In the work which appeared in 2006 titled *Breaking the Spell. Religion as a Natural Phenomenon* (Viking, New York, 2006) Daniel C. Dennett again explained his ideas on memes and the theory of memes, by applying it to the study of religion from the perspective of evolutionary biology. His conclusions establish that religion is a meme and that its persistence in history is explained by the replicating processes of memetic structures. However, are there reasons of philosophical or scientific rationality for men having persisted in religion? Dennett does not go into a deep rational analysis of religion. He simply states that it has a memetic structure and he considers that this is a sufficient basis to «break the spell».

Daniel C. Dennett is Professor of Philosophy and Director of the Center for Cognitive Studies at Tufts University, in Medford, Massachusetts. His fundamental philosophical position (which will not be addressed here) defends a computational idea of man (understood as a serial biological computer which carries out parallel processes given the neuronal structure). This same determinist and robotic idea of man seems to be applied as religion is understood to be determinist, replicating process produced by a structure of ancestral memes which have «trapped» humanity.

**WHAT ARE MEMES**

The term «meme» was introduced with the defined intention to make a parallelism with the term «gene». The latter belongs to genetics and, in some way, explains the programme which produces the biological order of each individual of the species; thus, it is a genetic-biological concept. However, «meme» refers to the biological-cultural. Just as biology arises from genes, culture (the conduct of individuals) arises from memes. A meme supposes a certain biological organisation (neural patterns, perhaps even partly hereditary), learning with cultural mediation (mimesis, imitation) and a register (or memorial). A meme supposes a game of neurology, mimesis and memory.

The creator of the concept and its denomination as a «meme» was Richard Dawkins. Other authors such as Edward O. Wilson and J. D. Lumsden previously proposed the concept of *culturgen* in order to designate something similar. At the present time the term of Dawkins has been imposed although the theory of memes now includes contributions from many other authors. Therefore, talking of memes today is not simply the theories of memes of Dawkins.

In principle, the theory of memes appears to be well constructed although in science, one thing are the facts commonly agreed to (which are also an «interpretation» of the scientific community) and the theories (much more discussable, subject to revision and in evolution). In general, the theory of memes seems likely to be accepted; this is widely agreed to.
The theory of memes

Why can the theory of memes be easily accepted? Simply because it gives a theoretically coherent form to a set of facts and previous theories of a biological, neurological and psychological nature which has been the subject of a broad consensus of the scientific community. We know that the Nervous System is an information resource (sensitivity) and a resource for the generation of adaptive responses. We know that the animal neuronally registers the adaptive discoveries (these are produced little by little as «innovations» ever since the evolution of the species, as they did not always exist and the animal learns). We know that the psychical-neuronal form (patterns, structures or neuronal mapping) which arises can even give rise to a certain genetic legacy in the species (remember the ideas of Chomsky on the neuronal codification of the rules of universal grammar). We also know that, on the genetic base, the learning of adaptive skills in animal species is done through mimesis (imitation) and its ethogram (adaptive responses) is transmitted (and extended) from generation to generation. Finally, we know that what is learned always remains registered by the mechanisms of memory and remains at the future disposals of each individual of the species.

Therefore, this means that the term «meme» is appropriate if it designates this set of adaptive resources of each species arising from the play of interactions between neural networks, mimesis and memory. Memes are already present in animal species and are proper to each species. However, they are also present in the human species. We have a legacy of genes which constitutes our basic biology, but we also have a legacy of memes which constitutes our culture. This is a structure of memes, forming coherent systems, which is inevitably transmitted (remember the memeplexes of Susan Blackmore). This is naturally open and never closed.

This theory is acceptable by the majority if it is maintained in a moderate environment. To do so, it must comply with a condition; memes must not be attributed with having an absolutely determinat nature nor, and this is the same thing, must they be conceived as conditioners which make conduct robotic, an inevitable closed consequence of memes. If this were so, history could not be explained in its creative and innovative aspect, capable of overcoming the somewhat coercive nature of memes in culture.

The experience is different: memes are a result of creativity. This occurs in the animal species and much more in the human species. Man created memes, he can criticise them, master them, innovate with new adaptive strategies. He is capable of creating, producing, controlling and positively innovating as regards culture. Once this said, it must be admitted, of course, that there are persons who are not very creative, and are subject to the determination of their memes; unfortunately, perhaps the majority.

Religion, memes and Daniel Dennett

That religion is a conduct produced by a memetic structure appears to be acceptable. It has been produced by human psychism, neuronal resources have come into play, and these have bee transmitted by memetic traditions and are registered in the memories of persons. This enables religion to «be replicated», to «be reproduced» and persist throughout generations. The bearers of religious images in the processions in Seville are trapped by the memes of popular religiosity; and the same occurs with the Buddhist monk who has been repeating and memorising the traditional texts for ten years.
Therefore, we consider that this is out of the question. However, what has the rational analysis of religion (philosophical and scientific) in modern culture asked? It has simply asked whether this religious conduct conceals a sense, a meaning, a coherence with reality and human nature.

There have been those who have exercised reason in order to reach the conclusion that religion does not respond to describable bases, but simply to human anxiety or the illusory desire for happiness and protection. Others have rationally reviewed religion and have reached the conclusion that religion responds to a congruent human possibility: the objective world makes the human opening up to religious conduct possible. However, both the negative and the positive criticism of religion have always reached their conclusions through rational attention to philosophy and science.

However, Daniel Dennett tells us that religion is a meme, it has a memetic structure. From here he reaches the surprising conclusion: religion is a natural phenomenon. We ask, «What could it be other than a natural phenomenon?» Dennett feels astonished by his discovery and considers that the discovery that religion is natural means the «break up of the ancestral myth of religion».

The structure of his book is very simple. Religion arose in primitive times due to irrational fear of the clamour and threats of nature. Thus, it was constituted as a meme which has been unceasingly replicated down to us. His analysis reflects on the circumstances which have favoured the permanence and reinforcement of this memetic structure. He also reflects on the conflicts and problems which religion has produced for humanity although he seems to admit that it has contributed to making people happier. Therefore, religion is a meme. Consequently, freeing us from religion must be to realise that we are trapped by this meme and escape from it.

Dennett insist that he only seeks the Darwinist analysis of religion from a point of view of evolutionary biology (we think he should rather say the evolutionary psychology of culture). However, he explicitly renounces a rational, philosophical and scientific analysis which might lead to an evaluation of the sense or non-sense of religion.

What modern reflection on religion has sought is philosophical analysis and reflection starting from the data of science in order to ask whether, religious conduct conceals a human possibility with sense which was known by intuition by primitive humanity. Today these analyses involve complex topics which range from quantum mechanics to psychology, the theory of mind, and cosmology. All of this is unnecessary for Dennett who is content to discover that religion is a meme, a natural phenomenon, and this is sufficient to reject it.

**Leon Wieseltier in the New York Times Book Review**

*Breaking the Spell*, like other works of Dennett, was widely commented on, as can be seen in the diverse opinions given in the most prestigious American press. When the commentators of fashion parades wish to give the supreme praise, they usually say that the parade was provocative, daring and wicked. The same can be said of Dennett: he has been provocative and wicked; and, in our opinion, iconoclastic and demythologising.

Dennett knows that, in order to make philosophy a show, he must be radical. There are no half-ways: either one believes in an absolutely determinist world and in reductionist science, or one believes in a God with a white beard who uses a compass to make the world and sustains it with one finger. Either one or the other. This is the same tra-
ditional tactic of the Greek sophists who, from ancient times, understood how one had to think in order to make philosophy a show.

Leon Wieseltier wrote one of the most devastating criticisms of the work of Dennet in the New York Times Book Review. He accused Dennet of being the maximum exponent of reductionist and simplistic «scientificism», which confuses science with metaphysics, when science maintains strict metaphysical neutrality. He accuses him of pretending to be the most authorised exponent of reason, however, he addresses an analysis of the religious which is reduced to the historical, and fails to address the true rational analysis which would be required. He accuses him of anti-rationalism and making science play an unacceptable grotesque role. In short, he accuses him of not seeing that the exercise of reason is required in order to remain in the simple, empty, narcissistic conceited feeling that he is the maximum rationalist who mercilessly flogs the popular irrationalities of our time.

Wieseltier conclusively states that, «There are concepts in many fables of the faith, which are propositions concerning the nature of the universe. They may be true or false, but they are there. Dennett acknowledges the use of faith, but not its reasons. Finally, his rejection of religion is a repudiation of philosophy, and everything is reduced to a question of belief in belief. What this absolutely superficial and self-complacent book establishes with most conclusive clarity is that there are many "spells" which must be broken». Undoubtedly, Wieseltier refers to the spell of false «scientificism» which has such a simplistic exponent in Dennett.

**Alister McGrath against Dennett**

In a criticism of Breaking the Spell, which appeared in Science & Theology News, the Oxford Professor, Alister McGrath, focussed on the crucial point of Dennet in order to discuss whether the very concept of «meme» was scientifically acceptable. He quoted several authors who disagree with the theory of memes and concluded that Dennett had founded his criticism of religion on a pseudo-scientific concept which did not have sufficient basis.

Above we defended that the theory of memes is acceptable in its moderate version. The majority accept it as such. Are there those who disagree? Of course, there are and McGrath mentions some of them. However, in our opinion, the way to discuss the thought of Dennett is not to say that memes «do not exist». We believe that it is a theory that might, perhaps, be of use, although not necessarily. Thus, the criticism of Leon Wieseltier is much more correct and deep.

Daniel Dennett replied to the criticism of McGrath in a lecture to the Royal Society for the Encouragement of Arts, in London, which was summed up in Science & Theology News, through a defence of the feasibility of the theory of memes despite the opposition. He also insisted that his criticism of religion was important because, from the simple fact that religions persist, some deduce that these are good. Dennett stresses what he criticises: that perhaps they are not because, if they have reached us, this is only due to the replicating process of the memetic structures.

**Conclusion**

We think that the universe and human life continue to be an enigma. Atheism is possible, as is religion. Both seem to have arguments which must be evaluated from the
rational freedom of man. Therefore, our position would be: atheism is possible and respectable, as are all the manifestations of human freedom. However Dennett should be told that atheism is alright but not in this way, please. Atheism deserves serene, deep minds. It does not deserve to be reduced to the grotesque by thinkers like Dennett.