

## Religion as a Remedy to Reduce Anxiety? A Cognitive Study of Religion

## Daniela Kurečková

Psychologický ústav FFMU, Brno info@psychologon.cz

The original version of this article is available on: <u>http://psychologon.cz/component/content/</u> <u>article/14-psycholog-online/266-nabozenstvo-ako-liek-na-znizenie-anxiety-kognitivny-</u> <u>vyskum-nabozenstva</u>

The term "religion" and its definition are areas in which scholars cannot see eye to eye. To clearly explain what the word religion means and at the same time not to leave out any of its forms is no piece of cake and not only for laymen. However, cognitive scholars have set out to find the cause for the presence of religious behaviour in people. They see it in the presence of anxiety which can be inhibited and reduced through ritualistic activities.

## What Are We Afraid Of?

If each of us tried to name at least three things that they are terrified of, scared of or afraid of, we would realize that it is not that difficult. The life is full of threats and potential danger which can threaten us or those who are close to us. Another point of interest when evaluating our fears would be the fact that the areas in which we are afraid of something are largely the same as the areas of others. Scholars think that it might relate to the development of humankind during evolution. If we suppose that people are a result of evolutional development, then the same is true about their cognitive equipment.

web: www.psychologon.cz tel.: +420 549 497 794 e-mail: info@psychologon.cz ISSN: 1805-7160 Psychologický ústav Filozofické fakulty Masarykovy univerzity Ame Nováka 1 602 00 Bmo Česká republika



First of all it, it is beneficial to clarify what the fears in question are. When we are in a stressful situation and sense danger (for example, the presence of a predator, or a fast driving car while our child is on the road), we react through a system specialising in specific present threats: the mechanism often called "flight, freeze or fight" (Eilam, 2005) activates. That means attacking, running away or being unable to react in any way.

However, it is different if our fear is omnipresent. To experience fear, we need to have a visible source of fear which even does not have to be real for a short period of time. It is enough to imagine that our fear could potentially become real. Nonetheless, we cannot simply mark these fears as unfounded. We see many people in real life who experienced exactly what we are afraid of. That is why our fears are certain reminders of various threats that lead us to caution. And so we are afraid even if there is no real reason for that. Just to make sure. As a precaution. Sometimes, the fears connected to the possible presence of a threat are called anxiety, unlike the immediate threats which evoke fear (Stein & Nesse, 2011). Among these fears might be the fear of a lack of money in the future or the fear of death or illness.

Despite the fact that we only seldom realize these thoughts evoking anxiety, scholars suppose that there is a kind of "precaution system" in our brain which unifies all of them (Boyer & Liénard, 2006). This system is considered to be highly specific and reacts only to specific impulses. That is why it is difficult to generally describe it. It reacts, for instance, very sensitively to the possibility of body infection or intoxication (think about how people emphasise health or hygiene or of the aversion they feel towards the presence of a person with an open wound). On the other hand, it is resistant to the cigarette smell (Boyer & Liénard, 2006). Today, experts agree on some main areas which the human precaution system reacts to. Among them are especially the loss of social status, the possible presence of a predator, pollution or contamination and violence in general (Boyer & Bergstrom, 2011). Again, it is necessary to mention that the system is specific even within the respective areas.

web: www.psychologon.cz tel.: +420 549 497 794 e-mail: info@psychologon.cz ISSN: 1805-7160 Psychologický ústav Filozofické fakulty Masarykovy univerzity Ame Nováka 1 602 00 Bmo Česká reoublika



What Does Religion Have to Do with It?

Typical of the obsessive-compulsive disorder (OCD) are the persistent thoughts about possible threats or danger (actually, it is often pollution) and the subsequent compulsion to behave in a stereotypical ritualised way, which decreases the anxiety connected to the danger (e.g. washing hands) (Boyer & Liénard, 2006). Pathological behaviour in people with the OCD therefore includes anxiety and also subsequent performing of a ritual. This fact, together with various pieces of evidence based on the knowledge of evolutionary psychology and cognitive science, helped to start considering the possible connection between the religious ritualization and the abovementioned precaution system. Does it mean that we perform a ritualized activity to reduce the subconscious anxiety connected to possible danger?

Even though this formulation seems reductive, it includes, in brief, one of the modern religion theories. We can see the expected structure of how the precaution system works in people with OCD and in people without a disease in the graph (Boyer & Liénard, 2006). The only difference is that the compulsion stops and anxiety reduces after the performance in people without OCD. That does not happen in people with OCD and a repeated performance occurs.

This is also what cognitive research of religion might look like – scholars look for its connections to the structures and functions of the human cognitive equipment. They assume that religious behaviour is a kind of by-product of human cognitive equipment which is the result of natural selection. As the pioneer in this theory, Pascal Boyer, states: the humankind does not have gods make society function; we have them because we have the mental equipment which makes society possible (Boyer, 2002). The result of these mental structures is the situation that people like participating in rituals and orientating towards religious types of behaviour.

[http://psychologon.cz/data/obrazky/266-nabozenstvo-ako-liek-na-znizenie-anxiety-kognitivny-vyskum-nabozenstva/266\_1.png]

web: www.psychologon.cz tel.: +420 549 497 794 e-mail: info@psychologon.cz ISSN: 1805-7160 Psychologický ústav Filozofické fakulty Masarykovy univerzity Ame Nováka 1 602 00 Bmo Česká reoublika



The question remains, whether it is possible to examine a concept as complex as religion in this way. Can we rely on data obtained from the brain when researching these "spiritual" phenomena? Is every laboratory experiment not simply a reduced source of information which does not tell us much about how things work in reality? It is not easy to find answers to these questions. However, the truth is we will hear about cognitive research of religion in the future.

Translation: Patrik Míša (pmisa@phil.muni.cz)

web: www.psychologon.cz tel.: +420 549 497 794 e-mail: info@psychologon.cz ISSN: 1805-7160 Psychologický ústav Filozofické fakulty Masarykovy univerzity

Ame Nováka 1 602 00 Bmo Česká republika



## Sources

- Boyer, P. (2002). Religion explained: The Human Instincts that Fashion Gods, Spirits and Ancestors. London: Vintage Books.
- Boyer, P., & Liénard, P. (2006). Why ritualized behavior? Precaution Systems and action parsing in developmental, pathological and cultural rituals. Behavioral and Brain Science 29, 595-650. [accessed 12.10.2013] doi: http:// dx.doi.org/10.1017/S0140525X06009332
- Boyer, P., & Bergstrom, B. (2011). Threat-detection in child development: An evolutionary perspective. Neuroscience and Biobehavioral Reviews 35, 1034–1041. [online] doi: http://dx.doi.org/10.1016/j.neubiorev.2010.08.010
- Eilam, D. (2005). Die hard: A blend of freezing and fleeing as a dynamic defense implications for the control of defensive behavior. Neuroscience and Biobehavioral Reviews 29,1181–1191. [online] doi: http://dx.doi.org/10.1016/ j.neubiorev.2005.03.027
- Stein, D. J., & Nesse, R. M. (2011). Threat detection, precautionary responses, and anxiety disorders. Neuroscience & Biobehavioral Reviews, Vol. 35, Issue 4, 1075–1079. [online] doi: http://dx.doi.org/10.1016/j.neubiorev.2010.11.012

**Picture source** 

1. <u>http://kenanmalik.wordpress.com/2013/08/15/religion-is-not-what-it-used-to-be/</u>