
ASSESSING COGNITIVE APPROACHES TO RELIGION: A THEOLOGICAL ACCOUNT

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Abstract

Religious studies today are witnessing new developments as a result of the application of cognitive methods to religious phenomena. It is surely time to address this research from a theological perspective, because what is at stake is nothing less than an understanding of religious experience, often very different from theological understanding. The 'state of art' of this research demonstrates some methodological opportunities for a better understanding of biblical and theological issues and, at the same time, exposes some problems and flaws. First, the cognitive approach to religion contributes to the reading of biblical texts in a different way and offers new hermeneutical tools with which to approach the writings of the Christian tradition. Second, it offers great insight into the so-called 'mysteries of faith', which can then be placed in relationship with some of the acknowledged limits of human cognition. Third, it provides a deeper insight into some classical and contemporary theological questions, such as: the meaning of the 'covenant', original sin, Christological and Ecclesiological issues, and the cognitive difference between Christian faith and other religions.

Keywords: Cognitive Sciences, Theological Anthropology, Religious Studies, Religious experience, language

1. Introduction

The emergence and expansion of cognitive sciences actually constitute a revolution affecting many fields in the human and social disciplines; its impact influences the way we both think about religion and construct a theological discourse. Indeed, recently published books in this field explain, for example, 'how religion works', 'why Gods persists', or 'what religion may be all about' in cognitive terms. Even though many studies have developed in recent years a real 'cognitive science of religion', its consequence for theology and the theological understanding of religion have not yet been sufficiently assessed, except for a

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few essays published in recent years. There is an open field of research and interdisciplinary work to be explored, comparable to the relatively new fields of sociobiology and evolutionary psychology, and many suggestions for the revision and development of several theological topics.

What are the main threads of interest and research? There are at least three broad areas of theological research concerned with the outcomes of the cognitive sciences: first, the revision of Christian anthropology, followed by the new understanding of religious ideas or experiences, and finally the theological assimilation of new methods.

2. The Understanding of Human Nature

First of all, the greatest impact of cognitive discoveries can be located inside the traditional Christian representation of human nature, as directly created by God, fallen into a state of considerable distortion, and subject to redemption and re-constitution. It seems quite evident that these presuppositions vary considerably when confronted by a scientific understanding of the human mind and how it operates. Topics such as the possible constitution of the 'soul' have been already explored, and still remain controversial in the dialogue between science, philosophy, and theology. The same can be said about other characteristics that both theology and humanistic contemporary methodologies have attributed to human nature: freedom, identity, human uniqueness, social abilities, and the meaning of love. The main issue at stake is surely the idea of humans as created in the 'image' of God, reflecting a divine plan and project, unique in the whole of creation.

Other areas of theological anthropology seem to be less affected by the latest scientific wave, or they simply have not yet been subject to deep revision. For example, the doctrine of 'original sin' has known some reformulations in line with sociobiology, but less has been written on the impact upon it of the cognitive sciences (except for some applications of the neurophysiologic thesis). A treatise on 'grace' is still awaiting consideration in cognitive terms.

Theologians engaged in the dialogue between theology and science are convinced that we cannot resort anymore to a naive theological description of the human being, which ignores the real conditions of his biological and mental constitution. Cognitive disciplines may be very helpful for the theological endeavour, which strives to keep the Christian conception of grace in touch with natural reality, demonstrating how the dynamics of incarnation still work within the conditions revealed by science. Receptiveness to the cognitive approach to the human mind, and a familiarity with the discussions going on inside this field of study, will be fruitful for any attempt to think in theological terms about human behaviour, a relationship with God, and the conditions within which the conception of a personal response to the divine call can be conceived.

There are different ways to understand the stated dialectic and for theology to receive the necessary input that proceeds from the cognitive sciences. Confrontation is sometimes inevitable, particularly when scientists surpass their own epistemic boundaries. Only a step further would precipitate creative involvement, a ‘dialogical negotiation’ between both fields – science and theology – in order to recompose an image of human nature, respectful of the discoveries of science and, at the same time, faithful to Christian revelation, and able to transmit hope in a perilous time. There has been a discussion in recent years between certain philosophers and the new scientific view of the human being, from which, regrettably, theology has been absent, or paralysed by indecisiveness, preventing meaningful contribution. It is time for theology to reconsider its position and to make its contribution in order to enhance possible bridges between the scientific and humanistic sensibilities.

3. Explaining Religious Experience

The second way to tackle the cognitive challenge has to do with recent research trying to explain the cognitive mechanisms of religious experience. Much work has been done and other work is still in progress, but from the provisional results it is possible to ascertain some of the dynamics presiding over the ‘religious mind’, able to process information in transcendent terms, attributing to supernatural forces or beings a mechanism of agency. Actually, theories of ‘attribution’ and ‘agency’ are attempts to explain ‘how religion works’ and why it subsists despite the present secularisation crisis and many pronouncements of its inevitable decay. Such theories are combined with classical functional views of religion – about the role it still plays in human and social life – and more recent theories on the expansion (or contamination) of ideas and the cognitive constitution of cultural or broadly shared items of knowledge.

At the moment, a set of ‘cognitive studies on religion’ is available for theologians and religious scholars. Their outcome should be taken into account in the theology and science dialogue. The work in progress can be divided between neurophysiological studies on the mental mechanisms, which reflect intense religious experiences, and psycho-cognitive approaches to religious experiences.

The first type of study is associated with names like M.A. Persinger [1], V.S. Ramachandran [2], and the team of A. Newberg, E. D’Aquili, and V. Rause [3]. For several years these authors have been pursuing the neural links of religious experiences. To this end, they have explored – with the help of sophisticated methods of ‘brain imaging’ – the brain areas, which are involved in the most intense religious experiences, such as mystical ecstasy, or states of deep prayer. Another method of searching for those links has been to verify the degree of connection between episodes of brain damage and the loss of ‘religious faculties’. Broadly speaking, this research has located areas in the brain associated with religious activity, or that become ‘activated’ through

religious concentration. These discoveries have been interpreted in various ways. Some authors claim that religious feelings and perceptions, like any others, can be reduced to their neurological circuitry, and explained away as mere human episodes. Others, for example, the school of Newberg and D'Aquili, maintain that their results show a 'neuronal capacity of human auto-transcendence'; a real base for religious experience, even if it is open to question whether the transcendental thoughts experienced are, in the final analysis, simply a product of the mind or an experience of, and answer to, divine revelation. These outcomes manifest the deep ambiguity of the neurological enterprise, which can be subjected to both a naturalistic and a transcendental interpretation.

The second line of research has more to do with cognitive and evolutionary psychology. Some authors in the forefront of the field are: Th. Lawson with his associate R.N. McCauley [4], P. Boyer [5], I. Pyysiäinen [6, 7], S. Guthrie [8], H. Whitehouse [9]. Their aim is to find and expose the mental structures underlying religious knowledge, how they developed, and how they are related to the basic structures of human thinking. Often the axiomatic departure point is the representation of a 'modular mind', evolved in a primitive context of Palaeolithic hunters and gatherers, and specialized in different but vital tasks. Their research program includes empirical enquiries and experimentation with children and adults, to ascertain their ways of evaluating the plausibility of some stories including counterfactual – supernatural – elements.

Pascal Boyer offers some of the most concrete insights into how religious concepts arise and 'become easily acquired and transmitted':

1. They include minimal violations of domain-level conceptual expectations.
2. They activate intuitions about agency developed in the context of predation.
3. They activate social interaction systems (our 'social mind' system) in a particular way.
4. They are parasitic upon moral intuitions that would be there, religion or not.
5. They are associated with a specific way of constructing misfortune [10].

In his theory religion becomes the way to deal with a set of events, for which we can find no other explanations. Its degree of survival and diffusion is due to its capacity to appeal to some cognitive templates and to solve various needs of social interaction. There is, however, always some logic in the process, which generates and expands religious ideas. These have to do with the need to attribute agency in the cases where no other natural agency is available. Doing so, religious ideas violate some expectations, but are not excessive in these tendencies. The peculiar structure of the human mind and the needs of social communication contribute to the success of such ideas. For example, the way memory works, retaining in a simple fashion extraordinary events, or how in some socially conflictive contexts we need to identify agents, contribute decisively to a religious understanding of things. Furthermore, the dynamics presiding over social interaction are essential to their success as well: the need to gather 'strategic information' about others, the need to establish moral rules, and the necessity to explain unfortunate events. Besides all of this, a characteristic

‘epidemiology of beliefs’ [11] helps to explain the diffusion of some religious ideas despite being counterintuitive. The human mind needs to gather as much information as possible in order to trace a cognitive map, which helps to ‘navigate’ and to deal with the many challenges one meets.

The meaning of the attempt of cognitive psychology to deal with religious phenomena is clearly reductive, at least in the exposition of Boyer and some other authors, as they attempt to describe ‘how religion works’ or to ‘explain religion’. Indeed, religion can become a kind of cognitive development associated with certain characteristics of the human mind, prone to host certain strange ideas, but still consonant with our cognitive structure. In this sense Boyer speaks of the ‘parasitic’ character of religious ideas, which lack any specific ‘cognitive module’, but rather live within other well identified mental structures, such as the ‘attribution of agency module’, the ‘moralizing codification processor’, or the ‘contingence managing unit’.

The challenge is enormous for theology because there exists a broad question regarding the reality of religion, and also the danger that these theories could be construed as ‘factual’ explanations and, indeed, eliminate any notion of transcendence. It must also be said that this briefly reviewed research does not exclude any theological explanation and use. There is still a long way to go to assess its meaning for, and relevance to, theological explanations of salvation history. This must take into account a new mediation for the understanding of religious faith, and even for the reflexive approach to the theological endeavour.

The initial approach has been offered and even if we deem the present research into religion and cognition as still quite immature and in progress, it is possible to draw some lessons; first, the need to rethink the meaning of religious experience in the light of the new knowledge between natural aptitude and the event of grace or divine gift. In this sense, it would be very helpful to rethink the different stages of salvation history as a development and succession of different cognitive models. Indeed it is still needed to trace the cognitive changes in the relationship between God and humans, as they unfold an evolutive path at different historical periods, for example through the mental structure linked to the idea of ‘covenant’, its precedents, and its development. The theology of faith may surely benefit from the new cognitive methods, as we are able to better locate what in human nature corresponds to the input we deem to be divine revelation.

The assessment, however, cannot avoid some criticism and some expectations of correction, which would facilitate a better theological reception. There are some evidential limits to what may become a ‘standard cognitive model of religious behaviour’. As many authors have stressed in recent years, the main problem of the reductivistic stance is their isolationist policy, particularly for what concerns the other factors that converge in human development; its embodiment, the environment where one lives, and the relationships he or she establishes [12]. There is an evident lack of ‘exteriority’, which is detrimental to the reach and heuristic capacity of cognitive psychology. Furthermore, the theory underestimates the weight of information, its quality or

veracity, the difference it makes to a more or less trustworthy source, beyond the congeniality of the content. And last but not least, the described theory shows no consideration of the so-called 'plasticity' of the human mind that manifests itself already at the neurological level. This would imply that the mind is not simply a closed system of modules, a structure unable to adapt to or develop new situations, in both the ontogenetic and phylogenetic way, as an answer to new stimulus and outside input.

Theology should make a contribution to cognitive research and even relate her own surveys and fruits of empirical observation to the compilation of a correct cognitive theory of religious perception. Only in this way can there be avoided a too-reductive approach and the field then be opened to the real capacity of the human mind to transcend the physical limits of the world in which it finds itself. Some authors have already asserted this non-reductive approach, but further research should be promoted, especially in order to show the complexities of religious experience and their cognitive structure when applied to the more mature world religions. It is necessary to move beyond the naïveté evident in the study of the ontogenetic evolution of religious ideas despite its initial helpfulness in reconstructing the picture brought to much more evolved views. Certainly, theology should also acclimate itself in a similar interdisciplinary way in order to understand religious issues, where that experience admits to a 'natural-cognitive' explanation, inclusive of other viewpoints besides the theological one. It remains to be seen if, after the cognitive reduction of religious thought, theology will still be taken seriously as a worthy interlocutor in the dialogue with science. The greatest danger is that the new scientific project will silence any kind of theological voice, reduced to a 'parasitic' and reflexive attribution schema, rendered useless and unsafe by the new 'Enlightenment'.

4. Utility for Theology and Biblical Studies

The third way to render fruitful the interplay between cognitive science and religion refers to the possibility of importing cognitive instruments and methods into the field of theological research. There are some disciplines that would surely benefit from this interaction, for example, the field of biblical studies and historical theology. There is a bright landscape of new methods to be applied to the task of biblical interpretation and the reading of documents relevant to the history of Christian thought. Anyone familiar with the evolution of biblical studies knows how much they depend on the assimilation of new methodologies: the historical, the philological, the structuralist, and more recently, the anthropological and sociological methods. I am convinced that the assumption of cognitive views could help to reconstruct the cognitive schemas or maps that defined the religious experience of ancient Israel, the early Church, and the subsequent deepening of certain disciplines, revealing the signs of a constant and logical evolution. Instead of being 'deconstructive' and 'postmodern', such a strategy would be construed as 're-constructive', unveiling

the way entire populations and multiple generations have dealt with the religious dimension and have found a compromise between the constant elements present in their perceptions and the eventual changes that are part of an evolutive process of religious thought and experience. At stake is a real contribution to the hermeneutic challenges that any generation of believers experiences in proximity to the sacred texts.

Furthermore, the application of cognitive methods to theological questions can offer great insight into the so-called 'mysteries of faith', which can be placed in relationship with some of the acknowledged limits of human cognition, such as the mystery of 'consciousness'. Then, these methods are able to shed greater light and provide deeper insights into some classical and contemporary theological questions, such as the meaning of 'covenant', Christological and Ecclesiological issues, and the cognitive commonalities and differences between Christian faith and other religions, as a useful tool in the inter-religious and inter-faith dialogue.

Going still further, there are practical and spiritual dimensions of theology that could benefit from the cognitive methodology. Some efforts have been made, as we have already seen, in order to offer a 'neurophysiology of the mystical experience'. There exists now an open field in the research of the cognitive structure of various aspects of universal religious behaviour, such as prayer, worship, moral engagement, community life, and an ability to ascertain the different levels of religious commitment - phenomenon common to different religious traditions, and an enigma that haunted Max Weber [13].

Finally, theology has a duty in exposing the flaws inherent in the cognitive approach as well. At times the standard research misses the point regarding Christian cognition of the mystery of God and salvation. Statements are often overly obvious or exhibit a tendency to reduce the enormous complexity of Christian cognition to simplistic mechanisms of attribution of causality. Furthermore, their schema is very often circular, being unable to discern between the subjective and the objective dimensions. Despite these limits, there remains a great field of exploration and a promising area of development in interdisciplinary work between theology and science.

Already in the middle of the ninetieth century John Henry Newman wrote that the truth of Christian faith could be measured by its capacity to 'assimilate' intellectual developments that form the cultural patrimony of humanity at any time [14]. Presently, theology is challenged to assimilate the most recent developments in the scientific field as a guarantee of its permanent openness to human achievements in different fields of knowledge and in its artistic expression.

References

- [1] M.A. Persinger, *Perceptual and Motor Skills*, **76** (1993) 915.
- [2] V.S. Ramachandran, W.S. Hirstein, K.C. Armel, E. Tecoma and V. Iragui, *The Neural Basis of religious Experience*, Book of Abstracts, Vol. 23, Conference of the Society for Neuroscience, New Orleans, 1997, 1316.
- [3] A. Newberg, E. D'Aquili and V. Rause, *Why God Won't Go Away*, Ballantine Books, New York, 2002.
- [4] E.T. Lawson and R.N. McCauley, *Rethinking Religion: Connecting Cognition and Culture*, Cambridge University Press, Cambridge, 1990.
- [5] P. Boyer, *Religion Explained: The Evolutionary Origins of Religious Thought*, Basic Books, New York, 2001.
- [6] I. Pyysiäinen, *How Religion Works: Towards a New Cognitive Science of Religion*, Brill, Leiden, 2001.
- [7] I. Pyysiäinen, *Magic, Miracles and Religion: A Scientist Perspective*, Altamira Pr. Walnut Creek, Lanham, New York, 2004.
- [8] S. Guthrie, *Faces in the Clouds: A New Theory of Religion*, Oxford University Press, Oxford, 1993.
- [9] H. Whitehouse, *Modes of Religiosity: A Cognitive Theory of Religious Transmission*, Altamira Pr. Walnut Creek, Lanham, New York, 2004.
- [10] P. Boyer, Why Do Gods and Spirits Matter at All?, in *Current Approaches in the Cognitive Science of Religion*, I. Pyysiäinen and V. Anttonen (eds.), Continuum, London, New York, 2002, 68.
- [11] D. Sperber, *Mind & Language*, **12/1** (1997) 67.
- [12] G.R. Peterson, *Minding God: Theology and the Cognitive Sciences*, Fortress Press, Minneapolis, 2003, 41.
- [13] M. Weber, *Wirtschaft und Gesellschaft*, Mohr Siebeck, Tübingen, 1922.
- [14] J.H. Newman, *An Essay on the Development of Christian doctrine* (1845), University of Notre Dame Pr., Notre Dame In., 1989, 185.