the mainstream of philosophy of religion as the mainstream in analytical philosophy is anti-Wittgensteinian (pp. 189-211). Against this sceptical denial of Wittgenstein, Fronda tries to show again that there are already important theological roots for Wittgenstein's thinking in medieval philosophy – especially in the platonic line of thinking. In this tradition God is conceived as ontologically, epistemologically and semantically transcendent (p. 204). Although this tradition obviously exists in Christianity, I wonder whether the wholly-otherness of God really is a very convincing approach to theology. It seems to me that especially the later Wittgenstein also offers other ways for theology, and Fronda does not choose the most convincing one. Thus, Fronda's last defence of Wittgenstein in his concluding remarks (pp. 213-229) certainly is a legitimate and possible interpretation of Wittgenstein - considering especially the work of the early Wittgenstein. But whether there is no alternative to the idea that Wittgenstein's point of view is the point of view of apophatic theology seems to be highly doubtable, in my opinion, in medieval thinking.

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Neil Spurway (ed.), *Theology, Evolution and the Mind*. Cambridge Scholars Publishing, 2009.

Theology, Evolution and the Mind (henceforth TEM) is an edited volume that contains the papers presented in the conference of the *Science and Religion Forum* in Canterbury in 2007. The volume tackles highly topical and controversial issues in theology and science: the nature of biological evolution and its theological implications, theological anthropology in the context of human evolution and the nature of human minds and brains. These issues are crucial for science, philosophy and theology, and deserve extensive, rigorous and critical treatment. Unfortunately, this is what the volume, for the most part, cannot offer. The book is all too short to deal extensively with the issues it raises. Further, the articles are very uneven with respect to scope and the level of argumentation, and lack much needed philosophical rigor. But perhaps the value of an edited volume does not lie in its coherence and length only, but in the strength of the

individual contributions therein. Here, TEM holds little surprises: there are some interesting exchanges and ideas, but hardly any innovations.

The first exchange of the book is between the cognitive archeologist Steven Mithen and theologian Celia Deane-Drummond. In his paper *The Prehistory of the Religious Mind*, Steven Mithen briefly goes through his theory of the emergence of culture and language. According to him, the religious mind emerges when both culture and mind emerge in human history. Early hominids, such as *Homo ergaster* and *Homo neanderthalensis*, did not have religion or culture in the same sense that later *Homo sapiens* had. The crucial difference between *Homo sapiens* and its ancestors is that *Homo sapiens* evolved towards larger group sizes. This also led to the development of a more sophisticated cognitive architecture and theory of mind. It was the theory of mind in conjunction with what Mithen calls *cognitive fluidity* that made religion, culture and language possible.

One of Mithen's arguments deserves some criticism here. He himself puts the argument like this. It is a fact, Mithen notes, that religiosity is a pervasive and ubiquitous feature of human societies. This fact can be explained in two different ways. According to the first, there exists a supernatural realm inhabited by a supernatural agent (or agents) that has the power to act in the natural world or even create it. If this explanation is true, then religion is not natural, but supernatural and God(s) exists. But there is an alternative: what if the pervasiveness of religiosity is just due to the fact that the human mind is prone to believe in the supernatural and "on-going activity of the universe and life are explained by entirely natural processes" (p. 11)?

What we have here is a very typical evolutionary debunking argument of religion. If it is the case that religion has natural origins, that is, its emergence can be explained naturalistically, there is no good reason to believe in the supernatural. In her response *Whence Comes Religion*, Celia Deane-Drummond points out the shortcomings of this naïve opposition. First of all, it might be the case (as far as we know) that God exists, but does not interfere with the emergence of religion in any way detectable by science. Second, the fact that the theory of mind and cognitive fluidity are necessary for religion does not mean that they are sufficient and causally explain all forms of religious action and thought. Given that many contemporary theologians tend to accept, for the most part, that human beings and their brains have indeed evolved and were not created by God in a single creative act, Mithen's argument does not have force against them. One point that Deane-Drummond does not mention but could be made here is that even if it is the case that all religions everywhere are completely natural and we could know this, we could still have other evidence to support, say, theism. A theist could argue, e.g., that the existence of the universe and the fine-tuning of its constants make theism at least as probable as naturalism. Finally, Deane-Drummond also points out that there are viable scientific criticisms of evolutionary psychology.

Lluis Oviedo provides a wider perspective by describing the diversity of contemporary approaches to the evolution of religion. He points out that Mithen's theory is only one theory in a family of theories. *Commitment theories* aim to explain the evolution of religion in terms of its adaptive benefits to individuals by enhancing cooperation in human groups. *Cognitive theories*, such as Mithen's theory, explain religion as a by-product of mental systems that evolved for some non-religious purpose. Finally, Oviedo also argues (*pace* Mithen) that contemporary naturalistic study of religion is much impaired by its disregard of conscious thinking, religious emotions and religious experience.

Another interesting exchange in TEM is between Neil Spurway and his commentator Derek Stanesby. In his paper *What Can Evolved Minds Know of God*, Spurway argues that since our brains are a product of natural selection, we cannot have any confidence in their ability to acquire knowledge about God (or anything else metaphysical or ultimate). Spurway claims that our mental mechanisms and their outputs (concepts and beliefs) have been selected for in our natural history. Only the fact that they have been selected for makes them trustworthy as sources of knowledge about the world. But they have not been selected for in order to produce beliefs about religion, metaphysics or anything else that goes beyond everyday human environment. In other words, our cognitive systems are not designed to produce knowledge about worlds beyond our everyday world (e.g., the world of ideas and abstractions beyond time and space). From this Spurway draws the conclusion that our minds are incapable of gaining knowledge in these domains.

I am not sure whether Spurway realizes the consequences of his argument. If the argument goes through, there is no trusting any concept or belief that goes beyond our everyday interest in survival and sex. This would rule out at least some scientific beliefs, not to mention most ethical, aesthetic and philosophical beliefs. This point is also made by his respondent Derek Stanesby, according to whom "it is one thing 'to urge a strenuous opposition to dogmatism in any form – fundamentalist or hierarchical' but entirely other to demand the elimination of all metaphysical conjectures and attempts to understand the world in theological terms. The rejection of anything that goes beyond science (meta physics) places us in the unimaginable bleak world of logical positivism and scientism" (p. 102).

Furthermore, Spurway's argument seems to make a questionable jump from the fact that our brains have evolved to the conclusion that our minds cannot have access to information that our brains did not evolve to process. Why should we believe this? And further, how does Spurway know this, if it is the case that his mind (as well as ours) cannot gain knowledge beyond our everyday world. If one wants to defend the possibility of achieving metaphysical or religious knowledge, it is enough that concepts and beliefs about such matters are to some extent similar to our everyday concepts and beliefs. Spurway has not in any way shown that the contrary is the case. Finally, Stanesby also points out how Spurway fatally confuses our concepts as a product of culture and our brains as a product of natural selection. The brain has indeed evolved, but the concepts that we use to carve up the world are mostly culturally formed. So the fact that our brains evolved to process information of a certain type does not entail that we cannot form concepts that are based on other types of information.

It seems to me that the debate between Spurway and Stanesby is mostly grounded in confusions created by what they call *evolutionary epistemology*. As most contemporary analytic philosophers have left evolutionary epistemology behind anyway, this debate gives all the more reason to look elsewhere for viable epistemological frameworks. This is, of course, not to say that the fact that our brains have evolved should have no impact in epistemology, but rather that the attempt to create a Darwinian epistemology (e.g., Peter Munz) in which the truth (or falsity) of our beliefs is somehow guaranteed by their adaptive value (or the lack of it) should be considered as a failure.

In his paper *Are We Ghosts or Machines?* Roger Trigg explores the evolution of the mind and the constraints that it presents to our view of humans. Given the fact that most contributions in TEM attempt to make theological content compatible with naturalism as far as possible, it is surprising that Trigg defends the idea that we humans consist at least partly of a non-physical soul. Trigg argues that only mind/body dualism is able do justice to our experience of ourselves as having unitary selves

and the multi-faceted reality surrounding us. He goes on to claim that the notions of God and afterlife are much more difficult to understand if some sort of materialism or physicalism is accepted. As far as theism is concerned, God will remain as a spiritual being that cannot be reduced to anything physical or immanent. Trigg maintains that attempts to combine theism with mind/body physicalism face considerable difficulties, one of these being the philosophical instability of non-reductive versions of physicalism and another being ontological parsimony. Trigg approvingly quotes Charles Taliaferro, according to whom "a theistic outlook will provide a fuller model of explanation in which the natural emergence of the mental from the physical, and indeed the very constitution and powers of the physical world itself, is seen as stemming, from a deeper, underlying cause" (p. 117).

In her response to Trigg's paper, Anne Runehov criticizes Trigg for setting up false dualisms between mind and body as well as God and world. Her own view as that the universe does not consist of two types "stuff", but is instead a nested hierarchy of increasingly complex parts and wholes. This includes both human selves and God. Runehov, therefore, seems to adhere to a view that could be classified as some kind of nonreductive physicalism combined with panentheism. In non-reductive materialism, the self consists of the physical operations of the brain but is not identical with them. Human selves emerge from the complex interactions between our environment and brains. Furthermore, selves, although composed of physical interactions, are highly complex entities that are not reducible to their parts. This assumption, she claims, is supported by neuroscience whereas dualism is not. But this is just what Trigg criticized in his paper; according to him, we are no closer in understanding how selves emerge from matter or how matter has the power to produce such things now than we were 30 years ago before the breakthroughs of neuroscience. Trigg insists that neuroscience does not force us to physicalism, the choice is philosophical and should be made on philosophical grounds.

Runehov seems to think that *panentheism* provides a kind of non-reductive materialist solution for the God/world relationship. In panetheism, the physical world is part of God, but God somehow extends beyond the physical world. The problem is, however, that the God/world relationship differs in many ways from the mind/body relationship. In panentheism, God is supposed to be "bigger than" the world. This does not answer the ultimate question of what God is. Classical theism has, as Trigg points out, an answer to this, but panentheism, at least as Runehov presents it, does not. If the panentheist wants to hold onto creation ex nihilo and the ultimacy of God, she has to, in one way or another, be able to say that God is at least partly composed of something else than the stuff of the natural world. Well, what is it? In the case of the mind/body relationship, this is not a problem, because it does not require mental to be ultimate. It can be claimed that the lower levels of the natural world have intrinsic powers to produce higher levels of complexity which also gives rise to minds and selves. Because theism insists on the ultimacy of God, this move is not possible with respect to the God/world relationship without giving up creation *ex nihilo* and God's transcendence altogether. There is, of course, the process theology option, but I suspect that Runehov does not want to go there. What I am trying to say here is that even if Runehov can have her cake and eat it in the mind/body issue by advocating non-reductive physicalism, similar moves are extremely difficult to make in the case of the God/world relationship.

In conclusion, I will briefly say a few words about the contributions that deal with what could be called *the theology of evolution*. In short, my point here is that TEM offers nothing new on this front. Jeremy Law, who in his article Unfolding Conversation attempts to find some consonance between the nature of God and the nature of the evolving creation (and humans), argues, along with Fraser Watts' article, that from a theistic point of view evolution can be seen as having a general direction. Contrary to what Stephen Jay Gould and several others have claimed, both Law and Watts invoke Simon Conway Morris' work on convergent evolution to show that the evolutionary process has inherent constraints and ends up producing certain designs more than others. Since something like Homo sapiens (although not exactly like it) are bound to emerge by natural selection sooner or later, God can be conceived as using this process for the creation of human and animal organisms. This is what is generally as the "freedom within a form" or "law and contingency" approach to theistic evolution. Law then combines this approach with the idea of the Trinity and the relational nature of humanity to produce a view in which the natural world and its organisms unfold in an open-ended conversation between the world and God. As I said, the view of theistic evolution emerging from Law and Fraser is a pretty standard one. One surprising fact is that neither Watts nor Law employs the notion of physical fine-tuning in their theology of evolution. Several recent models of theistic evolution, such as Alister McGrath's, have made extensive

use of this idea. This move would have given both Watts and Law more philosophical depth.

In addition to being fragmented, uneven and sometimes loosely argued, TEM also suffers from shoddy presentation and copy editing. Sometimes authors make references to books or articles that are not listed in the bibliography, and sometimes information is missing from the footnotes. Even a non-native English speaker (like me) can identify numerous spelling errors and mistakes in the text. Some contributions (especially the short papers at the end of the book) could have been greatly improved by heavy-handed copy editing. As they stand, some of them look rather more like lecture notes with lists of topics that should be discussed than polished articles in an edited volume. Despite containing a few interesting and fiery exchanges, TEM has so many problems that the philosophically oriented reader in need of good material on evolution, theology and the mind should look elsewhere.