also possibly the long-term evolution of our species. A high intake of omega 3 fatty acids, antioxidants, and slowly digestible starches has been linked to many health benefits, while a high intake of trans fats and easily digestible starches has been linked to many health impairments. If there was a slightly higher survival rate for the individuals eating magic mushrooms, it is enough to have influenced the genes and epigenetic structures within the human gene pool.

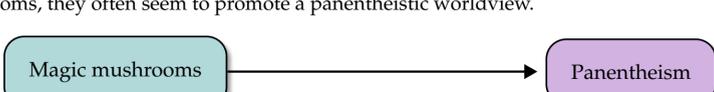
## Occasional increases in interregional brain communication

Increased levels of lingual abstraction might have arisen from temporarily increased neural communication between distinct parts of the brain that normally do not talk to each other. While a permanent increase in such interregional brain communication probably disrupts the proper functioning of the brain, occasional increases might have introduced our language to new metaphors and analogies. These occasional increases in interregional brain communication might have come from consumption of magic mushrooms as individuals under the influence of magic mushrooms often report synesthetic experiences which can be correlated with increased interregional communication between distinct parts of the brain. A study published by Journal of the Royal Society Interface in 2014 also seems to confirm that psilocybin increases interregional brain communication.<sup>[9]</sup>



**Figure 6:** How magic mushrooms seem to increase interregional communication in the brain.

Perhaps due to the increased interregional brain communication facilitated by magic mushrooms, they often seem to promote a pantheistic worldview.



**Figure 7:** How magic mushrooms often seem to promote a pantheistic worldview

## A higher diversity of tribe members increases tribe survivability

Due to occasional increases in interregional brain communication (Figure 6), human tribes that consumed magic mushrooms regularly might have had more diverse thinking than tribes that didn't consume magic mushrooms. According to the diversity prediction theorem by Scott E. Page, groups with a high level of diversity are better at predicting than groups with a low level of diversity (Figure 8).

$$(C - X)^2 = \frac{1}{n} \left[ \sum_{i=1}^n (x_i - X)^2 \right] - \frac{1}{n} \left[ \sum_{i=1}^n (x_i - C)^2 \right]$$

The crowd's square error = The mean square error - The diversity of the crowd

**Figure 8:** The diversity prediction theorem, by Scott E. Page at the University of Michigan. A more detailed explanation of the theorem can be found here ([PDF](#), [HTML](#)).<sup>[10]</sup>

So if tribes that consumed magic mushrooms had more diverse thinking, those tribes should also have had a higher survivability. And then it seems likely that we have evolved in a close symbiosis with magic mushrooms. Mushroom spores are extremely resilient, and might be able to survive the extreme conditions of outer space, especially if kept within layers of rock in a meteoroid. Is it an interesting hypothesis that magic mushrooms might have originated on a different world, and have been purposely spread across the galaxy to promote sentience.

## Bibliography

- [1] C. H. Legare, S. A. Gelman, and H. M. Wellman, "Inconsistency with prior knowledge triggers children's causal explanatory reasoning," *Child Development*, vol. 81, pp. 929–944, may 2010.
- [2] W. N. Pahnke *The International Journal of Parapsychology*, vol. 8, pp. 295–3113, 1955.
- [3] K. A. MacLean, M. W. Johnson, and R. R. Griffiths *Journal of Psychopharmacology*, vol. 25, pp. 1453–1461.
- [4] R. Gable, "The toxicity of recreational drugs." <http://www.americanscientist.org/issues/pub/the-toxicity-of-recreational-drugs/1>, 2006.
- [5] D. J. e. a. Nutt, "Drug harms in the uk: a multicriteria decision analysis," *The Lancet*, vol. 376, pp. 1558–1565, 2010.
- [6] UK Science and Technology Select Committee, "Drug classification: making a hash of it?." <http://www.publications.parliament.uk/pa/cm200506/cmsselect/cmsctech/1031/1031.pdf>, 2006.
- [7] R. G. Klein, "Anatomy, behavior, and modern human origins," *Journal of World Prehistory*, vol. 9, no. 2, pp. 167–198, 1995.
- [8] J. L. Bradshaw, *Human evolution: A neuropsychological perspective*. Psychology Press; 1 edition, 1998.
- [9] G. Petri, P. Expert, F. Turkheimer, R. Carhart-Harris, D. Nutt, P. J. Hellyer, and F. Vaccarino, "Homological scaffolds of brain functional networks," *Journal of Royal Society*, vol. 11, 2014.
- [10] S. E. Page, "Where diversity comes from and why it matters?," *European Journal of Social Psychology*, vol. 44, p. 267–279, 2014.