

Introduction

This dissertation has been inspired by a reading of Daniel Dennett's book on religion. Dennett titled the book in which he conveys his interpretation of evolutionary studies of religion, a bit provocatively, "Breaking the Spell". For Dennett, evolutionary studies of religion show how religion is not only deeply rooted in the evolutionary history of the human species, but, moreover, how religious beliefs manage to determine human behavior. In other words, evolutionary studies of religion, according to Dennett, show how religion 'works', and with that knowledge we can "break the spell" and set humanity free. This position fits, obviously, with Dennett's own New Atheist criticism towards religion. My question after reading this book, however, was whether an evolutionary explanation of religion does not instead serve to reveal the wonder of religion, showing how religion has been, and still is, part and parcel of humanity's evolutionary history. Paraphrasing theologian Terrence Ehrman, I wonder whether evolutionary studies of religion result in "a mere noise of nature" or whether they allow us to hear the song of God, the "carmen Dei"¹. What I hope to develop in the course of this dissertation is a theological perspective on evolutionary studies of religion. As such, this project belongs to the science-and-religion field; therefore, the first two chapters clarify what kind of relation between religion and science I envision. As a preliminary remark, I would like to make clear that I prefer to talk about the relation between theology and science, rather than about the relation between religion and science. One of the semantic ambiguities in the field of science and religion is the use of the term 'religion'². While being a notoriously ambiguous term in itself, 'religion' seems to be used as something that at least overlaps, or perhaps is something even completely synonymous, with 'theology'. Philosopher Robert McCauley argues that, from a cognitive perspective, theology and science have more in common than religion and science have³. He situates both theology and science on the reflective level of cognitive processing, while popular religion and 'folk science' belong to the unreflective or 'maturationally natural' level. Although he also points to differences between science and theology, arguing that science has more restrictions for using agency in causal explanations than theology for instance, his reasoning seems to suggest that the religion-and-science field is actually not defined by the bipolarity between religion and science, but, rather, by the tri-polar relations between religion, theology, and science. In this work, I will be following McCauley's suggestion and will focus on a dialogue between theology and science, rather than on a dialogue between religion and science. This dialogue, I will argue in Chapters one and two, should be a non-apologetic dialogue, a dialogue which is not primarily focused on defending faith, by showing the rationality of religious beliefs for instance. Instead, I think a dialogue between theology and science should be seen as a particular way of doing theology and, thus, should be in service of what Edward Schillebeeckx refers to as "theological praxis". Therefore, I will first show how different models

¹ TERRENCE EHRMAN C.S.C., *Evolution and Providence: Discovering Creation as Carmen Dei in Theology and Science* (2015) 271-287. We might bear in mind his warning, on *Ibidem*, p. 283, that recognizing the song of God in creation "requires a movement from knowledge to wisdom".

² Similar claims have been made regarding science, see for instance KEES VAN KOOTEN NIEKERK, *A Critical Realist Perspective*, p. 58, in NIELS HENRIK GREGERSEN & J. WENTZEL VAN HUYSSTEEN, *Rethinking Theology and Science: Six Models for the Current Dialogue*, Grand Rapids (MI), Eerdmans, 1998, p. 51-86: "In reality, there is not such a thing as science. The concept of science covers a manifold of different activities, which in different ways attain different kinds of results about different aspects of the natural world." See also PETER HARRISON, *The Territories of Science and Religion*, Chicago, Chicago University Press, 2015 (Kindle version), loc. 3574-3576: "As I hope is now apparent, science and religion are not natural kinds; they are neither universal propensities of human beings nor necessary features of human societies. Rather they are ways of conceptualizing certain human activities — ways that are peculiar to modern Western culture, and which have arisen as a consequence of unique historical circumstances."

³ ROBERT N. MCCAULEY, *Why Religion is Natural and Science is Not*, Oxford, Oxford University Press, 2011, p. 232-237. See, for a similar point, KEES VAN KOOTEN NIEKERK, *A Critical Realist Perspective*, p. 70. Van Kooten Niekerk sees theology as the "critical reflection on Christian religion", which suggests an analogy with science as the critical reflection on 'common-sense physics' or 'folk physics'.

of the relation between theology and science, as proposed by Ian Barbour, suffer from the tacit assumption that tensions and differences between both fields are, in fact, a source of conflict. In other words, theology often engages science with the predisposition that what is at stake is if, how, and to what extent a religious tradition can remain itself when in contact with science. This fear of, as I call it, ‘watering down faith’, should be overcome in order for us to arrive at a fruitful interaction between theology and science. I advocate a shift in focus in modeling the relation between theology and science, from the content of religious beliefs to their intent, which is the question of how to build a wholesome future for creation. The argument is based on both Catholic theologian Edward Schillebeeckx’s insights regarding religious experience and Lutheran theologian Philip Hefner’s view on theology and science as ‘partners in meaning making’. Crucial for this is, as Philip Hefner points out, bringing religion “into conjunction in a credible manner with the concrete data of our scientific and social experience”⁴.

We, theologians, need to explore evolutionary studies of religion, given that the dialogue between evolutionary studies of religion and theology should be instrumental in gaining insight into how religious traditions, which offer “large frameworks of meaning”⁵, can help us to understand how the human species can play its part in the evolutionary history of life on Earth. Chapters three and four provide the reader with a roadmap to this field. Chapter three introduces the wide variety of approaches in evolutionary studies of religion. This dissertation adopts a categorization of evolutionary studies of religion (and/or culture) proposed by biologist Jeffrey Schloss⁶. The first category described by Schloss is that of cognitive accounts, which focus on how the biological structures of the human body, of the human mind in particular, determine cultural and religious behavior. In short, explanations in this category deal with the question: ‘How does it work?’ The second category, Darwinian accounts, explain how cultural and religious behavior has been maintained throughout the evolutionary history of the human species. In other words, Darwinian accounts identify who benefits from transmitting these behaviors: ‘Why does it keep working?’ The third category, co-evolutionary accounts, combines questions about the bodily structures, involved in cultural and religious behavior, with questions regarding the history of these structures and of these behaviors. In discussing examples of these approaches, we will identify some of the theological questions raised by evolutionary studies of religion. Chapter four will further illuminate the possibilities offered to theology by evolutionary studies of religion, but will also present its challenges for theology, by discussing how a particular religious ritual might be explained by adopting an evolutionary perspective. The main challenge that will come forward is the difference in meaning attributed to a religious ritual by evolutionary studies of religion and by theology. From a theological perspective, the question is first and foremost about where a ritual points to, with what or who a belief connects us, and how it allows us to see the world we live in. In evolutionary studies of religion, however, the meaning of a ritual, or any given belief for that matter, is strongly related to who benefits therefrom, to its functionality in the ‘struggle for survival’.

The root of this difference, as I will explain in Chapter five, lies in the difference between how both fields connect the past to the present. The unproblematic methodological assumption⁷, that to study the evolutionary past of a cultural phenomenon is *instrumental* in understanding its present, receives the more problematic addition that knowing the past is *sufficient* to understanding the present in evolutionary studies of religion. In short, there is a tendency in evolutionary studies of religion to assume that the meaning of religious behavior and religious beliefs are determined by their evolutionary origin. This implies that theological reflection is regarded as irrelevant to a scientific understanding of religion and as only belonging to a religious tradition superficially. Chapter five explains this tendency, referred

⁴ PHILIP HEFNER, *The Human Factor. Evolution, Culture, and Religion*. Theology and the Sciences, Minneapolis, Fortress Press, 1993, p. 8.

⁵ PHILIP HEFNER, *The Human Factor*, p. 8.

⁶ JEFFREY SCHLOSS, MICHAEL J. MURRAY (EDS.), *The Believing Primate: Scientific, Philosophical, and Theological Reflections on the Origin of Religion*, Oxford, Oxford University Press, 2009, p. 16.

⁷ Also found, e.g., in Philip Hefner’s work.

to as ‘retro-reductionism’, but also points to critical voices from within science. This clears the ground for Chapter six, in which I propose bringing evolutionary studies of religion and theology together in a context which allows for a dialogue to take place between them, while respecting each field’s methodological choices. In other words, the intention of Chapter six is to build a thoroughfare down which evolutionary studies of religion and theology might travel together, bypassing the prickly shrub of retro-reductionism. This thoroughfare is, in my view, the recently emerging field of ‘big history’, in which human cultural history is integrated into natural history, both on an evolutionary and a cosmological level. By ‘historizing’ scientific studies of religion it becomes possible, I argue, to acknowledge a more complex interweaving of past and present. This, in turn, opens space for a potential dialogue between theology and evolutionary studies of religion.

An example of such a dialogue is presented in the final chapter, through a discussion of ‘niche construction theory’, a co-evolutionary account of culture. First, I clarify why niche construction theory is an interesting dialogue partner for theology. Norbert Bischof, a German ethologist, has developed three metaphors through which he characterizes three different positions regarding the relation between nature and culture. Since holistic history embeds human cultural history in natural history, it is relevant to see which metaphor is applicable to the work of Philip Hefner. Moreover, this helps us to understand, and to critically assess, how Hefner’s theological anthropology supports a constructive relation between the human and the natural. The scientific sources with which Hefner dialogues are also referred to by proponents of niche construction theory as part of the theoretical basis for the development of niche construction models of culture. Therefore, I suggest, that we can take stock of the implications of evolutionary studies of religion for theology through a discussion of niche construction theory as an instance of holistic history. First, I will argue that evolutionary studies of religion bring to our attention that religious traditions are one of humanity’s cultural tools to find meaning in each context in which it finds itself. Second, I think that evolutionary studies of religion help us understand how religious traditions can help humans to perceive possible futures and to act upon this perception. In short, I suggest that the dialogue between evolutionary studies of religion and theology offers us an opportunity to appreciate how deeply humanity is grounded in the creative act of God, and how we are called to live by, through, and from this act.