A BEING OR TO BE?

PHILOSOPHICAL THOUGHTS ABOUT FUTURE RESEARCH ON NEUROSCIENCE AND RELIGION AND THE NEED FOR INTERDISCIPLINARITY

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(Received 24 December 2005, revised 27 January 2006)

Abstract

Can we find a theoretical framework that could build bridges between different disciplines that broadens our insight into the religious dimension of a human being? In the present paper it is suggested that being should be comprehended as comprising ‘being’ in terms of ‘a being’ (ein Wesen) and in terms of ‘being’ (sein). Hence ‘being’ reflects the person’s neurological-physiological aspects as well as her cultural-religious-personal aspects. If this distinction were to be applied to the study of a person suffering from Alzheimer’s disease, this would entail that the neurological and physiological aspects of the person would be considered along with the psychological and spiritual person encapsulated in the damaged brain and body, as well as her relations towards her environment. It is also emphasized that, if a full explanation of a human (religious) being is to be given, it has to be done from the perspective of different disciplines. Such an explanation would be valuable for maximizing well-being.

Keywords: interdisciplinarity, neuroscience, religious being, Alzheimer’s disease, reductionism

1. Introduction

In Sacred or Neural? Neuroscientific Explanations of Religious Experience: A Philosophical Evaluation, the main question was in what way and to what extent neuroscientists can explain religious experience [1, 2]. The purpose was to clarify which religious experiences neuroscientists are able to measure by way of today’s neuroscientific methods. Therefore, some neurological research performed on religious experiences were critically analysed and evaluated, especially the work of the Canadian neuropsychologist Michael Persinger and the American neurologist Andrew Newberg and his fellow researcher, the late Eugene d’Aquili.

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When we regard the first part of the question we realize that asking in what way neuroscientists can explain religious experience is asking by what means they can explain this phenomenon. But it is also asking how they can explain religious experiences, i.e., in terms of what. For neuroscience to be able to study religious experiences these have to be observable by neuroscientific means. These means may be, for instance, Electroencephalogram (EEG), functional Magnetic Resonance Imaging (fMRI), Positron Emission Tomography (PET), Single Photon Emission Computed Tomography SPECT or Magnetoencephalography (MEG). Furthermore, since neuroscience is a discipline that belongs to the natural sciences and thus has to satisfy the criteria established by science, the religious experiences neuroscientists want to study need to be at least testable and repeatable.

Religious experiences that fulfil these criteria are, among others, those obtained by way of different meditation techniques such as, for example, the via negative or infused contemplation, the via positive or acquired praying, and transcendental meditation [3-5] and religious experiences obtained by way of repeatedly reading or memorizing a religious text [6]. Such experiences are testable and repeatable because the practitioners are able to recreate their experiences in laboratory settings. This is not the case, for example, with spontaneous religious experiences.

Asking the question to what extent neuroscientists can explain religious experience is also twofold. The question that is raised now is which religious experiences can be studied: all of them, a limited amount or none at all. Furthermore, can neuroscientists explain religious experiences exhaustively, partly, or not at all? Therefore, in order to answer the question in what way and to what extent neuroscientists can explain religious experience, one has to answer four questions.

However, what exactly is a religious experience? In my opinion, an experience is a religious experience when the following criteria are met. Firstly, when it is an experience in which it seems that God or Ultimate Reality, being the absolute ground of everything that is (and ever will be), appears to a person in a way that is in accordance with the doctrines and soteriology essential to the religious traditions and their continuities. What do I mean by religious traditions and their continuities? First of all, we live in multicultural environments, which means that the borderlines between different religious traditions are not as articulated as they once were. For example, today, the Buddhist religious Zen doctrine is accepted and applied along with Christian doctrines by some churches and monasteries of the Christian tradition. We also witness a growing endeavour towards ecumenism. However, we should also leave the question of eventual continuities of religious traditions open if we understand God as the absolute ground of everything that is and ever will be. This is because God, understood as such, could present God-self to a person in a way that nobody has ever experienced and no religion has yet thought about.
Secondly, an experience is a religious one when the experiencer recognizes the experience as a religious one, i.e., the experience is, to put it in Keith Yandell’s words, effective evidence. Yandell namely distinguishes between de facto evidence and effective evidence. An experience e is de facto evidence for a claim c if the experience e meets the relevant conditions (those conditions making the experience legitimate). An experience e is effective evidence if it is a) de facto evidence and b) accepted as such by the experiencer [7]. Suppose that you make a trip on a boat with a friend. Suddenly, a cross appears on the water. You both see the cross on the water and recognize it as a Christian doctrine. Hence both your experiences may be considered to be de facto evidence. However, you recognize your experience to be a religious one. For instance, you tell your friend that looking at the cross on the water fills you with awe. This means that your experience is effective evidence. Your friend, however, does not recognize the cross on the water to be a religious experience. He tells you that even if the cross on the water is in accordance with the Christian doctrines, (de facto evidence) it is simply a reflection of light particles on the water due to the strong sunlight. Your friend’s experience is not effective evidence and hence cannot be considered to be a religious experience. However, it is important also to note that not all experiences that are recognized by the experiencer as religious ones really are religious experiences.

Furthermore, assuming that God or Ultimate Reality exists, the Theory of Appearance, which, according to William Alston, suggests that the notion of God’s appearing to the experiencer is fundamental and unanalysable [8], makes testimonies of people saying that they have perceived God or Ultimate Reality plausible. For the experiencer to perceive God is then simply for God to appear to the experiencer.

Assume that the experiences studied by neuroscientists fulfil all the criteria to be religious experiences. Assume further that they are obtained in a way that satisfies the scientific criteria established by neuroscience and thus are testable and repeatable, for example, they are obtained by way of meditation. Nonetheless, the answer to the question in what way and to what extent neuroscientists can explain religious experience is this: in a way that today’s neuroscientific methods allow them to and in terms of neural chemistry. (i.e. the blue and red spots on the computer screen of a PET scanner are not pictures of God but of neural chemistry) Furthermore, neuroscientists explain religious experiences to the extent that they are observable, repeatable and testable; in other words, only partly.

Thus, neuroscientists can explain religious experiences in a methodologically restricted way and to a methodologically limited extent.
2. Philosophical discussion

2.1. The matter of reductionism

A problem is, however, that not all neuroscientists seem to be aware of the shortcomings of neuroscientific methods to explain such phenomena. Some neuroscientists explain religious experiences in terms of which neural activity generates them and maintain that neuroscience can exhaustively explain religious experiences. These neuroscientists explain religious experiences in terms of nothing but — religious experiences are nothing but limbic activity: there is nothing more to say about religious experiences than that. However, it is also possible to explain religious experiences in terms of something different — the roses you saw were not roses but cauliflowers. This kind of explaining something is known as ontological reductionism.

Some go even further and maintain that the scientific explanations are the only things that are real while what is explained is illusory. These neuroscientists apply reductive materialism, which is an extreme form of ontological reductionism. Let me present a concrete example. According to Persinger, the reason why people believe in God is because, through centuries and in all cultures, death-anxiety has been and still is, reduced by way of God concepts. However, he says that these concepts are nothing but words, and since human beings are governed by language in all aspects, he argues that they should realize the limitation of language. They should realize that some phenomena are nothing more than creations of human language. He maintains that there is nothing that these language creations refer to outside the language itself, which, he continues, is especially true for religious phenomena. As a matter of fact, he says, “God is simply ‘dog’” spelled backwards and hence all talk about God can be eliminated [9]. According to him, God and hence religious experiences, are illusory. Let me reconstruct his argument:

1. Religious experiences are illusionary, because they can be exhaustively explained by (neuro)science.
2. God is nothing but words (dog spelled backwards)
3. Therefore, all religious talk can be eliminated.

One may wonder though, if he has considered the opposite, namely that “dog is simply ‘God’” spelled backwards. Following his way of reasoning then, this would imply that neither gods nor dogs exist. In other words, both God and dog are then illusory.

Another type of ontological reductionism, and which is gaining ground, is known as eliminating materialism, which dictates that mental states such as religiosity and love are simply misnomers. One day all such concepts will be seen as inadequate and it will become clear that what is at stake is pure neural-chemistry. Eliminating materialism projects the success of science of explaining misnomers in the past on to the future. For example, that science proved that a storm is not caused by the Nordic god Tor when he rides the sky and throws his
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hammer, is taken as a proof that science one day will be able to explain everything. The exhaustiveness hence lies in the future.

All types of ontological explanations have in common that it is the explanans (a set of sentences being offered to account for it such as a scientific law) that exhaustively explains the explanandum (the phenomenon to be explained) or at least will be able to do this in the future. In my opinion, using these forms of reductionism are erroneous ways of explaining something, because ontological reductionism only seems to capture the fish that the fisher’s net is able to — or will be able to hold. The question is what happens to the other fish?

However, there are other ways to explain religious issues using neuroscientific spectacles. Neuroscientists then do not maintain that religious experiences are nothing but brain activity. Rather, they explain religious experiences in terms of correlations with specific neural activity. They explain religious experiences according to methodological reductionism, i.e. religious experiences are reduced into neural activity for a specific purpose. Using methodological reductionism then is not an erroneous way to explain something. Newberg, d’Aquili, and Azari belong to this group of neuroscientists. Some philosophers would maintain that there are (at least) five types of reduction: ontological reduction, reductive materialism, scientific reduction, causal reduction and methodological reduction. It is my view however, that these can be divided into two types or categories: ontological and methodological reduction. Ontological reduction then includes reductive materialism and eliminating materialism as I mentioned above, but also scientific reduction if it is claimed that the explanandum can exhaustively be explained by science and causal reduction if it is claimed that the explanandum can exhaustively be explained by what caused it. Scientific and causal reductions are applied in a methodological way when no such exhaustive claims are forwarded.

However, what exactly is the problem with ontological reductionism. What is the problem with a fisherman not wanting to have other fish than those he is fishing for? Or could it be the case that there simply are no other fish to catch? The answer to the latter suggestion is, of course, if such is the case, if it, for example, is the case that the roses you saw actually were cauliflowers, then the problem is correctly solved. Furthermore, it would even be the case that the roses were illusory, i.e. you mistook the cauliflowers for roses. Such can, needless to say, also be the case concerning religious experiences or other religious phenomena. What is interesting though, is when it is not the case that the roses were cauliflowers but, say, a very special and rare type of rose few have seen, and yet they could exhaustively be explained in terms of cauliflowers. Let us now turn to neuroscience again. However important brain research might be, if only the neurological part of a person is worth considering, too hasty conclusions can be drawn concerning how to understand a human, and in our case, religious being. For example, as the neuroscientist William T. Newsome suggests, “the entirety of our personal experience […] results solely from patterned electrical activity among the several billion neurons that comprise the
central nervous system.” [10] Statements such as “the mind is a side effect of the brain” and “consciousness is an aspect of the mind” are then not unusual. At its extreme, such reductionism could result in a medical service neglecting people’s non-physical needs. The importance of understanding the connection between spirituality and religiosity and health is a topic that is tangibly emphasized today.

2.2. Neuroscience and Alzheimer’s disease

This brings me to my question of whether brain diseases such as Alzheimer’s disease and epilepsy, brain disorders such as synaesthesia, and brain damage such as brain strokes could help give us a hint about how a person, and furthermore a religious person, should be understood?

Leaving aside the religious considerations for a while, I will now take a closer look at the consequence of an ontological reductionistic view of persons diagnosed with Alzheimer’s disease. Alzheimer’s disease certainly brings the matter concerning the nature and meaning of human life itself to a head [11, 12]. Before the illness, persons suffering from Alzheimer’s disease have different character traits, such as being intelligent, caring, cultural, religious, proud, etc. Where has all that gone? Neuroscientists who defend ontological reductionism would probably say, “there actually has never been something there”. What were there were brain functions which cease to function one after the other because of the amyloidal plagues found in the spaces between the brain’s nerve cells. These neuroscientists reduce the person who suffers from Alzheimer’s disease to her brain. However, the following questions can be raised: “What is the meaning of life for the person with Alzheimer’s disease”? “What happens in these individuals ontologically”? “What becomes of the person and her memories?” As David Keck asks, is there a metaphysical basis for the human person that this disease does not destroy? [12, p. 39]

A theological question, at least from a Christian point of view, would be how we should consider the personal relationship of the sick person with God if it is maintained that there is no person left. The point I would like to make is that neuroscientists alone cannot give us the answers to these questions. They do not ask the questions in the first place. We have, therefore, to turn to other disciplines than neuroscience, such as sociology, psychology, philosophy and theology to find the answers. We need a more holistic approach that brings together the different aspects of the person and also shows how these different aspects interact.

Let me briefly, by way of a few examples, explain why I believe such an interdisciplinary approach to be preferable. Firstly, theology has an important role to play because, as Stephen Sapp observes, “how one deals with life depends ultimately on how one understands God and that is what theology is”. [11] This means that how we live our lives corresponds to our view of life whether it is a religious view or other. Our view of life has to do with how we understand and treat others and ourselves, how we deal with love, joy and sorrow, pain and suffering and, finally, how we apprehend human mortality. For
instance, is not “thanatology an inseparable part of theology”? [12, p. 38] I believe this to be important both for those who are ill and for their carers. The life view of the carers, whether it concerns members of the family or others, will be crucial for how they will approach the sick.

Secondly, the question of attitudes toward older people, not least when they are sick, is a philosophical question; that is, a question of value. Hence, philosophical questions should be raised here because modern medicine is often merely concerned with the biological processes in aging and its related illnesses. They emphasize curing over caring.

Thirdly, also psychologists have an important task, which consists in explaining the impact of lethal disease on individuals and on various groups of individuals. Psychologists could give suggestions of how one could cope with his or her disease, if that is possible and how the relatives of the person diagnosed with Alzheimer’s disease could cope with it. Psychologists are also able to answer the question how one should treat the person who suffers from Alzheimer’s disease. How one expects or should expect to be treated by this person? Too often, especially when the disease has entered the final stages, the person is talked about as if he or she is not present or is treated like a child.

Finally, as Keck rightly observes, the person with Alzheimer’s disease “continues to have feelings all throughout the course of the illness, at all stages” [13, p. 31]. Hence, they need to feel that they are still needed and that they fit in. This is where sociologists come in. What does it mean for the person’s family, her or his community, church, etc. that the person has been diagnosed with Alzheimer’s disease?

2.3. The heart of the problem

Why then are theological, philosophical, psychological and sociological considerations, among others, neglected? Due to post-Cartesian dualism, enlightenment and post-modernism, we have come to perceive ourselves as minds on the one hand and as bodies on the other. Furthermore, due to the enlightenment and post-modernism we have come to divide the whole human enterprise into public-primary and private-secondary domains. The private-secondary realm stands for “all that the public rejects: the affections, relationships, caring,” […] The public-primary realm is considered the realm of “knowledge, objectivity, science […]” [14]

From this, one would draw the conclusion that the body of medicine, including neuroscience, belongs to the private-secondary realm. However, the peculiarity is that, even if the body of medicine including the public caregivers clearly belongs to the sphere of caring and thus should be ranged under the private-secondary realm, it is considered to be part of the natural sciences and thus part of the public-primary realm. What has been ranged under the public-secondary realm, and has been held outside the medical body, are the caring enterprises by the patient’s relatives, religious communities and other authorities not strictly belonging to the medical body. A consequence is that the physical
‘body’ has gained public-primary interest while the ‘mind’ has become, if not a part of the body (brain), then a property of the personal-subjective realm.

Let me reconstruct this observation:
1. All human beings have a body and a mind.
2. A sick human being is treated by the body of medicine.
3. The body of medicine belongs to the natural sciences.
4. Hence it belongs to the public primary realm.
5. Due to the scientific criteria, medics are mostly interested in the human body.
6. Consequently, the physical ‘body’ has gained public-primary interest while the ‘mind’ has become, if not a part of the body (brain), then a property of the personal-subjective realm.

However, to explain the non-physical in terms of functions of the physical may solve the mind-body-dualist problem, but is hardly a justified interpretation of what a human being is, let alone a religious being. For instance, if mind or consciousness derives solely from physical properties of the brain, exactly from which properties of the brain does it then derive? If, on the one hand, mind or consciousness is located in the part of the brain that is considered to be active during, say, a religious experience, should we then search for religious states in the part of the brain associated with religious behaviour? If, on the other hand, mind and consciousness are regarded as being spread all over the brain, should we then search for these religious states all over the brain?

Needless to say, I believe it becomes important how different disciplines understand the brain, mind, consciousness, awareness, and what is called the ego and the self, as well as how this leads to an eventual relation between them. We need to agree whether the brain, mind, consciousness and awareness are one and the same thing, or are totally different things, and to investigate which consequences these understandings have for how a human (religious) being should be understood.

How to come to terms with this huge philosophical problem? It is certainly not my aim to try to solve it in the present paper. Rather the aim is to put a finger on the complexity of the issue. However, a starting point might be to try to define what is meant by (human) being. I suggest that we regard being in two different ways: as to be (sein) and as a being (ein Wesen). The German concepts are only used here in order to clarify the distinction between to be (verb) and a being (noun). What do I mean?

A being in its meaning of ein Wesen comprises of at least the neurology, and the DNA, of that being. It tells us how that being’s brain is constructed, how his or her DNA map looks, which physical condition he or she has. The neural system is similar in all creatures. As a matter of fact, whether the neural system concerns a primitive creature like a flat worm or a human being, it works along the same basic principles of chemical stimulation and electrical conduction. At first sight one would be inclined to say that there is nothing specific in being human, seen from the Wesen-part of the being compared to, say, other mammals. However, I believe that this would be to draw too hasty conclusions. There is a
difference between the species but it lies in the complexity of the neural system rather than in its function. Thus, it is in the complexity of the brain that the specific notions for being human, compared with other beings, are to be found. According to neuroscientists, it is the cerebral neocortex that makes humans human, because this is the part of the nervous system that enables them to create language, art, myth and culture, and to make plans and create a self-image and a worldview. Fish have no neocortex at all; reptiles and birds have but a poor beginning. This implies that the Wesen-part of the human being does reveal what is specific for the human species.

Also DNA shows which species the humans belong to: the evolution of human species simply looks different and is far more developed and polished. Thus, what makes human beings authentically human can be shown by studying the neurological-physiological aspects of being, i.e. by studying a human being as ein Wesen.

This raises the question why we should be interested in the other aspects of being, namely those involving to be, sein? Being as Wesen does not tell us anything about the human way of living, an individual’s needs, or what it means to be a human being. It tells us nothing about the phenomenology of a human being. In short, it does not tell us anything about a human being’s being, which is about being someone that means something. It is here that the cultural, social, religious and personal comes in. Where a being (ein Wesen) refers to the individual, to be (sein) refers to the individual among other individuals. It is also in this connection that one talks about the soul. Thus, besides defining the concepts of mind, consciousness, etc, we now also have to define soul. Unfortunately it is not possible to account for all the different theological and philosophical understandings of the human soul given.

To conclude this debate, human beings are not only advanced neocortexes (ein Wesen), they are mothers and fathers, colleagues and friends, and they love and hate, and strive for better life-conditions. They paint, write poetry and create music. And many are religious (sein).

This is still the case even where a human being has been diagnosed with a lethal illness. Even though persons who have Alzheimer’s disease are constrained by a decaying brain, I believe that they still retain the fullness of their lives. I am hesitant to accept, without further investigation, that everything, i.e. the creativity, the cultural interest, religiosity, memory, etc., is gone or has never even been there, as ontological reductionistic neuroscientists would maintain. The problem is, that since persons with Alzheimer’s disease are stripped of their capacities to communicate, we have no chance of really knowing whether they, even at their end-stage, are aware of their environment. The point is that neither could neuroscientists know.

For instance, I remember my grandmother saying to me when she was 96 years old that she felt as if she were 30, imprisoned in a worn out body. Just assume that this is also the case with people with Alzheimer’s disease. Inside the worn out brain and body remains that 30-year old person, feeling completely and progressively more imprisoned in his or her body and brain. With merely
neuroscientific means, neuroscientists are only able to study that worn out brain… Nevertheless, some would ask whether this is not the only thing that really can be studied.

But is this really so? Reverent Bob Davies who was diagnosed with Alzheimer’s disease and, for as long as possible, wrote a diary, wrote: “When the darkness and emptiness fill my mind, it is totally terrifying. I cannot think my way out of it … The only way I can break this cycle is to move”. [14, p. 82] This may be why Alzheimer’s patients wander around so much in the second stage of the disease, which is the part that is visible for the carers. Nevertheless, this testimony clearly marks the part of the human being described as sein. For instance, who is the I who seems to observe and seems to be aware of what is happening? Who is this I who cannot think his way out of it? Surely, this I seems to be fully aware of what is happening, of the darkness surrounding his mind, namely, the darkness of his brain. In another testimony he writes: “My spiritual life was still miserable. I could not read the Bible: I could not pray as I wanted to [...] I could no longer be spiritually fed by sermons. [...] I could only lie there and cry, ‘O God, why? Why?” [15] Again, who is the I who realized, concluded and cries out why? A composer who was diagnosed with Alzheimer’s disease smiled when they played his music at the very end of his life. Doesn’t that at least strongly suggest that the I in the person with Alzheimer’s disease somehow is there and remembers?

This means that we also have to know how we should apprehend memory. Some philosophers and psychologists maintain that the I is strongly connected to memory. Some neuroscientists and others defending ontological reductionism, for example, would say that the I is memory and thus, the I decreases along with decreasing memory capacity and functionality of the brain. With such a view, the conclusion can be drawn that it becomes impossible to distinguish between the individual and her memories, or more precisely, to distinguish between the I and the brain. One of the problems with Alzheimer’s disease is that this seems to be the case, due to the fact that the person can no longer communicate his or her memories. But seems is not equal to is. According to Ellor, memories cannot be understood as realities “in the sense that they are carefully videotaped and recorded by objective sources” [13, p. 4]. In other words, there is not a vast packet of information stored in our brain that the healthy person can access whenever he or she needs. Consequently, when the brain is damaged, the package is damaged too. One of the problems here is that memory is seen as a way of telling the story oneself. Memory is seen as output. However, there is also an input to memory. Hence it would be better to understand memories, as being built upon a lifetime of experiences of reality such as it is unfolded for a person. They change through time. They are mostly shared. They are not only important for our private history but also for our history for others. Memory is not just a neurological feature; it is also a cultural-religious-personal feature.
Human beings are no doubt complex beings. They are not just “a pack of neurons” as Francis Crick puts it [16], and concerning those with Alzheimer’s disease, even malfunctioning neurons! These human beings are still cultural, psychological and religious beings. Therefore interdisciplinary explanations of a (religious) person are necessary. I believe that this brief description of Alzheimer’s disease shows how difficult and complex it is to fully understand a human condition. It shows that neuroscientists and other medics are not able to explain what this condition implies from their neuroscientific-medical platform only. The question that can be raised is how, when neuroscientists are limited in explaining a typical neurological illness on their own, can they explain religious conditions only by neuroscientific means?

3. Conclusions

To conclude, both the cultural-religious-personal aspect \textit{sein}, i.e. the being a person that means something, and neurological-physiological aspects \textit{ein Wesen}, i.e. the person as a being, need to be considered if a full explanation of a human being is to be given. It was argued that the Wesen part of the human being comprises the being’s neurology and DNA and can hence be studied by neuroscientific means. The sein part of the human being, it was maintained, consists of the being’s consciousness, mind, soul, ego, etc, i.e. everything that makes the human being someone that means something. The sein part can only be studied by neuroscientific means in those cases where it can satisfy the scientific criteria established by neuroscience, for example, testability and repeatability. However, even in those cases, neuroscientists alone cannot account for the whole story. As was concluded above, in the case of religious experiences obtained by meditation and studied by way of SPECT for example, what the neuroscientists are able to explain is the neurochemistry associated with the experiences. This is, needless to say, an important part of the explanation, but far from the only one and far from being an exhaustive explanation.

I argue that neither neuroscientists, theologians, philosophers, psychologists nor sociologists can by themselves explain a human (religious) being. Nevertheless, every discipline may have important information to contribute to the overall understanding, which we do not want to do without. Therefore, I believe that a more interdisciplinary approach is necessary, i.e. different disciplines using their own scientific methods contributing to a more holistic explanatory model. However, I want to emphasize the importance for all the disciplines involved of remaining faithful to their own methods.

The question now becomes how different disciplines, using their own specific methods, comprehend a person’s religious being in all its aspects and how these different kinds of explanations can be compared. Do they enrich, weaken or exclude one another? Could comparing these different understandings of a human being lead us to a tenable explanation of a religious human being and, if so, in what sense would such a multidisciplinary explanation then deepen and broaden the insight into the religious dimension of a human being?
References


