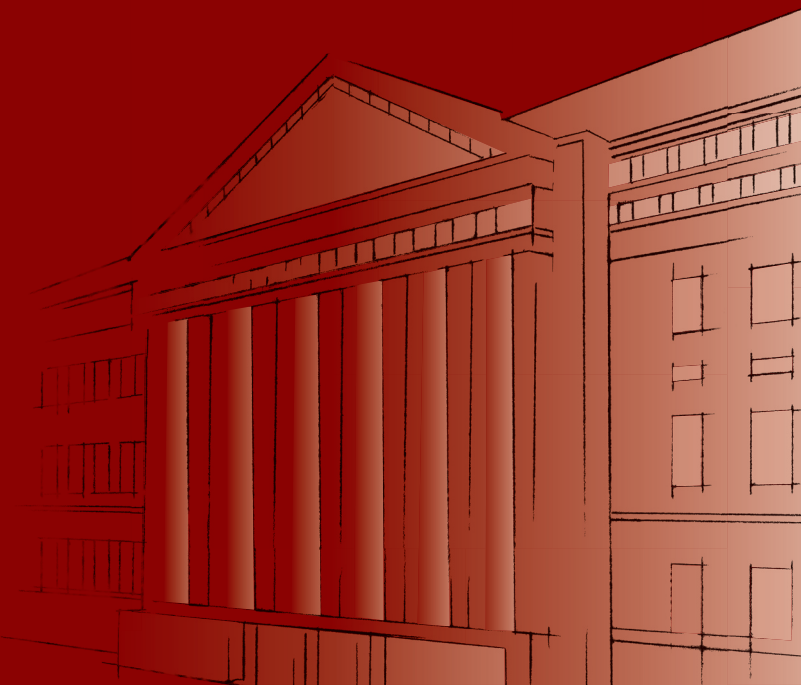


INDREK PEEDU

Positioning the Scholar:
Issues of Epistemology and Methodology
in the Evolutionary Study of Religion



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INTRODUCTION

For the scholars of religion, discussions concerning the nature of the academic perspective on religion have been ever-present practically since the very beginning of the discipline. The acceptability and reliability of method(ologie)s, research practices and theories has depended on their ability to acquire knowledge in ways which appear academically justifiable. So it is that we can find statements about this even in the most regular conference reports, such as the one detailing the discussions of the IAHR regional conference in Harare, Zimbabwe over 25 years ago (Geertz 1992). Following a short overview of the noteworthy debates, he notes in the most casual manner: “All were in agreement though that the study of religion must be neutral, unbiased, non-confessional, and peaceful, but it should not, however, remain a purely descriptive endeavor, rather it should address the significant philosophical problems of modern times” (Geertz 1992: 226). The question not addressed, of course, is obvious – how should one actually do this? How should one pursue academic study of religion in such a way that maintains the unbiased neutrality of the scholar and the discipline, but at the same time also avoids pure descriptiveness and does address major philosophical-theoretical problems?

This work here offers one look into this complex problem. However, the full treatment of such a fundamental, far-reaching issue would obviously extend far beyond the limitations of just one volume. Therefore, even though many different proposals have been made with regard to the position of the scholars and its conceptualization in the context of the study of religion in the past century or so, I will here focus on the one most fervently debated in the past few decades as far as the position of the scholar is concerned. Predictably, I have in mind methodological naturalism and the issue of its justifiability in the evolutionary study of religion as well as for the study of religion in general. The narrower focus thus will be on analysing methodological naturalism and arguments presented to justify it as the preferable position for all scholars of religion. At the same time, focusing solely on the epistemological justifiability of one specific conceptualization would not really tell a whole lot in itself. Because of that, it is vital to also take into account the larger context in which the debate over methodological naturalism takes place. Inevitably, this raises the issue of possible alternatives. After all, unless one is out to discredit a discipline or a research approach in general, it is vital to pay attention to the alternatives and their justifiability when criticising any of the possibilities. In this thesis I will try to balance both sides of this issue as it relates to the justifiability of methodological naturalism and to the relationship of evolutionary research and methodological naturalism. On the one side, this means taking a look at the larger picture and situating the debate over methodological naturalism within that context. As I will show, this complex matter is at the same time methodological and epistemological. On the other side, evaluation of methodological naturalism necessitates a closer analysis of all its justifications as well as some likely theoretical counter-arguments to the arguments presented. All in

all, I will explain in detail why justifications of methodological naturalism are not nearly as strong as they are made to appear in the context of the study of religion and how methodologically, theoretically as well as evolutionarily consistent alternatives are entirely possible.

However, as one has likely already noticed from the list of contents, an analysis of such a complex topic necessitates a very interdisciplinary approach. Thus I have pursued issues primarily dealt with in epistemology, evolutionary biology, evolutionary epistemology as well as in the philosophy of science, when necessary for discussing one or another question in more detail. Throughout these discussions focus will be also on the more general issues, as relevant for the study of religion. In each case, I have tried to give as much background information as necessary for the reader to be able to follow the discussion without major obstacles, as one cannot expect most readers to be familiar with the specifics of the cognitive science of religion, evolutionary epistemology or the underdetermination thesis at the same time. Thus, many chapters also incorporate compact descriptions and analyses of the specific field or topic of research currently under focus. In this sense, one can also say that on the one hand a lot of research has been done on all the topics that I am bringing together here. However, on the other hand I could also say that as far as I know no one has previously worked to bring these research perspectives together and show their intertwined relationship in the context of the study of religion. That said, I will be discussing previous research on specific topics throughout the chapters, thus I will not present an overview of earlier research in this introduction, as this would merely duplicate discussions inevitably necessary later on anyway.

Bringing these distinct fields of research together has necessitated a particular kind of a general structure for this work. Metaphorically speaking I would describe this as a kind of a loop, which repeatedly returns to the same place, having in the meantime taken a further look in some specific direction. Above all this discussion will be continuously returning to issues of epistemology, methodology and scientificity as these intertwine in matters related to the positioning options available for scholars – in particular in relation to methodological naturalism. Furthermore, I have tried to include as many cross-references to other chapters and sections as possible to point out relevant connections in between chapters.

Such considerations have also led to the structure of the thesis as presented here. All in all the chapters have been grouped into three larger parts, each including two or three chapters. In two chapters of the first part I will lay out an analysing description of the current situation. Thus in the first chapter I will begin with a short overview of the current state of research in the behavioural and cognitive sciences of religion, followed by a comparative take on the concept of scientificity as it is understood in these research programmes as well as elsewhere in the study of religion. The second chapter is wholly devoted to the issue of method and methodology as one can find it in the study of religion. As I will show, this is particularly important, since issues of (epistemological) self-positioning have been understood as matters of methodology in the study of religion. All in all the first two chapters should function as the basis for the subsequent

discussions, since everything discussed in the following five chapters relate to the first two or evaluates matters initially described in the first two. The subsequent three chapters of the second part are wholly devoted to the detailed analysis of the philosophical (that is, mostly epistemological) arguments presented in defence of methodological naturalism. While the first two chapters set the stage by looking at most general issues and the treatment of these, following three chapters go deeper and deeper into very specific aspects of a number of arguments. And since methodological naturalism is primarily justified in relation to the behavioural and cognitive sciences of religion and with particular emphasis on its relation to the natural sciences, this is where theoretical biology, evolutionary epistemology and philosophy of science become immediately relevant.

In the third part of the thesis, where I will return to the larger questions at stake. I will first critically evaluate concepts of scientificity and the unity of sciences as described in the first chapter. This is necessary for the concluding discussion in the seventh chapter where I will bring together issues dealt with in the first two and the sixth chapter with the detailed problems of epistemological justifiability as discussed in the middle three chapters. Such a structure is necessary, since human limitations necessitate a linear structure, even if it would be perhaps easier to present the complexity of the situation as three or four parallel texts, all read simultaneously. Yet, as humans are not capable of that, I have had to make difficult choices concerning the linear order of presentation of this complex matter. These parallel lines of argumentation are all necessary for the comparative evaluation of the scholarly self-positioning options, which will be the primary focus of the discussion in the seventh chapter. I intend to show how methodological naturalism is far from being as strong of an option as its advocates have claimed. Its competitors can claim to be at least as credible as methodological naturalism. Yet, I will also show why all the possible positioning choices also fall short in being able to claim universal applicability. All in all my goal is on the one hand on the evaluation of methodological naturalism. But on the other hand I also want to highlight the overall complexity of the situation, as there do not appear to be any easy solutions or any positions or arguments far stronger than all others.

At this point one might ask about the method of this thesis itself. Predictably, the answer to this issue is a complex one. What is the method of a metatheoretical, a philosophical or a meta-methodological study after all? Throughout this thesis I will be describing my approach to the matter as one of description, discussion, analysis, evaluation and criticism. Yet, if method(ology) itself is the focus of the study – as it above all clearly is, in particular in the second and seventh chapter – then a description of the methodological-procedural practice as detailed as it is, for example, possible in experimental sciences, is likely just not possible at all. That said, I would say that aside analysis and discussion as common in all meta-theoretical discussions, my aim throughout this thesis is to systematically present the intersection and interrelatedness of a number of issues which otherwise are typically dealt with separately from each other. One could thus say my approach is also described by deliberate intertwining of seemingly independent research

perspectives for the purposes of offering a more in-depth analysis of the situation at hand. Of course, this as well remains a relatively theoretical description when compared to the procedural methodologies relied on in many research approaches, but it would seem that offering more detailed descriptions of the method is just not possible in metatheoretical studies.

Finally, I would like to also say a few words about a couple of concepts I will be using throughout this thesis. Although I will be using a number of other concepts quite a lot as well, those will be defined and explained during the discussion as they become relevant, thus here and now I want to limit myself to just three: study of religion, religion and cognition/cognitive. Starting with 'study of religion' as the name of the academic practice which this thesis relates to I want to emphasize that I will be using it as a tentative marker of the discipline or the field of study as such. There is clearly a difference between calling it a discipline or a field of study. This difference is something I will be implicitly touching on during my analysis as well. But since ideals of scientificity, possibilities of unity or fragmentation and other issues also definitely do affect ways one can think of the study of religion as one thing or another, all usages of the concept itself in the subsequent chapters function merely as provisional markings or indeed as the object of the discussion itself. But it is not necessary for the purposes of this thesis to offer a pre-set definition of the study of religion or reach some kind of a final conclusion about the nature of the discipline / field of study.

Secondly, I would like to turn to the issue of 'cognition'. While this concept as well has meant many different things in different research perspectives over the years, from strictly psychological denotations to meaning conscious, rational thought in some philosophical discussions of the 20th century, in the context of this thesis I will be relying on 'cognition' as it is used in the cognitive science of religion. As I will show in the next chapter, 'cognition' there basically means the set of (unconscious) mental processes the human mind relies on its everyday functionality. 'Cognition' thus is a general designation, which can include most of the psychological processes we can observe and measure as visible through human actions and deliberate psychological experimentation. And 'cognitive' will therefore merely function as an adjective referring to the processes and functionalities seen as part of the human cognition.

Lastly, there is the matter of 'religion', the central concept for all study of religion. Here the matter is somewhat more complex. Not only is the concept used in noticeably different ways in different research approaches, but various critics have also extensively disputed its usefulness in general. However, in the context of this study, most of the time I will be staying outside such disputes, even though debates over the concept and its applicability as such would clearly have consequences for the issues I focus on here as well. Still, since it is far from obvious what the result of these conceptual debates will or can be, I will be here prioritising the kind of conceptual usage which on the one hand tries to avoid the most glaring problems as highlighted by the constructionist critics, while still aiming to maintain consistency with term as it is used in the behavioural and cognitive science of religion. After all, basic agreement concerning conceptual tools is vital for

dialogue and discussion to take place at all. Without that one would have to be disputing the research approach in general. However, as that is not my goal here and since I will be primarily discussing matters related to the evolutionary study of religion, I will have to rely on conceptualizations at least principally compatible with theirs for my conclusions to be relevant and important. Furthermore, since I am concentrating on one aspect of the wide-reaching phenomenon typically designated by ‘religion’, I inevitably have to conceptualize it more precisely in some of its aspects than others.

Thus, I can say that in the context of this study, Kevin Schilbrack’s proposal to understand religions as “composed of those social practices authorized by reference to a superempirical reality, that is, a reference to the character of the Gods, the will of the Supreme Being, the metaphysical nature of things, or the like” (Schilbrack 2013: 313) most useful. Or as he puts it even more succinctly: “In short, I define religion as forms of life predicated upon the reality of the superempirical” (Schilbrack 2013: 313). This is practically very useful, since it emphasizes much of what is typically thought of as part of religion, while at the same time also highlighting ‘superempirical’ aspects of religion, which in a way acquire centre stage as soon as we come to the issue of epistemological justifiability. After all, without that much emphasis on the superempirical, many of the epistemological issues would not arise in the context of the positioning debate at all. Still, one should not take this as my conclusive take on how to define religion. Similarly, Schilbrack suggest that this definition is simply a heuristic tool that he hopes scholars find practically useful (Schilbrack 2013: 293). My usage of religion is analogous – since most of the methodological-epistemological debate is focused on those aspects of religiosity that deal with things we cannot assess empirically, I will be inevitably focusing on this more than other aspects of religiosity. But this does not mean that other aspects are not important if we looked at religion in general or at some other aspect in more detail. Nonetheless, there will also be a section in this thesis where debates over the conceptualization of ‘religion’ are used to exemplify larger issues and highlight one or another aspect pertinent for the central focus of the thesis. In those cases ‘religion’ clearly becomes the object of discussion in itself. All other central concepts and terminology will be explained and defined as they become relevant in the subsequent chapters.

**PART I –
METHODS AND PERSPECTIVES**

1. Scientific explanation of religiosity as a research paradigm and as a goal in the cognitive-evolutionary study of religion

To keep this interdisciplinary thesis clearly defined and its focus steady, it is first of all important to clarify the actual research programmes¹ I am primarily interested in throughout this thesis. Of course, I could say that the subsequent analyses will mainly focus on the cognitive science of religion or on the evolutionary study of religion in general, but terminological designations in these matters have not always been consistent, thus actual specification is necessary. After saying a few words about that and related matters concerning the focus, I will highlight the main characteristics and the most noteworthy shared features of the relevant research programmes. I will not be presenting a thorough analysis of all their research and relevant literature, but merely an overview of the most noteworthy and influential research programmes. This is necessary to be clear about the kind of research I have in mind in my later analyses. Also, given the focus of this thesis, it is especially important to see how the proponents and practitioners of this field of research understand the “scientificity” of their approach or “scientificity” as the idealized goal of the study of religion as such. This is particularly important for the subsequent analyses and discussions of epistemology and self-positioning, since the way one understands the scientificity of one’s research or true scientificity as the ideal form of research has a major impact on the epistemological and positional dimensions of research. As the last topic of this chapter, I will draw attention to a couple of ways matters of scientificity and positioning interrelate to each other.

1.1. Cognitive, behavioural and other evolutionary approaches to religion

A couple of choices I have made need an explanation before I turn to the specifics of this field of research. First of all, there is the issue of the name of this field of research. After all, why use that stretched out designation visible in the title of this section? Could I not just call it the cognitive science of religion as many practitioners in the field do? This is indeed a relatively common way to deal with

¹ When it comes to the question of defining a ‘research programme’ I largely agree with Gavin Flood’s definition: “A research programme I take to be a coherent theoretical and methodological orientation which has a clear formulation of its aims, theoretical underpinnings, inter-subjective criteria of adequacy, and method; all of which occur within a wider environment which sanctions the process” (Flood 1999: 65). I do suspect that perhaps demanding a ‘clear formulation’ of its aims, theoretical underpinnings and criteria of adequacy is probably an overstatement in some cases – in regular daily research practice these often remain unconscious and are not clearly formulated – but if taken not that strictly, Flood’s definition is definitely a good one.

this situation. Robert N. McCauley and Emma Cohen (2010), Ilkka Pyysiäinen (2012) and Dimitris Xygalatas (2014) among others include everything from the cognitive by-product theories of belief to the cognitive study of religious transmission to the behavioural perspectives under this generalized heading.² Unfortunately, things are not as simple and this kind of a generalization is somewhat problematic. For one, some of the research programmes here certainly are not doing cognitive science and secondly, they specifically do not understand themselves as part of the cognitive science of religion. The most notable example is the behavioural ecology of religion (see Sosis and Bulbulia 2011), but among cognitivists Justin L. Barrett (2011b) has also found it necessary to distinguish the likes of Richard Sosis, David Sloan Wilson, Paul Bloom and others from the cognitive science of religion, portraying them as “evolutionary studies of religion” (Barrett: 2011b: 233). At the same time, phrases like “evolutionary perspectives” or about “evolutionary theories” have been used to designate the whole wider field in general, including all the subfields of the cognitive science of religion and other related research perspectives in addition to the behavioural models (for example see Boyer, Bergstrom 2008; Schloss 2009). Similarly, Sosis and Kiper (2014) talk about “evolutionary theories” and distinguish between two main areas of research under that general heading: cognitive and behavioural. It is this last approach that I find most useful. Although it is definitely true that all of the approaches included under these different headings are based on the theory of evolution, calling them all evolutionary is – while correct – a bit too vague and uninformative. Instead, I find it more useful to talk about the cognitive perspective and the behavioural perspective. Furthermore, there are now a couple of distinctively different evolutionary perspectives that try to incorporate all the existing sub-fields into unified perspectives.

Therefore, as a preliminary specification we can say that the kind of research I have in mind here is focused on studying religion or religiosity (or aspects of either one) in an evolutionary framework by applying the approaches and procedural methods of evolutionary psychology, behavioural ecology or other related fields on available empirical data. From such a perspective religion is one of the more salient traits of humans as a biological species and thus the existence of such a trait can be and should be explained by evolutionary research. One way or another all these research approaches try to come up with evolutionary explanations for the existence and persistence of religiosity (or, of specific aspects of it). The theory of evolution, therefore, serves as the basis of all research. Whether one studies religion by adopting a cognitive perspective, a behavioural perspective, a combination of both or instead relies on a more generalized evolutionist scheme (such as the group selection perspective for example), does not result in that big

² Or as a few critics have noted: “The “cognitive science of religion” is a ragbag term that covers the diverse activity of scholars from a wide range of disciplines – including anthropology, psychology, history, philosophy, and biblical studies – united, such as it is, by an enthusiasm for the methods and theories of cognitive and evolutionary psychology” (Jong, Kavanagh, Visala 2015: 246–247).

of a difference if one keeps in mind the big picture background they all share. I will return to the issue of the noteworthy and important similarities in section 1.1.5. What I have outlined here is meant merely as a starting point – as the most obvious shared characteristic.

It should be noted that although most of the research programmes and perspectives I will be dealing with are relatively recent – going back to the 1990s at the earliest – this kind of research does have predecessors from earlier eras as well. Cognitivists themselves actually often understand the book, “Rethinking religion: connecting cognition and culture” by E. Thomas Lawson and Robert N. McCauley (1990) as the beginning of the discipline – this becomes very apparent in the recent collection of articles: “Religion Explained? The Cognitive Science of Religion after Twenty-five Years” (Martin, Wiebe 2017). The evolutionist paradigm of the late 19th and early 20th century is perhaps what most might first recall at this point, but similarities and connections between that perspective and the contemporary cognitive-behavioural perspectives are very superficial and mostly limited to the fact that both wish to apply the theory of evolution to studying religion. Predecessors more significant and in many respects more similar to the goals of contemporary research and practices begin to appear after the Second World War. For example, Marvin Harris and Roy Rappaport (1968, 1979) are very noteworthy and influential predecessors of the behavioural ecology of religion.³ Also, Walter Burkert had been developing his own ideas about a potential naturalistic theory of religion for some time by the 1990s (Burkert 1972, 1998).⁴ At the same time, on the cognitivist side the idea of ‘a cognitive theory of religion’ goes back at least to Guthrie who published an article with that exact title in 1980 (see Guthrie 1980).⁵ Still, cognitive and ecological research programmes, as they are understood and practised today began in the 1990s with the works of Lawson and McCauley (1990), Pascal Boyer (1994) and William Irons (1996), although the influence of the earlier approaches is undoubtedly present in them.

Secondly, before turning to the specifics of these research programmes, there is another issue that needs to be addressed. Namely – aside the evolutionary study of religion there is an even more extensive field of research that we could loosely describe as the evolutionary-cognitive study of culture. Going from Robert Boyd and Peter J. Richerson (1988) to Merlin Donald (1991) to Tooby and Cosmides (1992) to Michael Tomasello (1999a, 1999b) to Mesoudi, Whiten and Laland

³ Richard Sosis in his articles also refers to Rappaport quite often. For a good overview of the earlier researchers in the ‘ethology of religion’ (as it is called in that article), see Wunn, Urban and Klein (2014).

⁴ For an overview of Burkert’s ideas and criticism of it see Schüler (2014b: 16–19).

⁵ But it should be noted that the possibility of even earlier cannot be ruled out. As far as I know, no proper history of all the attempts to apply the cognitive science to the study of religion has been written yet. All the ‘historical overviews’ we have thus far are written by practising cognitive scholars who are using the historical perspective to highlight the kinds of scholarship they find especially noteworthy. Thus such overviews function at least as much as ways how to construct the identity of the contemporary cognitive perspective as they function as histories of the perspective (about this matter also see Gilhus 2014 and Peedu 2018).

(2006) and to Joseph Henrich (2016), this wider field of research is certainly rather closely related to the study of religion. Many scholars of religion have clearly relied on such research in their own conclusions about religion. However, quite obviously including all of these research programmes here is simply not realistic. The extent and scope of this thesis would become almost gigantic. Because of that I am going to concentrate solely on theories that explicitly deal with religion and attempt to present generalized theoretical conclusions about religion. In addition, I think there are reasons to believe that much of the methodological and epistemological problems that I am dealing with here are specific to the evolutionary theories of religion and do not have as much relevance for the more general field of the evolutionary study of human culture as such. The reasons for this should become apparent in the subsequent chapters where I highlight the particular epistemological questions that dominate the evolutionary research on religion.

In addition, I am also leaving out all neurological studies of religiosity.⁶ Partly the reason for this is also the need to limit the scope of this thesis and give it a better focus, but to a significant extent this also has to do with the way these research approaches are practised. Even though the research programmes I will be discussing clearly have much in common with the neurological perspectives, in actual research practice right now these research programmes largely function and have functioned independently from each other. This is somewhat unfortunate and more cooperation would certainly benefit both sides, but as it is right now, this is not the case. Additionally, because of this it is possible to leave those research programmes aside here as my main interest is in the evolutionarily cognitive and behavioural treatments of religiosity. Therefore, the subsequent overview of the field is only meant as a compact introduction to the particular types of research I have in mind, what they have focused on and what kind of research questions scholars have asked. I have analysed the current state of research in the cognitive and ecological research perspectives more extensively elsewhere (Peedu 2015b).

1.1.1. The cognitive science of religion

The main goal of the cognitive science of religion can be described as an attempt to determine how the evolutionarily developed cognitive basis of our minds determines or guides the ways humans can think, behave and function religiously (Sørensen 2005: 467–475). Religiosity of course is also manifested through elaborate rituals, behavioural norms and many other aspects of human life, but in the end it is always the human being who does these things or thinks about these things and clearly this is determined by the cognitive processes of the human mind. This does not mean that neurological studies are considered irrelevant and such “even more fundamental” levels of human cognition are being ignored, but rather that the proponents of the cognitive science of religion do not consider it

⁶ For an overview of earlier research in the neuroscience of religion see Schjoedt (2009).

possible to study cultural aspects and forms of human life without taking into account their cognitive underpinnings. Also, it is important to note that in this research programme religion is understood as too complex a research object to offer a unified, general explanation of it. Instead, it is often emphasized that we should study religion in a ‘piecemeal fashion’ and therefore focus on smaller units and aspects of the complex general phenomenon of religion (for example see Sørensen 2005: 467–470; Barrett 2007a: 768–769). However, despite this most of the research in the cognitive science of religion has still focused on belief, its underlying cognitive mechanisms and forms. This is very well exemplified by the work of Pascal Boyer who sets out to present a general explanatory framework of religion (Boyer 2001) and yet the primary question he asks is “what is the origin of religious ideas?” (Boyer 2001: 4).

To answer that question research in the cognitive science of religion has worked towards identifying all the different mechanisms and structural elements of human cognition that shape and sculpture what we would call cultural forms and aspects of our lives. The first of these noteworthy elements of our minds is the ‘theory of mind’ (TOM). ‘Theory of mind’ is understood as a set of cognitive mechanisms that guide us to rely on the presumption that on a more general level all humans think, feel and comprehend the world the same way we do. With the help of the theory of mind we can deduce the inner cognitive states of other people based on visibly available information (gestures, facial expressions, talk, etc.) (Boyer 2002: 68–92; Bering 2002: 3–24; Bulbulia, Slingerland 2012: 575–577). Aside the theory of mind, hyperactive agency detection device (HADD) has also been emphasized a lot in the cognitive science of religion. HADD is understood as the innate tendency of all humans to assume the actions of agency behind things we witness and experience in the world – things do not just happen, behind events there are agents whose actions led to the outcomes we have witnessed (Barrett 2000: 31–32; Barrett 2007a: 773; Barrett, Lanman 2008: 115–116). This agency detection device is called *hyperactive*, since it does not just help humans understand how other living beings have caused one or another thing to happen, but because it has a tendency to cause many false positives as well. It is therefore somewhat too willing to suggest that the deliberate acts of an agent are behind something. Evolutionarily it is argued that this has been beneficial to us in a kind of a “better safe than sorry” form, since only those who assumed agency behind signs of threat and fled survived. The third central concept for the cognitive perspective is the idea of counterintuitiveness (Boyer, Ramble 2001; Pyysiäinen, Lindeman, Honkela 2003). Basically, this relies on the idea that all human beings have a shared set of innate and intuitive beliefs about the world – other people think like us, living beings are different from inanimate objects, different kinds of objects behave differently and so on. This means that if a phenomenon is considered as an example of some general type (person, artefact, animal, inanimate object, etc.), then it is assumed to have a certain set of characteristics. However, religious ideas break these intuitive rules and combine attributes which should not be simultaneous characteristics of the same phenomenon. For example ‘ghosts’ are supposedly persons with minds, yet they have no visible, biological body. Because of this

religious ideas are ‘minimally counterintuitive’. They do not break every intuitive assumption we have about the world, but they do go in conflict with a few of them. Religion persists because experimental research has shown that people remember counterintuitive ideas better than regular, intuitive ideas.

In the cognitive science of religion the existence of this kind of universal cognitive mechanisms is central for showing how humans have a strong pre-disposed tendency to think about religious matters in rather specific ways. This is also why widespread folk beliefs and the theological doctrines of the community typically differ so significantly: theological concepts are too complex and difficult to learn and understand and then use, whenever relevant. Instead, humans prefer to save their ‘cognitive energy’ and apply simpler concepts when it becomes necessary (Barrett 1998, 1999). If so, then this also makes it possible to explain why people do not cognitively rely on ‘theologically authoritative’ beliefs and it also helps us explain why concepts of supernatural beings are so remarkably similar all over the world (Barrett 2002: 95–96).

What I have described here thus far is commonly called the standard model of the cognitive science of religion (Powell, Clarke 2012; Jensen 2009). Due to the aspects described here, researchers in the cognitive perspective have generally concluded that religiosity is not a direct result of evolutionary selection, but merely the by-product of a number of cognitive adaptations. Religiosity therefore has persisted not because it is beneficial for humans, but because it relies on a number of beneficial cognitive functions (Boyer 2003). However, the cognitive science of religion is not limited to the standard model. In addition there are also a couple of alternative research programmes that are also clearly cognitive in their aims, research questions and methods.

The earliest among them is the only significant attempt to focus on ritual from a cognitive perspective (Lawson, McCauley 1990, 2002). Lawson and McCauley understand religious ritual as a formal system for information communication. The difference between religious rituals and all other rituals has to do with supernatural agents – they play a very important role in the religious rituals, but do not have any relevance in other rituals. For Lawson and McCauley linguistics is the ideal science in humanities as there scholars have managed to find the “fundamental building blocks” of language. Lawson and McCauley want to do the same for religion. However, subsequent empirical research in this research programme has been rather scarce, and has mostly been limited to subsequent treatments of by Lawson and McCauley themselves (for example, see McCauley, Lawson 2002).

The second distinct sub-perspective in the cognitive science of religion is the theory of supernatural punishment (Johnson, Bering 2009; Bering, Johnson 2005). Here the main focus has been on how connecting some event or a thing with supernatural agents affects the thinking and behaviour of people. The theory is understood as an answer to the evolutionary problem of cooperation – according to this theory belief in supernatural beings spread because fear of supernatural punishment motivated people to adhere to the shared rules of the community. Different experimental researches have shown that people behave more generously when they believe that they are being watched as well as in situations that people

understand to be specifically religious (Bateson, Nettle, Roberts 2006; Shariff, Norenzayan 2007).

The last one to bring up right now, but perhaps also the most significant out of these three sub-perspectives in the cognitive science of religion is the theory proposed by Harvey Whitehouse. He has argued that we can cognitively distinguish between different modes of religiosity (Whitehouse 2002, 2004a, 2004b). Whitehouse notes that only such religious beliefs and rituals can form that people can memorize and remember. Secondly, people must be motivated to pass down these rituals and beliefs. In other words, similarly to Boyer, Barrett and others, Whitehouse is also interested in how human religiosity is shaped by our pre-existing cognitive structures. Beliefs and practices must be congruous with our mental setup to persist and spread. Whitehouse considers it possible to distinguish between two main modes of religiosity – the doctrinal mode and the imagistic mode. In the doctrinal mode (Whitehouse 2002: 296–303) gurus, prophets and other leading figures play an important role and doctrinal concepts are frequently and regularly emphasized and repeated. Also, this mode has a tendency towards a higher level of institutionalization. Since ideas are memorized independently from when and where they were acquired, semantic memory is very important. In the imagistic mode (Whitehouse 2002: 303–308), on the other hand, religious practises are irregular, but highly stimulating and memorable. Episodic memory is very important and spontaneous exegetical discourse common – this also gives room for a plurality of views and beliefs. At the same time, institutionalization is not as important or extensive and communities rather rely on episodic memory – it is not possible to be a member of a community if others do not recognize you as such. Because of these aspects such movements do not spread over large populations.

While the cognitive science of religion is certainly not limited to the research programmes that I have briefly described here, the ones I have brought up can be safely called the most influential and widespread. But aside the cognitive perspective there are also other notable research perspectives, perhaps the most significant among them is the behavioural ecology of religion.

1.1.2. The behavioural ecology of religion

The ecological research programmes definitely are closely related to the cognitive perspective and in many ways these two are competing research paradigms that attempt to present explanations of the same phenomenon.⁷ The ecological perspective is quite noticeably different from the cognitive one, asking different kinds of questions and emphasizing different causal aspects in their explanatory schemes.

⁷ This is perhaps especially apparent in how they depict, analyse and criticize each other's research programmes. See for example Pyysiäinen and Hauser (2010) and Boyer and Bergstrom (2008: 116–117) from the cognitive side and Sosis (2009) and Purzycki, Haque and Sosis (2014) from the side of behavioural ecology.

While the cognitive approach is above all interested in mental processes, the ecological perspective considers human behaviour the decisive aspect, because in the end our behavioural choices determine our ability to survive, multiply and persevere (Sosis, Bulbulia 2011).

The best-known and most thoroughly developed research programme in the ecological perspective is definitely that of the costly signalling theory of religion. This theory is based on the idea of costly signals as proposed in the 1970s (Zahavi 1975; Zahavi, Zahavi 1997). Basically, it suggests that evolutionary selection can occasionally favour traits that do not give the organism a direct benefit (and instead are rather costly). However, at the same time these traits make it possible to communicate trustworthy information about some inner quality of the organism that is otherwise unobservable. This kind of traits can be corporeal (such as the peacock's tail) as well as behavioural. Various human activities and characteristics have been discussed and analysed as potential examples of this evolutionary mechanism (Hawkes, Bliege Bird 2002; Bliege Bird, Smith 2005; Smith, Bliege Bird, Bird 2003).

The costly signalling theory of religion builds on this, point out the apparent uselessness of religion from a strictly evolutionary perspective – time and energy spent on performing elaborate religious rituals could be used far more productively. Yet, given the universality of religiosity, evolutionary selection has clearly favoured the perseverance of religiosity (Sosis 2006; Bulbulia 2004a). For the proponents of this theory the solution to this contradiction comes from the problem of cooperation – religiosity is here understood as the solution to the problem of trustworthiness in large groups.⁸ Religious behaviours, norms and signs indicate devotion and commitment (Sosis 2003, 2005, 2006; Sosis, Kress, Boster 2007). Religious behaviours involve complicated and time-consuming rituals and activities, observing the rules and norms of the community, a willingness to adhere to the same limitations as others in the community and the usage of the correct signs and badges to indicate devotion to one specific community and no other. At the same time, faking all of this for the benefits one gains from community membership, while actually not sincerely valuing all of these becomes very complicated and tiring, if one wants to avoid “being caught” by other members of the community. Thus, religiosity can appear costly, but it turns out to be the most reliable way of acquiring trustworthy information about the commitments of fellow community members.

Lots of empirical research has been done to test and analyse the costly signalling hypothesis concerning religion, from the inner dynamics of Israeli kibbutzes (Ruffle, Sosis 2007) to Candomblé in Brazil (Soler 2012) to *ovaa* practices in

⁸ It should be noted that the proponents of the cognitive science of religion are not entirely denying the central relevance of this problem. For example Boyer repeatedly argues in his famous book that the two things people need most are (1) information about the surrounding social environment, and (2) the cooperation of other people (Boyer 2001: 120, 150–155). However, contrarily to the behavioural ecology for Boyer this does not mean that we ought to focus on the social level – for him cognition is still the central key element to explain both of these aspects.

Tyva (Purzycki 2010; Purzycki, Arakchaa 2013). While research in the cognitive science of religion focuses on psychological experiments, research here is rather a combination of anthropological fieldwork, behavioural experiments and interviewing (based on a detailed set of questions), but there have been a few historical analyses as well (such as Sosis 2000 for example). In newer research behavioural ecologists have also turned their attention to the question, how to integrate the cognitive science of religion with the ecological perspective? How to make them more compatible? They have proposed that religiosity ought to be understood as an extended phenotype that has adaptively coupled ritual and belief (Purzycki, Sosis 2013).

In addition to the costly signalling theory, David Sloan Wilson's proposal that religion can be understood as a group-level adaptation⁹ is also best regarded as part of the behavioural ecology approach.¹⁰ In a way quite similar to Sosis, Wilson looks for the ecological reasons behind human behaviour. His theory is based on the idea that evolutionary selection can take place on multiple different "levels" simultaneously – gene, individual as well as group can be the unit of selection depending on the situation (Sober, Wilson 2000; Wilson 2002: 5–35). As Wilson notes, the human body can be treated at the same time as one unit or as a community of cooperating cells (Wilson 2002: 17–20; 33–34). Another similarity between Sosis and Wilson is the shared interest in asking for the explanation why religiosity has persisted despite its sub-optimality from an evolutionary perspective. Wilson argues that religiosity is a group level adaptation for humans, making it possible for cooperative societies to function and endure (Wilson 2002: 163–168; Wilson 2005: 391–396). In this he is obviously very similar to Sosis, but also visibly relies a lot on the ideas of Durkheim (see especially Wilson 2002: 52–56, 156 etc.). It should be noted that he presents this as a case of cultural evolution – he does not claim selection for this kind of cooperation has established itself on the genetic level. To present his ideas in more detail, he analyses two particular cases based on available historical and anthropological data: early Calvinism (Wilson 2002: 86–124) and the water temple system in Bali (Wilson 2002: 126–133). Lastly, it has been emphasized that Wilson's theory has not been tested through actual empirical research as much as the costly signalling theory or as the different research perspectives of the cognitive science of religion. While Wilson himself has of course relied on existing empirical material in his analyses, these have not been gathered specifically to test his hypotheses.

⁹ The issue of group-level selection certainly has been rather controversial among evolutionary theorists and many do not find it acceptable in evolutionary studies at all (see Shanahan 2004: 37–62). However, David Sloan Wilson and Elliott Sober have been among those leading evolutionary theorists who have argued that group selection does have a justifiable place in evolutionary theory (for example, see Wilson, Sober 1994), inspiring subsequent studies (for example, see Price 2008). Because of this, the topic of group selection has become part of the evolutionary study of religion as well (for example see Davis 2015).

¹⁰ It should be noted, though, that as far as I know, Wilson himself has never explicitly said so. Also, the following general description is based on the analysis of Wilson's theory that I presented in my Master's thesis (Peedu 2011: 18–24).

1.1.3. The biocultural perspective

In recent years the so-called biocultural perspective (Geertz 2010a), sometimes also called ‘the Aarhus school’ has firmly established itself as the third noteworthy research perspective besides the cognitive and the ecological. Contrarily to the previous two research perspectives scholars here have not concentrated as much on presenting a complete causal theory of religion as they have focused on working out a wider research perspective that would enable one to study the biological and cultural evolution of humans in a combined way, without resorting to dualist presumptions. This attempt to overcome the dualism of culture and cognition is the most important difference between the biocultural perspective and the cognitivist mainstream. Whereas from the cognitive science perspective cultural forms are understood as growing out of the cognitive formations that have already fully developed by time cultural forms appear, the biocultural perspective emphasizes studying the ways how culture and cognition are thoroughly intertwined and thus how culture can bring about changes in cognition as well. Evolutionarily they have pointed out that since the required skills, mechanisms and capacities for religiosity were present already in *homo erectus* 400 000 to 600 000 years ago it makes little sense to differentiate between the biological and cultural level as strictly as scholars in the cognitive science have done thus far (Geertz 2014a).

Therefore, whereas the cognitivist model can be described as an “inside-out” perspective, attempting to explain religion on the basis of innate cognitive capacities and mechanisms, the biocultural model is rather an “outside-in” perspective, drawing attention to the way how culture has modelled us into cognitively functioning humans (Jensen 2011a: 37–39; Donald 2000; Wilson 2010). As Jeppe Sinding Jensen notes, “‘Culture’ is a convenient designation for all that which is a precondition for us to acquire in order to become “normal” persons in our social environment” (Jensen 2011a: 44), therefore “culture is, consequently, not just a product of cognition but just as much the precondition for cognition in an ontogenetic perspective” (Jensen 2011a: 44). This is very similar to the evolutionary perspective of Tomasello (1999a, 1999b) who has extensively argued that culture is a biological adaptation that enables people to acquire new skills and information quicker and by spending less energy on it than otherwise necessary.

This kind of an approach has caused researchers in the biocultural perspective to draw a lot of attention to embodiment, to the role of narratives and to the importance of practices for the human mind (Geertz 2010b; Jensen 2011a; Geertz 2011). Also, in addition to these aspects Jeppe Sinding Jensen has focused on the phenomenon of ‘normative cognition’ (Jensen 2010, 2013). As Jensen notes, collective norms have thoroughly (re)shaped and moulded these aspects of human cognition. In other words, “normative cognition transforms human individuals into social persons. At the individual level normative cognition functions in the internalization of social norms and cultural models and at group level in the construction of society” (Jensen 2010: 323). Quite a lot of empirical research has been done here as well, focusing especially on the ways how culture and cognition

are very closely related in religious practices such as fire-walking and otherwise. For example, see Konvalinka et al (2011), Fischer et al (2014), Bulbulia et al (2013) and Xygalatas et al (2013).

1.1.4. Attempts at synthesis and other recent developments

The full diversity of different approaches in the evolutionary study of religion is definitely not limited to what I have described thus far and there have been some rather intriguing developments in addition to the ones I have described in the previous sections. Here I am going to highlight a few of them.

First of all, the most significant among them is Ara Norenzayan's attempt to present a unified synthesis of the evolution of religion (Norenzayan 2013). In it he relies on cognitive as well as ecological research programmes to bind them together into a general theory about the evolution of religion. In this sense his theory is neither cognitive nor behavioural, but an attempt to present the two as complementary, rather than as competitors. In short, based on research in the cognitive science of religion he argues that the capability for religiosity appeared as a by-product of ordinary cognitive functions (as described in section 1.1.2.). This made it possible for religious intuitions to appear and become the basis for beliefs and practices. This in turn became an important part in a rapid cultural evolution that resulted in the appearance of societies that believe in 'Big Gods'. Those who feared big gods more were more cooperative, using displays of devotion and hard-to-fake signals (as discussed in section 1.1.3.) to communicate their faithfulness to the rest of the society. This way belief in big, moralizing gods became a very important causal factor for the appearance of big societies where a certain amount of anonymity is always inevitable. Having said all of this, Norenzayan emphasizes repeatedly that the latter part of his argument is one of cultural evolution and not biological-genetic evolution (Norenzayan 2013: 29–32, 94–105, etc.) and that he does not think that Big Gods were the sole reason for the appearance of large-scale societies. Norenzayan's theory has been criticized quite a lot and in some instances rather heavily (for a good overview see Skjoldli 2015), but it has been widely praised for being the first attempt to genuinely bring together all the different lines of research in this field (Barrett, Greenway 2014; Kiper, Meyer 2015, etc.).

Norenzayan's is definitely not the only attempt at a synthesis. More recent work by the behavioural ecologists also puts a lot of emphasis on accommodating cognitivist research within their ecological research programme (see especially Sosis, Kiper 2014; Purzycki, Sosis 2013). They highlight the overwhelming concentration on beliefs and mechanisms of belief formation in the cognitive approaches, but emphasize the need to study all aspects of the larger, complex phenomenon of religion (Sosis, Kiper 2014: 262–263) as cognitive mechanisms – for example, HADD, the theory of mind and attractiveness of counterintuitive ideas – are not enough to explain the appearance of the phenomenon as a whole (Sosis, Kiper 2014: 263–265). Therefore, they understand 'religious phenotype'

as “the coupling of ritual behavior and supernatural agency attribution” (Purzycki, Sosis 2013: 105).

Aside these attempts at a synthesis there is also a growing trend in the cognitive science of religion to look for ways how to overcome the premise of the computational model that most of the cognitive programme has thus far relied on (Day 2004a; N. Barrett 2010; Schöler 2014b: 20–28). As they point out, the problem with such a model is that it concentrates too much on the inner functions of a mind, ignoring the actual natural, social and cultural environment where that mind is living (Day 2004a: 105–109, N. Barrett 2010: 589–599). Therefore, these approaches look at various ways how to incorporate alternative research methods and perspectives into the cognitive science of religion. For example, Matthew Day emphasizes the difference between online and off-line cognition (Day 2004a: 109–117) and talks about the importance of examining religious systems through the lens of cultural and social embeddedness (Day 2004b), while Nathaniel Barrett proposes a kind of an interactive model to overcome the problems of the computational model (N. Barrett 2010: 599–603). In a way their concerns are rather similar to those of Lluís Oviedo who in a recent article criticizes the cognitive perspective for focusing overly too much on the unconscious and intuitive aspects of religiosity and therefore fails to sufficiently account for the conscious thinking processes that also play an important role in religiosity (Oviedo 2015: 31–33). To overcome that he argues in favour of adapting the dual processes model that has received quite a lot of attention elsewhere in psychology, but has not been applied to religiosity yet in any notable way (Oviedo 2015: 33–42). He looks for ways how this could be done to study the full extent of religious cognition (Oviedo 2015: 42–51). Lastly, some researchers have begun to study how – or to what extent – one could possibly apply these cognitive research perspectives on specific historical developments (Martin 2006, 2012, 2013; Martin, Sørensen 2014), but this kind of attempts are riddled with many problems (Gervais, Henrich 2010; Kundt 2007; Whitehouse 2005).¹¹

1.1.5. Most significant commonalities

In my preliminary outline of the field of studies in the beginning of this chapter I pointed to the ‘evolutionary framework’ as the most noteworthy characteristic of all these difference research perspectives. And this is certainly the most significant commonality among them – whether they attempt to do that through the cognitive science or through the behavioural ecology or through other approaches, the underlying framework is always derived from the evolutionary theory and all explanatory elaborations are specified in such a way that they would fit with that background. Perhaps most explicitly this is exemplified by the programmatic article of Joseph Bulbulia and Edward Slingerland who wish to understand

¹¹ At the time of writing this I have not (yet) had access to Turner et al (2017), but it deserves to be noted as one more recent, important study on this topic.

religious studies as a *life science* and thus emphasize the theory of evolution as the starting point of all such research (Bulbulia, Slingerland 2012: 567–572). This is something that should be very apparent in my review of all the relevant research programmes – in one way or another they are looking for explanations of religiosity that point to an evolutionary cause of the phenomenon they are trying to explain.

This is of particular importance also because in these research programmes the evolutionary theory is understood as the basis that makes it possible to reach a complete explanation of religiosity. As Edward Slingerland notes, many have “turned to the cognitive science of religion precisely because, conceived very much in the Victorian spirit of unified inquiry, it promises to bring our field back to an older model of integrated inquiry” (Slingerland 2014: 122). Slingerland understands this as a consilience of all the sciences where study of culture and religion is no longer methodologically and conceptually separate from the natural sciences, but instead they are all integrated into one complete scientific approach (Slingerland 2008a; Slingerland 2014; Slingerland, Bulbulia 2011: 307–312; Pyysiäinen 2004: 2–27). Similarly, in a response to his critics, Ara Norenzayan understands the evolutionary perspective as “a vehicle that consolidates different perspectives and facts, so that the contours of the whole elephant begin to emerge, bringing about some measure of consilience” (Norenzayan 2015: 63). Elsewhere, Xygalatas has discussed this in terms of *integrating* research perspectives concerning religion into one *synthetic* approach (Xygalatas 2010) – as he understands this, it would not be replacing any of the traditional humanities perspectives, but rather would complement them with theories, methods and technologies from the natural sciences. Such an integration of different sciences is essential to make a complete explanation possible. Complete explanation itself, however, is centrally important because study of religion should not limit itself to studies of localised cultural and historical contexts – it has to be capable of addressing universal questions and proposing causal explanations (for example see Sørensen 2005; Lawson, McCauley 1990: 14–44, Wiebe 2012, etc.).¹² Such an objective therefore includes distinguishing the main structures of religion – primary causes, basic mechanisms, common characteristics and main forms – to give a full picture of religiosity that can account for and explain the existence and main traits of any specific religious phenomenon.¹³ Because of this William Grassie has compared

¹² The most straightforward declaration comes from Sørensen: “in order to understand religion we need explanatory theories. Even if attempting to understand religious phenomena in their localised cultural and historical context is a laudable endeavour, this cannot be the sole purpose of the scientific study of religion. We need to address the universal questions raised above and this cannot be done by means of localised interpretations” (Sørensen 2005: 467), noting also that “explanatory theories not only enable us to address such general questions but also to fertilise local interpretations by supplying a more solid terminological grounding and presenting new potential lines of enquiry” (Sørensen 2005: 467).

¹³ This does not mean, though, that all of them are advocating a strongly reductionist model where a complete explanation means finding the evolutionary causes of everything and declaring cultural, historical or other such explanations insufficient. McCauley (2014) for example opposes such an approach, instead arguing in favour of explanatory pluralism.

this field of research to linguistics, arguing that “the new sciences of religion should be understood as akin to the field of linguistics, seeking the “grammatical” structures of religion in general based on a careful analysis of particular religions” (Grassie 2008: 139). Partly this also explains why the outlined research programmes often treat each other as competitors – most of them either already understand their current proposal as a complete explanation or at least as the fundamental basis for an eventual complete theory.

Another significant feature all these theories share has to do with how they conceptualize their object of research – religion. This is significant, since it is the primary difference between these research programmes and all the approaches that focus on culture. They focus on a research object that is understood rather differently from the ways how researchers of cultural evolution deal with their object of research. But, as is well known by now, “religion” is not a designation of a natural kind or an empirical object that one can just find wherever one goes; rather it is a second-order, generic concept, a tool (Western) scholars have used among other general concepts, such as culture, politics, etc. (Fitzgerald 1997, Smith 1998, Schilbrack 2010). However, adopting one set of conceptual tools over others can have far-reaching influence on the empirical research itself – it can shape the questions one asks and thus include some aspects or exclude other aspects. In this sense conceptualizing their research as cognitive science of *religion* or as behavioural ecology of *religion* has definitely had a significant influence on their research programmes and has also caused them to clearly distinguish themselves from all the evolutionary research of culture.¹⁴ Thus, Jonathan Z. Smith’s remark about the role of the concept of religion in the study of religion is very accurate: “it is a second-order, generic concept that plays the same role in establishing a disciplinary horizon that a concept such as “language” plays for linguistics or “culture” plays in anthropology” (Smith 1998: 281–282). Because of this one could understand one’s approach as studying religion in a “piecemeal fashion” (Barrett 2007a: 768–769, Barrett 2011b: 231–232). Or, one could emphasize the need to “fracture” religion as it is merely a shorthand designation and an impure research subject (Jensen 2016). Or, one could point to the existence of recurring features (myth, ritual, taboo, symbols, etc.) – all related to each other in comparable ways in different parts of the world – and therefore emphasize the need for a complex explanation that takes into account this “whole”, instead of just treating all its aspects separately (Sosis 2009: 319–322). Regardless of which approach one prefers, the differences between them are minor compared to the overwhelming similarities. In the end they all wish to explain and study the phenomenon of religion (or religiosity or religiousness) in an evolutionary framework. This is the disciplinary horizon of the cognitive, behavioural and other evolutionary approaches towards religiosity. It makes it possible to differentiate

¹⁴ I have elaborated on this further elsewhere, arguing (based on examples from empirical research) that categorisations are our primary tools of research and “categorising one’s object of study is the primary methodological act in the human sciences” (Peedu 2016: 120).

oneself from approaches that focus on “culture” or “society”, but it also highlights the existence of competing explanatory paradigms.

Lastly and I would argue that most significantly all of these evolutionary approaches towards religiosity share a remarkably similar understanding of scientificity. Furthermore, they consider this particularly important for their research. This deliberate emphasis on the scientificity of their research is very significant for the wider scope of this thesis. Therefore, I am going to devote a separate section to the analysis of their understanding of scientificity. Before I turn to that it should be noted that obviously every single one of these commonalities is not present in every single research programme or theoretical hypothesis. However, these are definitely the prevailing and most widespread commonalities.

1.2. Concepts and ideals of science and scientificity in the study of religion

Although contemporary evolutionary scholars’ defence of a *scientific* approach towards religiosity has certainly been very visible, it is far from the first time that scholars of religion have found it important to emphasize the *scientificity* of their research. In this one can go back at least as far as Max Müller (1882), but the debate over the meaning of the scientificity of the study of religion has always been present in one form or another. To highlight this I am first going to look at how scientificity and ‘scientific study of religion’ have been understood by scholars who are advocating a cognitive or more generally an evolutionary approach towards religiosity. For comparison I am then going to highlight some of the ways scientificity of the study of religion was understood in the 20th century before these new approaches appeared. All of this is relevant for the wider question of ‘positioning the scholar’. Any kind of a scholarly (self-)positioning always includes an understanding of scientificity – how is one’s scholarship scientific and/or what is the ideal form of scientific research that one is striving towards?

1.2.1. “Science”, “scientific” and scientificity in the recent evolutionary research programme

This understanding of the scientificity of their research includes several distinguishable themes and ideas that reappear in multiple different places. First of all, the true ideal of scientific research here is predictably based on the natural sciences. True scientific research is about presenting hypotheses and testing those hypotheses empirically (which primarily and preferably means experimental research), thus in the end arriving at conclusive evidence, enabling scientific progress (Slingerland, Bulbulia 2011: 308–312; Wiebe 2012: 181–189, but from

earlier times also see Wiebe 1975). Strictly humanistic (philological, anthropological, hermeneutical) approaches towards religiosity are understood as unsuccessful and unscientific, lacking in interdisciplinarity, in capabilities of implementing the scientific method and in willingness to cooperate with other scholars (Slingerland 2014: 121–122; Bulbulia, Wilson, Sibley 2014; Martin, Wiebe 2013: 478). Furthermore, postmodernist and constructionist trends in the religious studies are considered dead ends that have nothing to offer and have not shown ability to bring about scientific progress (Slingerland 2014: 122; Wiebe 1997, especially 167–168, 172–174). Thus, it has been argued that religious studies have been too isolated, have been limited to the confines of the humanities and because of that have a bad reputation (Xygalatas 2010).

Evolutionary perspectives and particularly the cognitive science of religion at the same time are portrayed as ways how to establish a genuinely scientific study of religion or as ways how to “science up” religious studies in general (Barrett 2011b: 229; Xygalatas 2010; Bulbulia 2013a; McCorkle 2008). This they understand as a vertical integration of the religious studies to the natural sciences where humanities adapt themselves to the conceptual and methodological understandings and practices of the natural sciences or as a synthesis of different sciences. Effectively this means that evolutionary psychology, behavioural ecology and other related sciences are seen as primary and fields like history, comparative religion and anthropology are considered *valuable only insofar as they are capable of establishing a connection to these primary sciences* (Slingerland 2008a, 2014; Pyysiäinen 2004: 2–27; Xygalatas 2010; Taves 2010).¹⁵ In any case, ideally a higher level of consilience should be established (Slingerland 2014, Norenzayan 2015). All of this I already pointed out in the previous section as this is essential to arrive at the desired complete explanation. Complete causal explanations are here understood as central to the scientific enterprise.¹⁶ Several scholars have emphasized the necessity of adopting methodological naturalism for this vertically integrated consilience to be possible (Slingerland, Bulbulia 2011; McCorkle, Xygalatas 2014; Bulbulia 2007: 621–623; Bulbulia, Slingerland 2012: 567–569; Wiebe 2012: 173–174).¹⁷ These “scientifications” of the study of religion are all necessary to turn study of religion into an academic discipline that is analogous to other academic disciplines and therefore properly scientific. Religion should not be regarded as anything special, rather it is just one

¹⁵ A noteworthy exception here is Harvey Whitehouse (2004b: 332–334) who disagrees with kind of insistence on modifying the theoretical agendas of anthropology, history and comparative religion to those of evolutionary psychology, arguing instead that historical and ethnographic research is valuable in itself as well.

¹⁶ However, see also chapter 6 where I return to this issue of completeness and analyse the feasibility of integrating all the different approaches into one coherent complete picture.

¹⁷ For the larger question of ‘positioning the scholar’ this is of particular interest in general (and not just in relation to their understandings of scientificity), thus I am going to return to this concept in a lot more depth later on. For now it is just important to keep in mind that this idea is central to how scholars in the evolutionary perspectives understand how they are treating their research objects and what kind of issues one ought to study or avoid.

phenomenon among other comparable phenomena and it can be studied in the same way. Explaining it does not require special tools or theories or methods (Martin 2000; Jensen 2011a: 32). Furthermore, study of religion should be solely interested in acquiring knowledge about religion and should not be involved in social advocacy, nor should it focus on reflection and values and the scholar of religion should definitely not function as a public intellectual or as a spiritual teacher (Wiebe 2006; Martin, Wiebe 2012b).

However, they have not just limited their elaborations on truly scientific study of religion to specific theoretical and methodological requirements. Rather, they have also put a lot of effort on a kind of a historical argument – placing their preferred form of religious studies in the wider context of the history of the discipline and emphasizing its importance in that context. In general, modern evolutionary approaches are portrayed as a way scholarship has returned to the “to the desires set by Max Müller, Edward Tylor and Émile Durkheim (as well as other contemporaries)” (McCorkle, Xygalatas 2012: 153).¹⁸ Martin and Wiebe also argue in a similar fashion – cognitive science of religion is a return to the true ideals of the founders of the discipline (Martin, Wiebe 2012a: 589–590; Martin, Pyysiäinen 2014). Much of the scholarship from the time period between the ‘founding fathers’ and the newly established evolutionary approaches is at best regarded as somewhat relevant – they “have a role to play in a comparative and scientific academic study of religion” (McCorkle, Xygalatas 2012: 153) – or at worst is considered a misleading path, a failure of nerve (Wiebe 1984) and a kind of a crypto-theology (Martin 2008: 95; McCorkle 2008: 12–13). The works of Otto, van der Leeuw, Smart and Eliade are seen as not properly scientific, but faith-imbued, whereas the original founding fathers of the “*Religionswissenschaft*” tradition were propagating properly scientific ideals (Martin, Wiebe 2012c: 69; Martin 2012). Similarly, the likes of Clifford Geertz are found lacking, as they are supposedly only interested in (thick) descriptions and symbolic interpretations, but not in genuine explanatory theories of religion (Lawson, McCauley 1990). Thus, modern evolutionary approaches are depicted as a tool and as a method for a proper integration humanities and natural sciences, making it possible to reach causal, explanatory theories of religion in general, but at the

¹⁸ The list of “approved” early scholars somewhat varies depending on the author. Müller, Tiele and Durkheim are certainly always included. Martin (2008: 95) also speaks approvingly of Jane Harrison. McCorkle and Xygalatas also speak positively of Frazer, Weber, James and Freud (McCorkle, Xygalatas 2012: 149). Also the “Mental Culture” collection of articles – which classic theorist is included and which is not – is rather enlightening in this regard (Xygalatas, McCorkle 2012). However, it is largely following the same list of authors whom I have already mentioned here. Some have gone even further back in the history though. Robert N. McCauley, for example, argues that David Hume “is probably the best known intellectual ancestor of recent cognitive and evolutionary approaches to religion” (McCauley 2016: 462). Elsewhere Michael Ruse also argues that Hume’s ‘*The Natural History of Religion*’ is the foundational text of naturalistic study of religion, highlighting Hume’s influence of Darwin and other later scholars (Ruse 2014: 39–41), insisting that “any account of the evolutionary origins of religious belief starts with David Hume” (Ruse 2014: 39).

same time, they are also portrayed as a return to the ideals of the founding fathers of the religious studies discipline itself!

In conclusion one can say that the propagators of this ‘new scientificity’ understand their programme as not just a way how to integrate knowledge and methods from the evolutionary psychology and biology into the study of religion, but as a way how to, ideally, transform the whole discipline of religious studies itself. Therefore, it is also conceived of as a way to turn religious studies into ‘a proper scientific discipline’; everything that has come before is suspect and valuable only insofar as it meets the criteria of this new scientificity. It should be kept in mind though, that not everybody in the field has explicitly expressed all of the abovementioned ideas and certainly some ‘ideologists’ have been more active in spreading these ideas. Still, the fact that except for a few specific individuals¹⁹ and their arguments concerning some details of the overall picture, other researchers in the field have not found it necessary to dispute these claims. This indicates that even if people do not completely agree with them, they do not find such views particularly problematic either. Having analysed their views it is now useful to turn to the earlier, ‘Religionswissenschaft’-based ideas about the scientific character of the study of religion. These earlier understandings of the scholarly character of the discipline also deserves a brief look to better understand the debate about scientificity and to place it in a wider context.

1.2.2. In comparison: scientificity of research in earlier scholarship

Even though representatives and advocates of this evolutionary-psychological study of religion like to depict themselves as ‘heralds and practitioners of true scientificity’, discussions about the scientific character of the discipline actually have a long history, going back much farther than one would suspect from their writings.

Elaborations on what it means for a study of religion to be scientific are already very much present in the writings of Max Müller (1882, 1895: xii–xxxiii) and have persisted ever since. Even the title, ‘scientific study of religion’, has already been in regular use at least since the late 1940s when the Society for the Scientific Study of Religion was founded (followed by founding of the Journal for the Scientific Study of Religion in 1961) by more empirically-experimentally minded psychologists and sociologists than most of the researchers of religion back then (Wildman, Sosis, McNamara 2012: 102–103).²⁰ At the same time, there

¹⁹ See my notes about Whitehouse (2004b) and McCauley (2014) above.

²⁰ I will not be analysing the conceptual developments of that subfield of the study of religion much further here as I am not attempting a complete historical analysis of all conceptions of ‘scientificity’ throughout the history of the scholarship in this thesis. Also, concentrating on the ‘Religionswissenschaft’-centred tradition instead is a lot more illuminating because this is the tradition advocates of the new scientificity are harshly criticising and in many ways opposing (see especially Martin, Wiebe 2012c: 69–70). Even a superficial look into the discussions relevant in that subfield reveals that much of the discussion there is rather similar,

is a long and influential tradition of scientificity centred on the concept of 'Religionswissenschaft' (sometimes translated into English as 'science of religion' as well, but mostly the form 'history of religions' has prevailed, inaccurate as it may be). Rather interestingly and in a remarkably similar way (to the contemporary conceptions), here insistence on the fundamentally empirical nature of the scholarship is similarly at the centre of the conception itself. This is very much present in the writings of Joachim Wach (1988 [1924]: 81–100) almost a century ago as he emphasizes the need to distinguish between empirical study of religion and philosophical discussions about religion, but also continues to be a central topic later on. For example, Reinhard Pummer (1972: 93–99) insists on empirical research as the foundation of any kind of research, objecting to all interpretations of religious matters which do not rely on empirical sources.²¹ Even more recently Wouter Hanegraaff (1995: 99–108) has emphasized empirical research, opposing both the (for him) essentializing tendencies of the Eliadean tradition and the reductionist approach as propagated by Robert Segal. By now one should have noticed a certain pattern here: emphasis on empirical research regularly functions as an argumentative tool to criticize those with a different understanding of the empirical character of their research. After all, in this new insistence on empirical research and proper scientificity, it is exactly the likes of Wach, Pummer and Hanegraaff who are criticized for lacking proper scientific character and being too isolated to humanist interests and research perspectives. The difference between this earlier understanding and the newer understanding therefore does not that much have to do with matters of empirical research or the lack of it, but rather is concerned with determining what kind of research counts as properly empirical research and what kind of research does not count as such.

Another important aspect of this new insistence on scientificity is its emphasis on the need to study religion in the same way as all other aspects of human life are studied. However, even a quick look at earlier research reveals that this very same insistence is also present there. For example, in an article published more than 60 years ago E. O. James argues that the study of religion is "a science of religion in which the available material is recognized to be capable of investigation in a noticeably similar way as the data of any other aspect of human culture, irrespective of the truth or falsity of particular beliefs and practices" (James 1954: 92). This he places at the very centre of his treatment of the scientific study of religion, emphasizing it as one of the key differences between

also emphasizing balance, objectivity and accuracy of understanding, interpreting and explaining and therefore talking about the reliability and trustworthiness of social scientific knowledge (compared to that advocated and developed through other means). For one such depiction of the social scientific study of religion and knowledge derived through such study, see Barker (1995).

²¹ And in the context of his era 'empirical research' in 'Religionswissenschaft' of course primarily meant the historical-philological approach to religion. 'Empirical documents' above all meant any kind of textual documents, but secondarily also archaeological and other historical artefacts. Concerning this, see also Rudolph (1981).

theological and scientific approaches towards religiosity.²² The same theme persists in the more recent literature on this topic as well – religion ought to be studied the same way as any other human characteristic or phenomenon, there is nothing special about religiosity (e.g. Stausberg, Engler 2011b: 4; Dubuisson 2016: 26; etc.). There are good reasons to suspect, though, that “studied the same way” has often meant quite different things in different argumentations and discussions. The same way compared to what? – is perhaps the central question here. The answer to this question to an extent guides the criteria of scientificity of any field of study or discipline. This is also closely accompanied by the strong insistence that study of religion ought to be focused solely on acquiring knowledge about religion – spiritual matters or practical applications of this knowledge are not part of the discipline itself (Pummer 1972: 116; Lease 2000). Furthermore, complaints about the lack of interdisciplinarity and repeated calls for the integration of different methodologies have persisted for decades as well (Pummer 1972: 118–121; Pye 1982; Kippenberg 1984, etc.). The need for proper explanatory theories of religion is also emphasized in earlier elaborations on the scientificity of the discipline.²³

As one has probably noticed, there is little to no difference between arguments presented by advocates of this new scientificity and arguments presented by earlier scholars, even though one would think from reading ideologists of the new

²² It should be noted though, that in case of James there is perhaps some substance to the later criticisms that he is not actually sticking to his initial claims and is being somewhat crypto-theological. After all, in the very same article he criticizes Durkheim for studying religion as a social phenomenon, instead arguing that it is rather directed towards Ultimate Reality (James 1954: 96–98) and later on also argues that “Religion is essentially a human reaction to the ultimate facts and meaning of life, and constitutes a living reality for those who accept its premises and presuppositions. To regard it merely as a branch of anthropology or sociology, and still less of psychology, would be to fail to recognize its true significance as a human discipline” (James 1954: 104). One can of course argue that given the time period when he was writing this, James also had to defend the very existence of the study of religion as an academic discipline to gain institutional support for it, but that can hardly account for the whole of it.

However, also it should be noted that this kind of insistence of has been part of the Religionswissenschaft-tradition for a long time (if not always). For example, even 25 years earlier Joachim Wach argued very similarly: “In any case, there can be no doubt that in studying foreign religions the history of religions must proceed in a manner that is analogous to the other humanistic studies. The history of religions cannot simply be equated with these studies” (Wach 1988: 160). But, he also immediately followed this up with the insistence that religious expression follows its own laws, thus it needs to be based on “categories specifically suited to the subject that it studies” (Wach 1988: 161). Furthermore, he also insists that religious experience relates to the absolute, is beyond description and all expressions of it are in the end inadequate (Wach 1988: 160–161).

²³ For example, Pummer explicitly complains about the lack of proper theoretical inferences, saying: “Neither historical positivism nor speculative philosophy of religious history can be the methodical principles of Religionswissenschaft. What is needed are explanatory theories that are tested, adjusted and re-tested, and so on, the test material being the data” (Pummer 1972: 121).

scientificity that there is a major difference. But, this does not mean that there are no differences. The actual differences have to do with how central concepts are understood – substantial differences are not really about the arguments themselves. Old arguments have been given a new content, one could say. For the advocates of the new scientificity cooperation between different humanities' disciplines no longer counts as proper interdisciplinarity. For them integration with natural sciences is necessary for a properly interdisciplinary study. The situation is similar regarding the issue of “have to be studied the same way” – the phrase now appears to mean thorough application of life sciences. Nothing can be studied properly in separation from the life sciences, explanatory theories are not possible in a form that does not go beyond humanities and social sciences. Scientificity, therefore, is not inherently present in the humanities, no matter how thoroughly and carefully one applies their methodologies, scientificity of research only exists in the humanities only insofar as it adopts the methodological, conceptual and theoretical ideals of the natural sciences.²⁴

As the last comparison from earlier scholarship we can look at the detailed analysis of the ‘scientific study of religion’ by Ninian Smart. He has devoted many of his writings to this (e.g. Smart 1973, 1978), but perhaps the clearest and most succinct explanation can be found in Smart (1973: 158–159). There he formulates a six-part criterion of the scientific study of religion: (1) it is not determined by a position within the field – that is, it begins neither from a theological nor from an atheistic standpoint, (2) it does look for theories, but it does not begin by building theories into phenomenological descriptions, it adopts methodological neutralism in descriptive matters, (3) descriptions begin from the position of the participants and attempt to delineate the way things appear from their point of view, (4) it is scientific in the sense of having an analogy to the experimental method – the use of cross-cultural comparisons, (5) it makes use of such methods as may be available in the disciplines that are connected to the study of religion, (6) it incorporates dynamic and static typologies, which attempt to illuminate and explain religious phenomena, but always stays in touch with the particularities of historical traditions.

Now, it should be quite apparent that in some aspects this is rather similar to the currently prevalent concepts of scientificity, yet in others it is fundamentally different. Its focus is on empirical material and it values the integration of different methods and methodologies, yet at the same time it emphasizes methodological neutralism (or ‘methodological agnosticism’ as Smart elsewhere describes this – I will come back to this in the next chapter) whereas propagators of the new scientificity insist on methodological naturalism. It also argues in favour of an analogy between the use of experimental method and cross-cultural comparisons whereas none of the advocates of the new scientificity would take this analogy

²⁴ Again, it should be noted that there are exceptions to this. For example Wildman, Sosis and McNamara (2012: 101) concede that the discipline of history is among the more methodologically secure academic fields and better organized than the scientific study of religion.

seriously. In a sense it could be said that whereas earlier Religionswissenschaft-centred tradition was seeking something that all sciences shared and thus tried to base its proper scientific character on that or tried to look for methodological analogies to the methods of the natural sciences, this new scientificity comes with a deliberately hierarchical conception of sciences where physics and chemistry are the ideal sciences and everything else is truly scientific only insofar as they are capable of adopting the same methods, theoretical bases and conceptual tools as these ‘true’ sciences.²⁵ This has made a few critics note that in such a case it would appear that it is impossible for humanities disciplines to be scientific (Taves 2012; N. Barrett 2010: 585–586).

Particularly notable here is the fundamental difference between insisting on the sole acceptability of methodological naturalism compared to valuing methodological neutralism/agnosticism as a way how to avoid adopting a specific view (and thus fundamentally ruling out methodological naturalism).²⁶ This is something I will be returning to in several of the following chapters, thus I will not expand upon it further right now.

1.2.3. Scientificity and the difference of scientific study and theology

Rather interestingly one noteworthy aspect of the discourse on scientificity is that it continues (often, if not in fact most of the time) to serve as a way to demarcate study of religion from (Christian) theology. This was central to the earlier discourse on the scientific character of research and this is something that has continued to be a major part of the scientificity discourse right now too.

For example Smart (1973: 8–17) agrees that the scientific study of religion is polymethodic, pluralist and lacks clear borders, thus his clarification remains relatively vague. But, with one exception – other things may be vague, but

²⁵ To an extent this is possibly also a case of ‘lost in translation’. ‘Wissenschaft’ in German and ‘science’ in English do not quite mean the same time. Humanities are easily part of the ‘Wissenschaften’ in German, yet in the Anglophone world humanities most certainly are not part of the sciences. Still, it should be obvious from the discussion in this chapter that this definitely cannot explain the whole debate. As noted, many in the English-speaking world have also talked about a scientific study of religion (for example I highlighted the writings of Ninian Smart) without the need to regard natural sciences as genuine sciences and humanities as inevitably lacking in that regard. However, with that said, it is certainly true that issues of translation probably do also play a role here – even Joachim Wach’s reluctance to translate ‘Religionswissenschaft’ into ‘science of religion’ or anything like that, instead choosing ‘History of Religions’, noted a certain tension that has always existed in the English-speaking academic study of religion.

²⁶ I very much suspect that if Ninian Smart was alive today he would describe methodological naturalism as “determined by a position within the field”, comparable to theology and fundamentally different from the methodological neutralism that he considers “not determined by a position within the field” (Smart 1973: 158).

scientific study of religion is fundamentally different from any kind of theology.²⁷ Elsewhere this took the form of insisting on the one and only “religionswissenschaftliche method” (Schimmel 1960: 236) as the essence of the scientific approach and arguing against any possibility of cultural or regional variation in the study of religion (Werblowsky 1960, see also Oxtoby 1968 and Wiebe 1981: 48–58 concerning this discussion issue). This is all described very accurately by Donald Wiebe as he notes in one of his earlier writings:

“The ‘science of religion’ is, then, a label intended primarily, it seems, to designate that *attitude* on the part of certain scholars to treat religion, insofar as that is possible, free of (theological) bias or prejudice (*prae + judicium*: a judgment that has been passed *before* the issue has been subjected to *test* or *trial*). It suggests then that the foundations of the study of religion must be intellectual rather than practical or, as Smart puts it, they must be concerned with the truth *about* religion and not the truth *of* religion” (Wiebe 1978: 10, italics in the original).

The noteworthy difference here is that while earlier scholars (as just exemplified) used the label to emphasize one specific distinction, these newer scholars are convinced that the programme of scientificity they are offering actually does live up to the name and is thus genuinely scientific. For them adopting methodological naturalism is absolutely necessary, because that is seen as the foundation of all biological sciences. Therefore, for compatibility, cooperation and integration it is vital for scholars of religion to adopt methodological naturalism in the same way (Bulbulia, Slingerland 2012: 602; Martin, Wiebe 2013: 482; Bulbulia 2013b: 224–225). However, curiously enough this as well is understood as a way how to clearly distinguish study of religion from any kind of theological agenda which is found to be still present implicitly and explicitly (for example see Wiebe 1984, 1986; Martin 2008: 95, 2012; Martin, Wiebe 2012c: 69). Thus, discourse about the characteristics of a genuinely scientific study of religion continues to function as a way to demarcate study of religion from theology.

As a few scholars have noted this has brought about a situation where scientificity continues to be used simply as a rhetorical device for blanket criticisms of earlier scholarship:

“When the conceptual adequacy of “religion” as an analytical category is scrutinized, there are no comparative investigations of the nature and function of scientific categories. When reductive “scientific” explanations of religion are espoused, there is little consideration of the debates on reductive methodology within the sciences. Without actual investigation into scientific practices, science as a standard for the study of religion is used as little more than a disciplining rod” (Cho, Squier 2008: 422).

²⁷ He writes: “Doing theology, in the proper sense, is articulating a faith. ... But in the study of religion itself, theology is part of the *phenomenon* to be understood. ... The historian of architecture need not be an architect. Likewise, a person articulating or defining a given faith is part of the ongoing process of that tradition” (Smart 1973: 6–7).

This they relate to the larger discussion concerning the relationship of theology and science and point out that implicitly this talk of scientificity is a variation of that (Cho, Squier 2008: 434–443). Therefore, although new evolutionary approaches have certainly adopted many of the theoretical premises and procedural methods of the natural sciences, talk about the scientificity of their research also serves other significant purposes. They are not just trying to advocate in favour of widespread acceptance and integration of methods and perspectives thus far relatively unused, they are also advocating a specific way how scholars should approach their research topic and how they should treat and think of their research topic. Therefore, this is not just a matter of scientificity, this is also a question of methodology – something I will look into in the next chapter.

1.2.4. A few additional critical notes about this new understanding of scientificity

However, before concluding this chapter I would like to point out two more things that stand out about this new concept of scientificity. First of all, as I noted earlier, for many advocates of this new scientificity humanistic approaches towards religiosity are not considered properly scientific and knowledge derived through such means is considered incapable of bringing forth a scientific progress in religious studies (any kind of hermeneutical practice is often particularly suspicious).²⁸ Yet, at the same time researchers in the cognitive science of religion and in the behavioural ecology to a large extent rely on the results of such “hermeneutical” scholars! There is no shortage of examples for this. Most explicitly one can see this in Wilson (2005) who openly declares his reliance on the *Encyclopedia of Religion* (edited by Mircea Eliade). Elsewhere one can also see this in Dominic D. P. Johnson (2005) who relies on ethnographically collected data and tries to test an evolutionary hypothesis based on that. In any case, these are merely the most explicit examples. This is not limited to just a few specific research perspectives or methods. Without hermeneutical research experimental scholars (whether cognitively or behaviourally inclined) would not know what they are studying. We would have very limited knowledge about other cultural contexts in general.

This conflict in their views has been brilliantly highlighted by Hubert Seiwert in his remark about the reliance on earlier hermeneutical research by the cognitive science of religion researchers (2012: 28–33), especially when he argues that:

“whether human beings maintain ... a belief cannot be discovered by methods of the natural sciences without relying on hermeneutics. We have to understand the meaning of what people say, write or express in some other way, and we have to assume they have intentions. Without understanding meanings and intentions, there is no way of discerning religious behaviour. We cannot know if depositing flowers in front of an inscribed

²⁸ Detailed descriptions of these views and all the relevant references can be found at the beginning of section 1.2.1.

stone is somehow related to beliefs in supernatural agents or not, when we ignore meanings and purposes. Only after we have identified religious behaviour hermeneutically can we start trying to explain it by natural causes” (Seiwert 2012: 32).

Therefore, as many others have pointed out in various other debates and discussions, hermeneutical research is the fundamental basis for all other subsequent research questions, topics and perspectives (Long 1978; Kippenberg 1984; Joy 2000a; etc.). Thus, as depicted and defended right now, the ideal of the new scientificity carries in its centre a contradiction – it wants to be more scientific than all earlier research concerning religion, yet at the same time it heavily relies on earlier scholarship practices and data in its research. If I were to use their conceptual logic, I could say that they are basing their research on unscientifically acquired knowledge and in many cases one could show how distinctions derived from earlier scholarship are determining the results of their research.²⁹ If they want to continue with this kind of a concept of scientificity they have to overcome this contradiction somehow or modify their concept so that it no longer results in such a contradiction.

The second issue I want to briefly touch upon here is their depiction of history. As noted earlier³⁰ there is a widespread understanding among evolutionary and cognitive scholars that even though the founding fathers of the discipline (Müller, Tiele, but often also Durkheim is emphasized) advocated a genuinely scientific discipline, later scholars in the religious studies did not value the same kind of research practices and thus diverged from this path of proper scientificity. It should be noted that this kind of a depiction of the history of the discipline is not limited to the advocates of this new, ideal scientificity. As one will notice from my earlier description of it, Wiebe was talking about it already long before the cognitive science of religion came along. But also, similar views can be found elsewhere as well. For example, Cristiano Grottanelli and Bruce Lincoln (1998) also applaud the likes of Marx, Weber, Durkheim and Malinowski (Grottanelli, Lincoln 1998: 311–316) and consider the subsequent trends in the ‘comparative religion’ or ‘Religionswissenschaft’ a downfall both institutionally and theoretically (Grottanelli, Lincoln 1998: 316–320).

Yet, there is a major problem with such a portrayal of historical development: actual historical research does not agree with it. As Arie L. Molendjik (2005) repeatedly emphasizes, scholars in the end of the 19th century understood disciplinary borders rather differently from our contemporary conceptions and the first professorships of religious studies were not really founded to establish a genuinely scientific study of religion. Nor were Tiele or Müller really advocating the kind of views these modern ideologists of scientificity claim.³¹ Instead this portrayal of historical developments appears to play the role of identity development – it

²⁹ For one such example, see Peedu 2016.

³⁰ See the end of section 1.2.1.

³¹ For more about views and ideas of these ‘founding fathers’ see also Kippenberg (1997), Sharpe (2003: 20–96), Kitagawa, Strong (1985), Masuzawa (2003), etc.

helps to distinguish valuable historical scholars whom one should pay attention to from those whom one should avoid and thus it establishes a shared canon and a shared list of values (Gilhus 2014; Peedu 2018). Specifying a certain narrow kind of ‘scientificity’ as the central ideal and practical goal of all research, establishing a shared understanding of history and scholarship and putting in place an understanding about how a researcher should relate to his/her object of research all function as ways how to pre-establish the kind position and attitude a true scholar of religion ought to have.³² This in turn is very much related to the question of methodology that I will turn to in the next chapter.

1.3. Conclusion & looking ahead

I have tried to show in this chapter how on the one hand these new cognitive and ecological research programmes are working towards studying religion as a universal phenomenon, striving towards generalizing explanatory theories. The application of cognitive science, evolutionary psychology, behavioural ecology and other related discipline here all serve the purpose of determining the fundamental underlying basis of religiosity. And in this sense their usage of ‘scientific’ is nothing particularly noteworthy. Or as one commentator has noted:

“Biological, cognitive and neurological schemes compete – and sometimes collaborate – to provide various scientific models to “explain religion.” “Scientific” basically means here that they build from empirical evidence and apply the most fitting theoretical frame, or the one with the most heuristic power with which to account for the available data” (Oviedo 2013: 460).

In this sense their usage of ‘scientific’ appears almost trivial – of course scientific research approaches its object in such a way. On the other hand, as I show in the second half of this chapter, their usage and understanding of the concept is rarely just about such practices. Rather, they see it as much more than that. It functions as an identity marker, as means how to distinguish oneself from anything even potentially theological and as a way of establishing an epistemological position. It is this latter that I will be returning to in the subsequent chapters of this thesis. Next, however, issues of method(ology) need to be looked at since matters of scientificity and epistemology are always related to how one understands method(ology).

³² Stuckrad takes this even further as he notes that he is “struck by the religious connotations that regularly underlie these narratives. In many cases, scholars who were trained in theology decades ago, present their ‘turn’ to cognitive study of religion in words that resemble conversion stories, marking a completely new (scholarly) identity. In their role as adepts of a new cult they have the tendency to preach the gospel and to distinguish clearly between in-group and out-group” (Stuckrad 2012: 55).

2. Method(ology) in the study of religion

The second issue in need of clarification before moving on to specifically epistemological questions in the subsequent chapters is method(ology). Discussions and treatments of method and methodology are inherently complicated in the study of religion. A proper, systematic and reproducible method(ology) is typically seen as the very foundation of all kinds of scholarly and scientific research. Thus if one aims to make sense of the self-understanding and research practices of a discipline, one needs to have a clear picture of the ways method and methodology as such are understood in that discipline or field. Yet, as I will shortly show, there is no shared understanding of method as such, nor does any method have a particularly privileged position. Method appears to be the essential requirement to attain and maintain scientific status and quality of research, yet discussion of method itself is witness to notable diversity. Meanwhile many (Stausberg, Engler 2011b: 14, Lambek 2014: 146–148, Jensen 2011b, etc.) emphasize the close interrelatedness of method and theory, of the interdependence of data and theory and thus the close relations of method and epistemology, yet oftentimes these topics are still treated separately. Here I intend to give an overview of the method(ological) debate of the study of religion and show the extent to which these self-proclaimed discussions of method actually have little to do with method in any strict procedural or clearly definable way, but rather deal with larger matters such as research approaches, the scientific status of the discipline and the position of the scholar. It is especially the latter which I find particularly relevant for the subsequent discussion, but to understand the wider methodological context of this matter of positioning it is important to take a closer look at the internal diversity of the whole methodological discussion in the study of religion.

2.1. Diversity of ‘method’ and ‘methodology’

Michael Stausberg and Steven Engler begin their introduction to the *Routledge Handbook of Research Methods in the Study of Religion* (Stausberg, Engler 2011a) by noting:

“It is generally agreed that methods, together with theories, concepts and categories, are foundational for modern science: knowledge accepted as ‘scientific’ must be based on empirical materials (data) gathered by using methods that are accepted as ‘scientific’, and their analysis must proceed following rules based on ‘scientific’ methods by engaging concepts and theories accepted by the respective academic community” (Stausberg, Engler 2011b: 3).

Similarly, Michael Pye considers methodological order and integration as absolutely vital characteristics of a scientific discipline, insisting that a scientific

discipline is “a methodically ordered approach to the study of a field” (Pye 1999: 189), later stressing the necessity of the methodological integration of different specific methods in the study of religion (Pye 1999: 195–200). Insistence on a proper method has always carried a certain emphasis in the study of religion, thus Stausberg and Engler, and Pye echo a sentiment with a long history. This goes back at least to Max Müller as he found it essential to declare over a century ago that comparison and classification are the fundamental practices of scientific research: “all higher knowledge is acquired by comparison and rests on comparison. If it is said that the character of scientific research in our age is pre-eminently comparative, this really means that our researches are now based on the widest evidence that can be obtained, on the broadest inductions that can be grasped by the human mind” (Müller 1882: 9) and also that “all real science rests on classification and only in case we cannot succeed in classifying the various dialects of faith, shall we have to confess that a science of religion is really an impossibility” (Müller 1882: 68). Method therefore functions as a kind of a structuring mechanism, specifying rules and procedures that enable scholars to carry out research in comparable ways and also evaluate others’ research and its reliability and trustworthiness.

What I find particularly noteworthy here is that although clearly defined and organized method has always been the ideal in the study of religion, the actual discussion on method(s) and methodology has been very diverse and complicated, with anything as specific as ‘factor analysis’ (Boyd 2011) to as general as ‘religio-historical’ (Bleeker 1971) being treated and analysed as ‘method’ in the study of religion. Much of the discussion on method has thus revolved around the question whether there is a method specific to the study of religion? In recent times it has been common to indicate that there is no method unique, particularly special or specifically essential to the study of religion³³ (Rudolph 1981: 102; Stausberg, Engler 2011b: 4; Jensen 2011a: 32; McCauley 2014: 13–15; Dubuisson 2016: 26; Gothóni, Sakaranaho 2016: 10).³⁴ From an historical perspective, this is obviously a response to earlier attempts to define what is unique about the method of the study of religion or which method is particularly fundamental or essential to the study of religion. For example, Joachim Wach understood

³³ However, there are exceptions to this. While these researchers take it for granted and find nothing negative about the lack of a unique method, not all agree. For example William McCorkle (2008) considers this lack of “a methodology of its own” (McCorkle 2008: 16) highly problematic and indeed one of the major flaws of the religious studies (McCorkle 2008: 16–17) and the primary reason for why much of the intellectual community supposedly does not take religious studies seriously. Furthermore, he believes that religious studies “in principle could be unified by a method” (McCorkle 2008: 16) and argues that cognitive sciences could provide such a methodology (although he agrees that definitional problems would still plague the field regardless).

³⁴ It should be noted, though that while Kurt Rudolph agrees with the statement that there is no method unique or particularly special to the study of religion, he also insists that philological-historical method is essential to the study of religion, even if inadequate by itself and ideally supplemented by the ‘comparative-systematic method’ (Rudolph 1979: 98–100, 109).

hermeneutics as such an essential method without which understanding other religions and therefore doing high level research is simply not possible (Wach 1967: 12–15).³⁵ Also, C. J. Bleeker insisted that each discipline has its own method and the method generally results from its object (Bleeker 1971: 9), later on insisting that the method of history of religions is “the principle of scholarly impartiality, of purely historical research” (Bleeker 1971: 13). Similarly, Eliade argued that the methodology of the historian of religions is different from that of all other disciplines in the sense that it is uniquely focused on the religious symbols (Eliade 1959: 88–92).³⁶

Yet, there are good reasons to believe that all these scholars do not quite mean the same thing when they use the word ‘method’. For Stausberg and Engler methods are “techniques for collecting and analyzing, or enacting ... data in scientific or scholarly research” (Stausberg, Engler 2011b: 5), Daniel Dubuisson criticizes the use of “analysing”, “comparing”, “discussing” and so on as designations of method, finding them all lacking in definite and definitive method (Dubuisson 2016: 27–28), while suggesting that we ought to “set up a critical method with a strong analytical dimension” (Dubuisson 2016: 28). Meanwhile Kurt Rudolph (1979, 1981) discusses “philological method”, “historical method” as well as “historico-critical method”, “comparative method”, “sociological method”, “psychological method(s)” and “phenomenological method” and Jensen (2011a: 37–48) emphasizes the difference between “inside-out” and “outside-in” methodologies.³⁷ It is also noteworthy that he considers these both methodologies and theoretical paradigms at the same time (Jensen 2011a: 39).

What should be apparent by now is the diversity of the whole ‘method-discussion’ in the study of religion. Stausberg and Engler want to limit the usage of ‘method’ to clearly specifiable procedures and techniques and while others are

³⁵ Wach understood “pure psychological, pure sociological, and pure typological answers” (Wach 1967: 13) as such research approaches which do not help us, because they lack a hermeneutical dimension, while co-operative (with hermeneutics, that is) psychological, sociological and typological approaches were acceptable.

³⁶ Specifically, he writes: “Moreover, the very procedure of the historian of religions is not identical with that of the psychologist, the linguist, or the sociologist. It is just as dissimilar to that of the theologian. The historian of religions is preoccupied uniquely with the religious symbols, that is, with those that are bound up with a religious experience or a religious conception of the world. ... But the historian of religions uses an empirical method of approach. He is concerned with religio-historical facts which he seeks to understand and to make intelligible to others. He is attracted to both the meaning of a religious phenomenon and to its history; he tries to do justice to both and not to sacrifice either one of them. Of course, the historian of religions also is led to systematize the results of his findings and to reflect on the structure of the religious phenomena. But then he completes his historical work as phenomenologist or philosopher of religion.” (Eliade 1959: 88)

³⁷ The “inside-out” perspective aims to “explain religion on the basis and as the result of innate cognitive capacities and mechanisms inherited from our evolutionary past” (Jensen 2011a: 37), whereas the “outside-in” perspective draws attention to our social and cultural environment and emphasizes that “human brains and cognitive systems are conditioned by that which comes to us from the outside” (Jensen 2011a: 39).

certainly not denying this usage of the concept, they are considerably expanding it as well – in the end to such an extent that it indeed becomes difficult to say how one can distinguish between ‘methodology’ and ‘theoretical paradigm’. In that sense Rudolph’s usage is very close to earlier scholars (Wach, Bleeker, Eliade) – discussing approaches as general as ‘sociological’ and ‘psychological’ as ‘methods’ indeed blurs the line between methods and theoretical paradigms. And it is just this usage which also enabled Annemarie Schimmel to talk about “the *religionswissenschaftliche* method” (1960: 236) in her summary of the discussion that took place at the 1960 IAHR congress (Schimmel 1960).

But this kind of diversity in the discussions of method is prevalent in the study of religion in general, not just in the select few articles I have highlighted thus far. To begin with, there is the relatively strict meaning of method, where it signifies a specific procedure or technique. In that sense content analysis (Nelson, Woods Jr 2011), factor analysis (Boyd 2011), experimentation (Barrett (2011a) and interviewing (Bremborg 2011) can be treated as specific methods of the study of religion – these have obvious rules and regulations to follow and they can be spelled out in a rather detailed manner. Of course, most of the time these also make use of other methodological tools (for example interviewing is always going to involve a certain amount of hermeneutics). Things become more complicated when we look further. In recent decades discourse analysis has gained quite a bit of attention as an important method for the study of religion (Taira 2013; Stuckrad 2013), however as Titus Hjelm notes, “in the sense of method [discourse analysis] remains a largely untapped source” (2011: 135). Still, it is important to note that discourse analysis is not and probably cannot be portrayed or treated as a clear procedure or technique to follow. Thus, Kocku von Stuckrad understands discourse analysis at the same time as a methodology and as a more generic research approach which would enable rethinking the study of religion in general (Stuckrad 2014: 1–3, 13–18; Stuckrad 2003).³⁸

A similar kind of ambiguity is also present in discussions concerning several other ‘methods’. Earlier I already noted the importance of hermeneutics for the study of religion and typically hermeneutics is understood as one of the methods of the discipline (for example Stausberg and Engler (2011a) locate it under the section ‘methods’, alongside factor analysis, content analysis, interviewing, structuralism, etc.). Yet, this is not without its problems, since Ingvild Saelid Gilhus (2011) is quick to note that “hermeneutics is both a method and a philosophy of interpretation. The method can neither be satisfactorily employed nor explained without being firmly rooted in theories of interpretation” (Gilhus 2011: 276). She continues by arguing that because the issue of understanding and thus hermeneutics is present in all research practices, “one might even ask if hermeneutics really is a method” (Gilhus 2011: 276). Therefore, even though it is possible to limit one’s understanding of hermeneutics to a specific method, it is inevitably

³⁸ The final goal of this would be turning “the academic study of religion into a metatheory that tries to describe systematically the formation of meanings about things religious” (Stuckrad 2003: 262).

related to a wider philosophical perspective – and more importantly, it is an unavoidable part of all research that deals with human beings. After all, even experimental research in the cognitive science of religion requires interpretive skills and practices from the researchers who carry out experiments to be able to communicate with their test subjects.

This dilemma of ambiguity reappears when one looks at fieldwork. In contemporary study of religion it is probably one of the most popular ‘methods’ to use, yet understanding it as a ‘method’ has its ambiguities. As Graham Harvey (2011) notes, doing field research is a complicated “hybrid activity” (Harvey 2011: 240) which requires the combination of various kinds of participation and observation, asking questions, checking facts and so on. Therefore, if one is going to understand fieldwork as a method, one would have to accept it as a method which also includes various other methods within itself. Fieldwork can take the form of participating, observing, interviewing and interpreting, but it is also possible to include behavioural and psychological experiments, statistical analysis and free-listing as parts or aspects of fieldwork.³⁹

Similar issues appear in treatments of ‘philology’ (Thomassen 1999; 2011) and ‘history’ (Smith 1968; Rüpke 2011) as methods of the study of religion, for they both mean something far more extensive in practice. Thus, even though Thomassen (2011) compiles a whole list of issues, questions and topics a proper philological study entails, he is still forced to conclude that philological interpretation is rather a practice, than something that could be “operationalized as a positive methodical procedure” (Thomassen 2011: 352). ‘History’ as well functions as a more general research approach, similarly to fieldwork that can also include and accommodate other methods, more specific or equally general.⁴⁰ Therefore, although history, philology, hermeneutics, fieldwork and discourse analysis are complex practices and often function as large-scale research approaches rather than specifically definable procedural methods (such as interviewing, factor analysis or experimentation) it has been common to treat them as methods just the same.

This is not at all uncommon in the study of religion. Talking about ‘sociological,’ ‘psychological,’ ‘historical,’ ‘philological’ and other such generic descriptions – that we would otherwise often call fields of research or disciplines – as methods has been present in the discussions concerning the methodological issues of the study of religion for quite some time now. As noted previously, Rudolph (1979, 1981) talks about ‘sociological method,’ ‘psychological method,’ ‘historical method,’ etc. But he is not alone; by doing this he joins a longstanding practice of treating research approaches as methods. Eric J. Sharpe (1971: 12), Pummer (1975: 173–175), Bruce Alton (1986: 156), Pye (1999: 189–192), Geertz and

³⁹ As examples such practices as parts of fieldwork research, see Soler 2012; Purzycki, Arakchaa 2013; Purzycki 2013; Fischer et al 2014.

⁴⁰ For example Rüpke (2011: 286) emphasizes the relevance of discourse analysis, hermeneutics, philology, network analysis and structuralism (among others) as important tools for historical research.

McCutcheon (2000: 6) and Aaron Hughes (2013: 2–3) also talk about method in such a way. Sometimes there is reason to believe that this is done for the sake of generalization,⁴¹ but I do not think it can be explained solely as a matter of generalization, since even the generalized form this would still imply that there are methods somehow particularly inherent or essential to sociology, psychology or philology.

In addition, there is the ever-present and extensive discussion over the use, usefulness and practice of the comparative method (Smith 1971; Carter 1998; Saler 2001; Jensen 2004; Freiburger 2011; Annus 2014; etc.).⁴² It has been called the dominant method of the comparative religion for the first half of the 20th century (Sharpe 1988),⁴³ as well as the underlying basis of the study of religion (Freiburger 2011) or historical humanities in general (Annus 2014). Comparison has at times appeared both problematic as well as advantageous. It has appeared problematic as on many occasions the practice of comparison has forced disputable classificatory schemes and interpretations on the studied phenomena. Yet, on the other hand, scientific research without comparison either produces trivial knowledge or is simply impossible, since ideas, things or knowledge in general never appears to us completely separated from all other ideas or things that we have observed. As Jensen has succinctly put it: “What cannot be compared or generalized cannot be an object of scientific or scholarly scrutiny, nor can it be an object of philosophical reflection” (Jensen 2016: 469). This has led Paul Roscoe to note that the whole discussion about comparative method in the study of religion is not even that much about method as it is about the underlying *a priori* assumptions concerning the nature of humanity and cultural processes (Roscoe 2008).⁴⁴ This ubiquity and inevitability of comparison has caused Stausberg (2011a) to argue that instead of analysing and treating comparison as a method

⁴¹ I would suggest this is most probably the case with the Geertz & McCutcheon article as they use plural form: “Scholars in the study of religion apply historical, archaeological, linguistic, textual (e.g., philological, structural and semiotic), philosophical, sociological, psychological, ethnographic, anthropological, and art historical methods. These methods having been developed by separate disciplines and do not constitute what is special about the comparative study of religion” (Geertz, McCutcheon 2000: 6). In the other highlighted articles the usage is far more straightforward, also using singular form, not plural (so specifically ‘sociological method’, not just ambiguously ‘sociological methods’).

⁴² It is worth noting that among them Smith (1971) has put a lot of effort on documenting and referencing much (if not most) of the earlier literature on comparison, thus the bibliography of his article is also very useful as a reference list for pre-1970s discussion about comparison as such.

⁴³ But as Sharpe also notes, at the same time no one found it necessary to actually discuss methodological issues (Sharpe 1988: 246)!

⁴⁴ More specifically: “debates about the comparative method are not really about the validity of the method at all. Rather, they are disputes about the validity of the comparativist assumption that the surface manifestations to be explained are all expressions of the same underlying, obscure, or obscured explanatory entity or process. Comparativists assert this essential uniformity. Their critics demur. Obscured by disputes about ‘method’, in other words, are implicit quarrels about the nature of humanity and of cultural process” (Roscoe 2008: 738).

we should rather think about it as “research design, i. e. as a framework for the collection and analysis of data and the analysis of research problems” (Stausberg 2011a: 34). Thus “comparative research design” for Stausberg is rather a kind of a setting in which specific “techniques or tools for the collection of data” (Stausberg 2011a: 34) can be used.⁴⁵ Discourse analysis, content analysis, philology, hermeneutics, historiography, phenomenology, etc. are all examples of such techniques and tools for Stausberg. Therefore, although treatments, analyses and critiques of ‘the comparative method’ are ever-present in the study of religion, discussing comparison as a method is somewhat problematic and questionable, since the act of comparison as such is an inevitable part of all research and thus discussing ‘comparative method’ amounts to treating ‘method’ as something even more generalized than it appears in discussions of method which treat ‘sociological’, ‘psychological’, etc. as designations of methods.

Alongside aforementioned discussions, phenomenology is also oftentimes treated as a method. However, this discussion of ‘phenomenological method’ is rather twofold.⁴⁶ On the one hand discussions of the phenomenological method have concentrated on the matters of understanding and interpretation – how to understand and interpret the religious phenomena one wishes to make sense of? Bleeker (1959), Penner (1970), Smart (1973: 18–38), Dhavamony (1976) and others discussed this extensively back when phenomenology of religion was still far more part of the scholarly mainstream than it is today. How to avoid unjustifiable and misleading (value) judgments about the supposed object of study and how to approach it in a way which would make it possible to genuinely understand it? – these have been the main questions of ‘method’ in this discussion. Therefore, one could say that much of this discussion predominantly deals with topics we would consider hermeneutical – what should one do to adequately and fairly understand the other? – but also with the wider question of one’s perspective or attitude towards ‘the research object’.

On the other hand, these discussions about phenomenological method have concentrated on questions of classification and categorization. The main focus is therefore the systematic study of the forms of religion, investigating all the conceptions, rites, myths, traditions and other aspects from a comparative morphological-typological point of view (Hultkrantz 1970; Widengren 1969). Although

⁴⁵ I find this conceptualization very helpful and in my subsequent usage of the concept I will be using it the same way as Stausberg presents it here.

⁴⁶ Ingvild Saelid Gilhus (1984) also distinguishes between these two main approaches in the phenomenology of religion. However, some have even gone further. For example Douglas Allen (2005) considers it possible to distinguish between four different meanings of ‘the phenomenology of religion’: first of all the term may mean nothing more than an investigation of observable objects, facts and events; secondly (from Chantepie de la Saussaye to Widengren and Hultkrantz) it can mean the comparative study and classification of religious phenomena; thirdly (Brede Kristensen, van der Leeuw, Wach, Bleeker, Eliade, Waardenburg) it has meant a whole separate discipline within the religious studies and lastly he distinguished a philosophical phenomenology of religion with Max Scheler and Paul Ricoeur as its most noteworthy representatives.

understanding the phenomena is important here as well, this should be achieved through the use of extensive comparative material and “no specific intuitive quality is needed to grasp this purport, but just a general perception of the world of religion and of the logic of the religious conception and feeling” (Hultkrantz 1970: 80).

And although phenomenology of religion has been extensively criticized⁴⁷ both discussions of ‘method’ have continued until today, with Dale W. Cannon (1993), Thomas Ryba (2009), James V. Spickard (2011) and Jason Blum (2012) mainly focusing on the analysis of the hermeneutical perspective and Jensen (2004) and Gilhus (2004) mainly dealing with questions stemming from the categorizing and classificatory perspective in the phenomenology of religion.⁴⁸ Overall, discussions about the ‘phenomenological method’ are remarkably similar to the aforementioned discussions which consider it possible to talk about ‘philological method’, ‘historical method’, ‘sociological method’, ‘psychological method’, etc. Here as well phenomenology is at the same time understood as a theoretical paradigm and as a method(ology). Or in other words one could say that by understanding phenomenological approach as a method one is putting a theoretical paradigm into practice by utilising it as a general research design (within which more specific procedures and approaches, for example categorization or hermeneutics, are applied to make sense of the research object).

Understanding method as something significantly more generic than a simple procedure or a specific research design also makes it possible to treat many other topics as issues of method. For example, Bruce Lincoln’s well-known “Theses on Method” (Lincoln 1996) says little about any specific practical procedures or how to set up (design) one’s research practice, instead it mainly focuses on how scholars should approach religion as a research object, how one should treat it and what questions one should ask. This has caused at least one commentator to note that these theses do not say much about method or methodology, but rather they “attempt to inculcate an attitude, a way of being in the world of academia (but not only that world)” (Geller 2005: 19).⁴⁹ This is something Lincoln later agreed with as well, noting that his ‘Theses’ is “less a discussion of method than an attempt to foster an attitude: one distinctly more critical and less empathetic than is elsewhere standard in our discipline” (Lincoln 2005: 62). It is this wider meaning of method that makes it possible to treat a whole variety of issues as ‘methodological’. For example, in his discussion of methodological issues, Pummer (1975) focuses on understanding, explanation, comparison, phenomenological method and other such topics. In a similar fashion Wiebe (1981: 44–58) analyses the autonomy of religious studies, its difference from theology and

⁴⁷ For a succinct and accurate summary of the criticisms, see Allen (2005: 199–203), but also Ryba (2000: 164–171; 2009: 277–281).

⁴⁸ I have also analysed the latter of the two discussions in more detail elsewhere, focusing on the contemporary usefulness and usability of the categorization side of the phenomenology of religion. See Peedu (2015a).

⁴⁹ Later on Engler and Gardiner also agree with Geller, also finding it remarkable how little time these theses on ‘method’ actually say about method (Engler, Gardiner 2013)!

social sciences, the significance of ‘understanding’ and other such issues as aspects of methodology. Pye (1999: 202–203) also focuses on the issues of comparison and contextualizing as topics of methodology.⁵⁰ Lastly, it is worth noting that this more generalized understanding of methodology also allows Sharpe (1971: 4–5; 2003: 20–58) to argue that the theory of evolution in practice functioned as the unifying, all-sufficient method for the new science in the second half of the 19th century.

Lastly the concept of ‘methodology’ has one more notable usage in the study of religion. This occurs in the concepts of ‘methodological atheism’, ‘methodological agnosticism’, ‘methodological naturalism’, etc. Now, it is clear that these are certainly not meant as method(ologie)s in the sense of procedure or technique, but it is also doubtful that there is much use in trying to understand these as a research approaches or practices comparable to ‘philology’ or ‘fieldwork’. For example, in a recent prominent introduction to the evolutionary research on religion, Slingerland and Bulbulia (2011) describe methodological naturalism as an assumption that religion is an entirely human phenomenon and therefore “seeks to understand religion in purely naturalistic terms” (Slingerland, Bulbulia 2011: 308) Explaining further, they also argue that “methodological naturalism does not require that any scholar embrace atheism. However, the scholarly study of religion does require scholars to bracket their commitments when they pursue their scholarly work, which is to be framed in a manner that is broadly consistent with the other disciplines that investigate our world” (Slingerland, Bulbulia 2011: 308) and therefore “methodological naturalism is not a doctrine; it is rather a practical rule of thumb that is favored because it works” (Slingerland, Bulbulia 2011: 312). While this portrayal of methodological naturalism is problematic and disputable (and I will dispute this later on!), it for now serves as a good example how this ‘methodological’ conception is depicted in the current evolutionary sciences of religion.

Methodological agnosticism on the other hand is understood as “agnosticism about the existence or otherwise of the main foci of the belief system in question” (Smart 1973: 54) and therefore “methodological agnosticism cannot exclude the possibility of the truth of some religion R” (Smart 1973: 57).⁵¹ Therefore, these ‘methodologies’ are understood as practical guidelines to use in epistemological matters, but they do not offer a concrete research practice to follow (as anthropological fieldwork, philological history or other comparable approaches do). In a sense these ‘methodologies’ are comparable to the theses of Bruce Lincoln,⁵² because it is more accurate to describe them as “attempts to inculcate an attitude”,

⁵⁰ And it is worth reminding – as I already noted earlier – that he talks about ‘sociological’, ‘psychological’, ‘historical’, etc. as designations of methods.

⁵¹ It is worth noting that Smart did want to understand this as a ‘method’ (and not just as a ‘methodology’), since he also writes: “I wish here to establish a method of looking at the objects of religious experience and belief which neither brings heaven down to earth nor takes a step into metaphysics and theology” (Smart 1973: 49).

⁵² I will come back to this noteworthy similarity in section 2.4.

if I were to reuse the rather accurate way Geller (2005: 19) described Lincoln's theses.

However, while the goal of this compact overview has been to show the extent and diversity of all the different, but interconnected discussions of method, the more important question here is rather what to make of this all? How should one makes sense of this diverse plurality of meanings 'method' and 'methodology' have obtained in the various discourses and discussions? This is the question I intend to pursue next, to also highlight the importance and relevance of methodological topics for the subsequent issues I am going to discuss later.

2.2. How to make sense of this diversity?

As I highlighted in the previous section, method(ology) has been understood, analysed and practiced in a variety of different ways in the study of religion thus far. In their compact description of this situation Geertz and McCutcheon (2000: 4–8) simply argue that the study of religion “is a composite field of study” (Geertz, McCutcheon 2000: 4) and it is “based on a methodological pluralism” (Geertz, McCutcheon 2000: 4) and while this is certainly accurate, it is not particularly helpful. Stausberg and Engler on the other hand have tried to make sense of this situation by distinguishing methods and methodologies. Therefore they define methods as “techniques for collecting and analyzing, or enacting ... data in scientific or scholarly research” (Stausberg, Engler 2011b: 5) and methodology as “the application and discussion of the underlying principles of these procedures ... Methodology refers both to general technical issues regarding methods (i.e., case or sample selection, data collection and analysis), and to the theory and conceptualization of methods” (Stausberg, Engler 2011b: 5). However, as it quickly becomes apparent from the general set up of the *Handbook* (Stausberg, Engler 2011a) and from their own discussion as well, this distinction is hard or impossible to enforce consistently. For one they have categorized ‘grounded theory’ as a method, yet quickly admitting that it “is both a method and a more general (methodological) view on the relationship between theory, data and method” (Stausberg, Engler 2011b: 13), while also talking about “the methodological tools of discourse analysis” (Stausberg, Engler 2011b: 13), even though discourse analysis is listed under methods and in their definitions methodology appears to be the more general, overarching concept and method the more strictly defined procedure. Similarly, they are forced to conclude that field research is rather a “methodological scenario rather than a single method in a stricter sense” (Stausberg, Engler 2011b: 13), even though field research as well is listed under methods. And as I highlighted already in the previous section, in the actual articles their attempt to distinguish methods and methodologies is undermined furthermore, since neither philology (Thomassen 2011), hermeneutics (Gilhus 2011), field research (Harvey 2011) nor history (Rüpke 2011) really fit under the heading of ‘methods’, even though they are indeed listed as such.

Possibly it could be argued here that the contradiction can be solved simply by treating these as methodologies instead of methods, but even that would not solve the actual ambiguity, since we would then have to discuss discourse analysis, structuralism, semiotics, grounded theory and so on. In the end we would have an overcrowded methodology section and a rather sparsely populated methods section. The real problem is that in such a categorization many of the most influential methods in the study of religion end up being both methods and methodologies at the same time. History, discourse analysis, field research and some other influential method(ologie)s do not properly fit into such a categorization. But also I am rather sceptical about the usefulness of distinguishing between methods and methodologies, because throughout the discussion of method(ology) in the study of religion one can find people using these concepts interchangeably or without much effort to consistently distinguish them from each other. Going against this tendency to draw a clear line would be very hard to achieve on a wider scale. All in all, this approach does not appear to help with making sense of the whole issue.

One alternative here might appear to be distinguishing methods as tools for approaching the supposed object of study from methods as tools for studying available data about the supposed object of study. From this perspective archaeological retrieval of (ancient) artefacts, philological deciphering and study of ancient texts (and the development of their composition), as well as experimental studies in psychology or surveys in sociology can all be understood as ways to retrieve data about religiosity as a phenomenon. At the same time, hermeneutical interpretation of the retrieved data, analysis of the experimental results or more generalized comparison between different separate data-sets would be understood as studying data about the object of the research.

This kind of a distinction is noteworthy, since it was prevalent in the study of religion for quite some time: first all the available data should be gathered, systematized and classified and then we can deal with its interpretation. A comparable distinction is present in Max Müller's *Introduction* as he argues for the dual division of the science of religion into comparative theology and theoretic theology (Müller 1882:16–17, 74, 146), where comparative theology concentrates on “the historical forms of religion” (Müller 1882: 17) and thus should simply deal with “the facts such as we find them” (Müller 1882: 74), while theoretic theology “has to explain the conditions under which religion, whether in its highest or its lowest form, is possible” and thus it “ought not to be taken up till all the evidence, that can possibly be gained from a comparative study of the religions of the world has been fully collected, classified, and analysed” (Müller 1882: 17). Similar sentiments are still echoed in various statements a century later. For example, Kees W. Bolle (1967) argues that history of religions deals with materials that are hard to arrange and is therefore “always inductive rather than deductive, empiricistic rather than aprioristic” (Bolle 1967: 95) whereas any kind of “ultimate questions” should be dealt with only later on, but they should not interfere with the empirical part of the study. Also, in the same collection of essays Charles S. J. White emphatically notes that “Methodology stands out as the single most important problem

for the historian of religions. Let us be frank about it. There is no lack of material for our speculations. The researchers in the various linguistic and other humanistic disciplines have recorded an enormous amount of relevant data which, aside from whatever other uses they may have, apply to the work of the historico-religious interpreter as well. Without an adequate method for handling these materials, our uses of them become mere improvisations” (White 1967: 161).⁵³ A similar distinction between objective facts about religion and subsequent interpretations and theories also appears in Helmer Ringgren’s article about objectivity in the study of religion (Ringgren 1970).

Now, it is true that the distinction Müller, Bolle, White and Ringgren emphasise between empirical data about religion and later interpretation of it is not exactly the same as the distinction between studying the supposed object and studying data about the supposed object (since for them the eventual theoretical evaluation should also deal with the questions of truth) but the underlying idea – we can distinguish objective, empirical facts from later interpretations – is still very similar. Differentiating between study of object and study of data reinforces an analogous distinction – it still presumes that we can somehow distinguish between the object itself and data about it.

As I already noted earlier in the thesis, this is an idea that has come under severe criticism in the past few decades. Most famously, Jonathan Z. Smith has argued that “*there is no data for religion*” (Smith 1982: xi, italics in original). While Smith’s idea has provoked a lot of discussion⁵⁴ and it certainly does leave room for interpretation, it also points to something essential (which has been analysed and elaborated in much more detail in the subsequent decades): we cannot draw a fundamental distinction between data and our understandings of data. Religion as a phenomenon is not something we have inductively derived from the empirical material; it is a conceptual tool that we have chosen to formulate a distinguishable phenomenon of the multifariousness of the world around us (Smith 1998: 281–282).

But if we accept this theoretical conclusion, then we also have to give up the attempt to distinguish theory-independent empirical facts from later analysis and the distinction between retrieving data about the supposed object of study and the analysis and interpretation of retrieved data. What we wish to retrieve, what we

⁵³ He also follows this up with a further insistence on the need for a proper methodology: „This problem is particularly acute for someone who, besides being a historian of religions, with the implication that he is a generalist, aspires to be a specialist in some phase of man’s religious history. Such a specialist is required to concern himself not only with the formal character of the religion described in the literature but with the lived experience of one religion in the midst of its cultural realization, if, indeed, it continues to be a living religious expression. Hence he enlarges the problem of method. He must know how to be a specialist against the background of, or in a way that contributes to, his function as a generalist. This small problem in the specialist’s field method is thus related to the larger concern for an adequate general theory of historico-religious methodology” (White 1967: 161).

⁵⁴ Engler (2004), Day (2005), Schilbrack (2010) and Hart (2016) are but a few more recent examples of this extensive discussion.

wish to find for later analysis, is already guided, interpreted or in some cases determined by the analytical and interpretive questions which we wish to ask at 'a later stage' of research. Or as Jeppe Sinding Jensen describes this: "data are theory dependent. Data are produced and 'sifted' from the streams of experience by means of theories, concepts and models" (Jensen 2011b: 47).⁵⁵

One recent rather notable attempt to make sense of this methodological diversity comes from Patrick Hart who draws attention to the history of the 'method' concept and analyses its current usage. He distinguishes between two major usages of the concept: first there is idea that methods are procedures or processes that the scholar has chosen to attain an object, but secondly there is also the idea that method involves "the disposition, comportment, or attitude that we bring towards the subject matter" (Hart 2016: 16). Furthermore, he argues that this attitude or disposition can affect our selection of specific procedures, but our choice of procedures can also affect the attitude that comes with it (Hart 2016: 16). Whereas Stausberg and Engler (2011a, 2011b) have tried to take a normative position and suggest how the field of scholars ought to understand the concepts of method and methodology, Hart has rather looked at the actual complexity of the usage.

By doing that I think Hart has drawn attention to something I already discussed in the previous section and what I find very significant: the discussion of method is never just about method as a procedure or even just about method as a general research design (and it is even less about when and why should one use which method). Rather, significant proportions of this discussion deal with questions of attitude, perspective and disposition. Interestingly enough, some have drawn attention to this some time ago. Willard Gurdon Oxtoby noted already in 1968 that the debate about method is not so much about method as it is about the 'scientific status' of the discipline – what are the scientific principles of the study of religion (or whether there are any at all) (Oxtoby 1968). Similarly, as I already highlighted in the previous chapter, Donald Wiebe (1978) noted a decade later that the methodological debates in the study of religion are rather focused on how to carve out a standpoint for the 'science of religion' and therefore to differentiate it both from the social sciences and from theology. Therefore 'science of religion' as a label rather functions as way how to establish an attitude free of (theological) bias or prejudice (Wiebe 1978: 10).⁵⁶

In his discussion of method and methodology in the study of religion Eric J. Sharpe notes something similar when he argues that "the Religious Studies enterprise seeks to erect or discover a "high place" from which the student can survey and analyse the world of religion without actually submitting to the

⁵⁵ Elsewhere elaborating further: "Theories are not given by facts, but facts are produced relative to theories. The philosophy of the natural sciences has shown that inductivism is logically flawed because the theory-dependence of observation means that the idea of verification with reference to 'un-interpreted' empirical evidence is impossible Theories and evidence (data) are mutually constitutive. Generalizations are the results of theoretical reflections on what is considered to count as evidence within a given theoretical definition-space" (Jensen 2011b: 44).

⁵⁶ Later on he discusses these same topics again in Wiebe (1981: 44–58).

conditions of any part of it” (1988: 249), concurrently arguing that much of the methodological debate is actually focused on determining how to erect or discover this “high place” for the emerging science and not so much about method in any specific, procedural or technical sense. He continues this by arguing that although we might have different ways how to describe this place, we do “pre-suppose that we occupy a rather special vantage-point, and that we have in fact arrived at certain conclusions about the desirability of being there – and about the necessity of *not* submitting to transcendental authority as a condition of getting off the ground in the first place” (1988: 249).⁵⁷ The word, *attitude*, is very significant here as this leads us straight into the theses on method as presented by Lincoln (1996), which as I showed above, is also largely an exposition of an attitude. This discussion of attitude and position (i.e. that ‘high place’) has continued as a steady part of the methodological discussions in the study of religion up until today. For example, Jörg Rüpke (2011) devotes much of his discussion to distinguishing academic study of history from popular history and public historical narratives, emphasising the crucial role of methodology in it and therefore arguing that the academic study of history “is defined by its *ethos* as conforming to the standards of a science, at least as far as possible without losing its function as an orientation for a future” (Rüpke 2011: 288, emphasis by me).⁵⁸

However, it is important to notice that these discussions about the correct attitude, ethos or position are closely related to the discussions about methodological atheism, methodological naturalism and methodological agnosticism. As briefly noted previously (and this is a topic I will return to in more detail later on), these characterizations of methodological self-understandings are also treated as ways how to position oneself – which arguments one should pursue and which arguments one should not pursue, what kind of judgments one should make and which judgments one should refrain from. In other words these are attempts to expound and elaborate on that ‘high place’. We can admit the impossibility of true objectivity, but this does not mean that we should just succumb to extreme

⁵⁷ Furthermore, in a book of his he argues that one of the fundamental premises of the study of religion is the possibility of studying religiosity without presuming the trueness or falseness of the studied phenomenon beforehand (Sharpe 1983: ix–xiv), describing the position of the scholar of religion in the following way: “It follows (and this may be harder to grasp) that the student of religion is in most cases engaged on a different quest from that which motivates the spiritual pilgrim. His quest is an intellectual quest for explanations which do not do violence to profound convictions, and not a spiritual quest for deepened commitment (though this is not to say that the two may not overlap)” (Sharpe 1983: xi).

⁵⁸ Elsewhere René Gothóni also talks about the *attitude* of the scholar of religion: “The Study of Religions scholar’s attitude towards religion and religiosity is thus somewhat paradoxical, S/he is supposed to get involved and to meddle in ‘other people’s’ affairs without committing him/herself to anything except a simple, sincere and sensitive search for the meaning of the concepts and terms. In doing this, s/he is also expected perpetually to commute intellectually between involvement and detachment, while concurrently avoiding any kind of emotional commitment. Only by becoming this kind of commuter do we generate repetitive reflection, which eventually sharpens our discernment and provides US with a distinct understanding of the matter at hand” (1995: 50).

relativism and all-encompassing subjectivism – these discussions attempt to overcome just that. As such, debates about the ‘neutrality’ of religious studies (Donovan 1990, Cannon 1993, Byrne 1997, Hyman 2004, Porpora 2006, etc.) are also very closely related to the hereinbefore discussed concepts, even though this is conceptually not understood as a discussion of method(ology). In this regard discussions of method(ology) are also directly or indirectly discussions of epistemology. The two are inevitably intertwined, in matters of method as procedure or technique as well as in matters of methodological self-positioning.⁵⁹

Based on this analysis of the method(olog)ical discussion and some of the ways scholars have tried to make sense of this I wish to propose a threefold categorization which should help to make sense of the diversity of method(ology) present in the study of religion, but more importantly, it should also highlight the epistemological aspect of all the discussions of methodology. This categorization can be understood as a distinction between three different dimensions of the wider methodological discussion – all of these dimensions intersect with each other, they are interrelated and they are simultaneously present in all academic research. However, this categorization is certainly not meant as a description of ‘how things really are’, rather I consider it an efficient way how to make sense of the multiple discussions and applications of ‘method’ and how all of these are intertwined with each other. One could say that it is meant as a kind of a heuristic toolbox for thinking about matters of method.

The first dimension of method has to do with a clearly definable practice that follows specific, explicit rules. The ‘generality’ of this practice can vary from very specific techniques to more generally defined practices – which still follow clear procedural rules. On the one end of the scale we have very strict procedural techniques such as factor analysis. Subsequently, network analysis (Adams 2011), free listing (Stausberg 2011b), surveys (Navarro-Rivera, Kosmin 2011) and experimental research (Barrett 2011a; Schjoedt 2009; Andersen et al 2014)⁶⁰ among other similar methods also follow clearly specifiable rules of practice. However, at the other end of the scale we can find methods which cannot be

⁵⁹ Lambek (2014, see especially 146–148) explicitly emphasises and discusses just this point, also noting that “behind questions of methodology lie those of epistemology and hence it is here we have to begin in order to reach a deep understanding of the relationships among the various disciplines that study religion” (Lambek 2014: 146). Interestingly enough, Stausberg and Engler agree: “Ultimately, each research method carries a specific philosophical baggage, and by constructing a certain kind of data, all research methods facilitate certain kinds of analysis and thereby privilege certain kinds of perspectives. With some methods, the various philosophical and theoretical backgrounds remain more visible than with others. ... The methods sometimes appear as practical applications of the theoretical paradigms” (Stausberg, Engler 2011b: 14). However, they have not followed through with the logical conclusions of this and have still persisted with their dual categorization – as if method, methodology and epistemology can be treated separately.

⁶⁰ It should be noted that Barrett (2011a) actually talks about experimental *methods* – plural – but it would seem that this is merely a way to emphasise that many different experimental settings are possible and it is not meant as a way to talk about clearly different methods as such.

defined as narrowly but which we can still clearly describe as following procedural rules. For example, discourse analysis in ‘the narrower sense’⁶¹ and interviewing (Bremborg 2011) are therefore also methods in this sense – they cannot be delineated as specifically as factor analysis or experimental research, but they are still procedural practices with specific rules. Perhaps the most complicated cases are archaeological methods in researching religion (Raja, Rüpke 2015: 1–8; Rüpke 2011: 294; Jonuks et al 2013) and anthropological fieldwork – they are understood both as generalized research approaches, but also as specific procedural practices.

In archaeology Tönno Jonuks (2005) serves as a good example of treating archaeology strictly as a generalized research approach, saying little about technical archaeological procedures as such. Thereby he also has little to nothing to say about excavation techniques and related issues in the “methods” section (Jonuks 2005: 45–46), instead he discusses the usefulness (or uselessness) of the phenomenological method which has dominated the study of prehistoric religion in the past. Alternatively, Anthony Clark (1990) and Mark Aldenderfer (1998) understand archaeological methods in the sense of procedural techniques to follow. Similarly, with fieldwork, where it is at the same time possible to talk about fieldwork as a generalized research approach within which it is possible to adopt multiple different procedural techniques as well as in the narrower sense of specific rules of action and techniques to follow in the practice of participant observations or structured observations (Stausberg 2011c).

The reason for this might have to do with the close interrelationship of participant observation and fieldwork – although other procedural methods are also usable in the fieldwork setting, participant observation as such tends to be by far the most widespread and dominant method in the fieldwork context and thus fieldwork is often equated with participant observation. In any case, both fieldwork and archaeological excavations can be seen as types of a general research design within which it is possible to use many different methodical techniques. However, this leads us beyond understanding method as a clearly definable practice with specific rules and into the second dimension – method as a research approach.

The second dimension of method(ology) deals with the general research approach that a scholar has chosen to pursue to accomplish one’s goals. Methodology in this sense functions as an overarching research design which enables the accommodation and use of multiple different procedural practices. When philology, history, fieldwork, hermeneutics, structuralism, discourse analysis or semiotics are declared ‘methods’ of the study of religion, then the meaning of this phrase is closer to saying that these practical research designs can guide us in our study of the phenomenon we are interested in.

⁶¹ As I noted before (see section 2.1.), discussions about ‘discourse analysis’ in the study of religion can be both discussions of method as well as discussions about discourse analysis as a generalized research approach for the whole study of religion. Thus, when we are talking about method as a clearly definable practice with procedural rules to follow, we are talking about discourse analysis in the narrow sense (and not as a research paradigm).

The third dimension of the methodological debate concentrates on the question of positioning. What kind of a position does the scholar occupy in relation to one's research focus? What kind of a position does one inevitably occupy? What kind of judgments or arguments should one avoid? Discussions of methodological naturalism, methodological agnosticism, methodological atheism, objectivity, neutrality and so on are all closely related to each other here. Yet these are largely epistemological debates and therefore this discussion of methodology is rather a discussion of epistemological methodology or methodological epistemology, than a discussion of specific research designs, technical or structural procedures. I find it very useful to think of this as a matter of (self-)positioning. Obviously not meant in the literal sense, talking about positioning allows one to show how discussions of 'attitude', 'ethos' or 'scientificity' (if I were to use a very compact term) are all closely intertwined. And with regards to the rest of this thesis it is these latter two usages and discussions of 'method(ology)' which deserve a closer look.

2.3. Method as a research approach

Previously I noted how a significant proportion of the discussion about method is actually about something a lot more generalized than specific procedures. Although this has been treated as an integral part of the wider methodological discussion, I believe it is practically useful to see this as a somewhat separate debate, or a debate taking place on a different dimension, so to say. As I explained earlier, this dimension of the methodological discussion understands method(ology) as an overarching research approach. Philology, history, fieldwork, hermeneutics and discursive study are here excellent examples of such research designs. As highlighted earlier, introductions to these approaches have persistently struggled with the idea that they are described as 'methods'.

This caused Hjelm (2011: 135) to emphasise that he will not be discussing discourse as a (meta)theoretical concept, but rather as a specified method.⁶² Gilhus (2011) also is doubtful of the usefulness of treating hermeneutics as a method, suggesting instead that hermeneutics is rather a philosophy of interpretation (Gilhus 2011: 276). In a similar vein Thomassen (2011: 352) does not find it useful to describe philology as a method, instead preferring to describe it as a practice. Harvey (2011: 240) rather talks about field research as a hybrid activity. All these struggles with method as an activity that follows specific procedural rules stem from the historical circumstances due to which more general approaches and questions concerning specific procedures have been both treated as discussions of method.

To avoid this confusion and to clearly distinguish general programmes from specific procedures, it is far more useful to think of these as research approaches. Philology as a research approach highlights certain materials and prefers to

⁶² Obviously wishing to distinguish his usage of discourse analysis from the more generalized usage propagated by Stuckrad (2003, 2013).

pursue some questions over others – sometimes due to historical traditions and habits in the discipline, but sometimes because philology as an approach is simply better equipped to deal with some questions rather than some others. Content analysis, discourse analysis (in the stricter sense, as described by Hjelm (2011)) and other procedural methods which deal with texts can all be used within the philological approach, whereas the use of experiments or the use of the various techniques common in archaeology is simply not possible or practical. Fieldwork as a research approach on the other hand enables both hermeneutically inclined methods as well as behavioural and psychological experiments, if the researcher so wishes. Yet, the application of philologically inclined techniques (for example content analysis or discourse analysis in the stricter sense) is not as usable or useful there. For one, it is unlikely that one can do thorough philological research and fieldwork at the same time and secondly, because philology and fieldwork focus on different kinds of manifestations of human religiosity, even more, they have access to different aspects of it.⁶³ Aside philology and fieldwork there are several more or less widespread research approaches in the study of religion – discursive study of religion in the wider sense, historical research, archaeological excavations, experimental research, structuralism as well as semiotics are oftentimes all treated as methods, but as research approaches one can think of them as overarching research designs, each of which includes a general set of guidelines to follow and goals to pursue. Some research approaches have more in common than others, but it is rarely possible to accommodate or apply both simultaneously or even in the same overall research project.

Oftentimes parallel discussions dealing with ‘research approaches’ (e.g. Oviedo 2016, Szocik 2015, Sakaranaho 2010, Krech 2000, Levine 1998, Sharma 1991) are analysing questions very closely related to the discussions that take place under the heading of ‘method(ology)’. Therefore discussing philology, history, experimental research, etc. as research approaches rather than method(ologie)s also serves the added benefit of highlighting the importance of a significant parallel discussion, which is very closely related this dimension of the methodological discussion.⁶⁴ However, while ‘psychological’, ‘sociological’ and other names of disciplines (which are also practised independently) have oftentimes been described and treated as methods, I do not find it practically useful or meaningful to describe these as research approaches. Psychological research can take an experimental form as well as a hermeneutical form, sociological research can be based on quantitative surveys as well as on qualitative interviews and participant observations. And while it is true that this kind of earlier usages also talk about

⁶³ Fieldwork can “access” only what presently exists, whereas philologically it is also possible to study ancient texts – if I were to highlight just one example.

⁶⁴ It should be noted though, that the word ‘approach’ or even ‘research approach’ is used in many different ways, thus I certainly do not mean to say that the whole ‘diversity of approaches’ is relevant for these discussions, but simply that a significant proportion of closely related discussion also takes place under this title.

research approaches under the title of ‘method’, they are too ambiguous or general to be practically useful or meaningful.

On a similar level of abstraction a lot has been said lately about naturalistic study of religion and constructivist study of religion, depicting these as competing research paradigms (e.g. Schüller 2014a, 2014b, Oviedo 2016, King 2013, Bulbulia, Slingerland 2012) which have drastically different understandings of the study of religion and therefore are in conflict about a number of things. Obviously, these also do entail research approaches and procedural methods and certainly some research approaches and procedural methods are more common under one generalized paradigm than other. However, I would not describe these as research approaches because of the same reasons as I did not suggest that we should understand ‘psychological’, ‘sociological’ and other such designations as research approaches. Here as well we are dealing with something far more generalized and all-covering than the approaches I have previously highlighted. A constructivist paradigm can be philological, semiotic as well as fieldwork-based, while naturalistic can be experimental, fieldwork-based as well as historical. In addition, it is worth noting that I am not aware of any cases of analysing or discussing or treating constructivist or naturalistic study of religion as ‘method(ology)’. However, in the wider discussion the idea of ‘method’ is occasionally invoked. For example, Hanegraaff (1995) in his criticism of Robert Segal and his proposal of a reductive study of religion (Segal 1983) has emphasized ‘empirical method’ as a general approach, strongly distinguishing it from “positivist-reductionist” and “religionist” pursuits (Hanegraaff 1995: 99–108). Here as well ‘method’ acquires a very general meaning, implying a complete research paradigm as such and thus rather discussing the study of religion in the most general sense, comparable to previously mentioned constructivist and naturalistic paradigms.

This leaves us with just two more cases that deserve attention in this section: what of ‘comparative method’ and ‘hermeneutics’? As exemplified earlier both of these are regularly presented and understood as central to the study of religion in general. Yet, at the same time comparison and interpretation are inevitable parts of any research (Stausberg 2011a; Gilhus 2011) – academic research on religion always involves some kind of comparison and one always has to make interpretive decisions. Because of this one can easily ask whether there is even any point to talking about a comparative research approach or a hermeneutical research approach? However, I think when it comes to the study of religion there are reasons why we can also think of hermeneutical and comparative approaches as overarching research designs.

As I pointed out earlier, the literature on ‘comparative method’ is extensive – much of it focuses on the premises of comparison, on the underlying assumptions and on the inevitability of comparativeness. And certainly in the most trivial sense all academic research is comparative. However, in the study of religion emphasizing the comparative method has also served as a way to prioritize a certain kind of research – one where comparativeness is prioritized as the primary goal in itself. This is a situation Michael Stausberg has described in the following way: “comparison is most often not practised as a separate method, but as a

research design, i.e. as a framework for the collection and analysis of data and the analysis of research problems. Comparative research designs use different kinds of techniques or tools for the collection of data (i.e. methods in a narrower sense), for example discourse analysis, content analysis, document analysis, philology, hermeneutics, historiography, phenomenology, surveys, etc.” (Stausberg 2011a: 34). I find this description dead-on. Going back to at least Max Müller comparativity has been emphasized as a goal in many studies – wide-scale comparison is here understood as an approach, as a research design that makes it possible to highlight questions, similarities and differences which would otherwise go unnoticed. Much of the earlier classification and categorization oriented phenomenology of religion (Widengren 1969, Hultkrantz 1970, etc.) was pre-occupied with this and it continues to be valued in much of the contemporary research – including scholars such as Grottanelli and Lincoln (1998) who are otherwise very critical of earlier phenomenological trends, but still find it positive that in the increasingly specializing academic environment study of religion has maintained a more comparative approach than most other neighbouring disciplines (Grottanelli, Lincoln 1998: 320–321). Of course, this has caused some to complain that research under the heading ‘history of religion’ actually is far more interested in classification and categorization than in history (Smith 1968: 9–12),⁶⁵ but this rather points to confusions the usage of some titles (such as ‘history of religions’ in the American context) causes and is not really indicative of fundamental problems with the research itself. Comparative research is therefore the kind of research that values comparison far more than other studies which concentrate on a specific region or tradition or a group of people and prioritize learning as much as possible about this ‘research object’. In the comparative approach no research object is more interesting or more important in itself, every object of research is interesting only when compared to other objects of research.

With hermeneutics we find ourselves in a similar situation. On the one hand in the simplest form interpretation is inevitable in all kinds of research, yet on the other hand, as Gilhus (2011: 276) notes, hermeneutics is also understood as an all-encompassing philosophy of interpretation. Yet, in the context of the study of religion hermeneutics has also been understood in ways very similar to fieldwork, philology or the comparative approach. When interpretation and the understanding of meanings becomes a goal in itself, when higher value is seen in understanding the meanings of religious ideas and practices, then we can say that we are dealing with a hermeneutical research approach. In such a case specific procedural methods are treated as necessary tools for procuring the meaning of the studied phenomenon.

Earlier I mentioned Joachim Wach as a representative and apologist of a devotedly hermeneutical approach, but Mircea Eliade is just as noteworthy of an example.⁶⁶ Although Wach and Eliade have been harshly criticized and focus on

⁶⁵ For a more general overview of the various criticisms see Roscoe (2008).

⁶⁶ For example one can look at his relatively provocative essay about the hermeneutical importance of the history of religions (Eliade 1961). From an historical perspective Jacques Waardenburg (1997) also emphasizes hermeneutics as a significant research approach in

meaning and interpretation is not so often understood as a value in itself, there have been some recent noteworthy attempts to retrieve or re-establish the credibility of the hermeneutical approach. For example, both Spickard (2011) and Blum (2012) have presented attempts to rethink phenomenology as an approach to religiosity and have thus emphasized it as a way how to re-establish hermeneutical study as research approach in the study of religion. ‘Empirical phenomenology’ as Spickard depicts and practices it, should be clearly differentiated from the earlier phenomenological approaches in the study of religion though – as Spickard himself does as well, when he argues that the likes of Mircea Eliade and Ninian Smart were not genuinely phenomenological, but only applied aspects of phenomenology in their work (Spickard 2011: 334–336).⁶⁷ Blum also wants to clearly distinguish his position from the position of the earlier phenomenologists, but he takes a somewhat different approach in doing that. However, in short it can be said that although their depictions of phenomenology differ in many important aspects (the details of which are not relevant in this context), they are both talking about an approach centred on hermeneutics under the heading of ‘phenomenology’.⁶⁸

Here one could ask why have I not described phenomenology as one such research approach in the study of religion? The reason is relatively simple and straightforward: a variety of different research perspectives were practised under the heading of ‘phenomenology of religion’. As I noted earlier, Allen (2005) has distinguished between four different meanings of the concept, from distinctively philosophical to purely classificatory. Furthermore, oftentimes the essential characteristics (‘epoche’ for example) of the phenomenological method are rather described as tools to maintain neutrality (see Bleeker 1959, Bleeker 1971: 14–20; Dhavamony 1976: 66–67; Cannon 1993: 159–166; Cannon 1994). Because of this multiplicity of meanings phenomenology has (had) in the study of religion and the complex history I do not find it practically useful to try to think of phenomenology as a unified or/and coherent research approach. However, discussions of neutrality in the phenomenology of religion do play a significant role in the

earlier scholarship, describing it as one of the two main lines of scholarship in the early study of religion and expressing regret that the exaggerated claims of some hermeneutical scholars caused the approach as a whole become suspect.

⁶⁷ It should be noted, though, that by doing this Spickard is simply taking a position in the debate over the real meaning of ‘phenomenology’ within the phenomenology of religion. Spickard prefers an understanding closely related to Husserl’s philosophy, whereas most of the proponents and practitioners of phenomenology in religious studies have preferred a noticeably different understanding of phenomenology and have thus not practiced phenomenology in a particularly Husserlian perspective (see James 1985 and Murphy 1994).

⁶⁸ As Blum succinctly puts it: “the phenomenologist of religion attempts to interpret or understand religion, which is to say that he seeks to disclose the meaning or meanings of it as they are constructed, perceived, and experienced within consciousness, or from the perspective of the religious subject. ... The phenomenologist is interested, first and foremost, in *the experience of that which the subject takes to be transcendent*, rather than in the transcendent itself” (Blum 2012: 1030, emphasis in original).

third dimension of the methodological debate in the study of religion – that of positioning the scholar.⁶⁹

2.4. Method or rather positioning the scholar?

Earlier I highlighted the significant proportion of the discourse on method(ology) that in actual practice deals with matters such as ‘the high place’ of the scholar, the ‘attitude’ of the scholar or the ‘ethos’ of the scholar. In other words, who is the scholar in relation to one’s research interest and how should one think of one’s position as a scholar? In addition to the discussions of Sharpe that I cited in length earlier,⁷⁰ similar discussions can be also found in the writing of R. J. Zwi Werblowsky, who has argued that “the student of comparative religion operates, by definition, from an archimedic point outside religion, though obviously inside some secular, cultural, and possibly ideological system—no matter what religious commitments he chooses to make as an individual believer” (Werblowsky 1975: 152).⁷¹ Discussions concerning the exact meaning of this and about the actual applicability of one or another position for the scholar of religion have been ever-present in the study of religion for at least the last half a century.

Lincoln’s theses on method (Lincoln 1996) are arguably the most famous recent example of this that also makes use of the concept of ‘method’ as he lays out the attitude scholars of religion should harbour in relation to religion as their research object. Yet, this debate also extends much farther and this is exactly what I want to draw attention to in this section. Lincoln is far from being alone in analysing matters of *attitude* (Geller 2005: 19; Lincoln 2005: 62) as those central to the study of religion. As I earlier noted, Rüpke (2011: 288) also argues for something very similar when he emphasizes the *ethos* of the academic study of religion. Also, as I noted already in the previous chapter, more than three decades earlier, Donald Wiebe was discussing the label ‘science of religion’ and found that it is primarily used “to designate that *attitude* on the part of certain scholars to treat religion, insofar as that is possible, free of (theological) bias or prejudice” (Wiebe 1978: 10, emphasis in the original). Later on he also talked about an “intellectual ethos” as he described and applauded the naturalistic framework for the study of religion as an intellectual ethos (Wiebe 1989), noting that “such a naturalistic approach to the study of religion simply treats religion as an element of culture like any other and does so by rejecting the assumption that it is necessary ‘to believe’, in some sense or other, what the devotee believes in order to understand” (Wiebe 1989: 305). In the mid-20th century Joseph M. Kitagawa

⁶⁹ In the following chapters I will be using the concept of ‘religion approach’ always in the sense I have described it here, thus also suggesting one or another approach like the ones exemplified here (but not necessarily limited to them).

⁷⁰ See section 2.2.

⁷¹ In the subsequent discussion Werblowsky deliberately emphasizes the contrast between a scholar of religion and a theologian, who operates from within a religious tradition, attempting to give a reasoned account of it.

argued in a similar fashion, suggesting that aside a sympathetic understanding of other religions and critical attitude towards one's own religion, the third essential quality of the study of religion is "the "scientific" *temper*" (Kitagawa 1959: 15; emphasis by me). There are good reasons to suspect that Rüpke and Wiebe do not understand the ethos of the study of religion in quite the same way, but the difference between them is nothing fundamental. Discussions of 'method', 'attitude' or 'ethos' are conceptual tools used to debate the position of the scholar and the justifiability of one or another way of understanding the scholar's relationship with his or her supposed object of study.

As emphasized earlier, it is important to notice that discussions concerning methodological naturalism and methodological agnosticism also deal with questions closely related to these very same matters. As I briefly described earlier, Slingerland and Bulbulia (2011) understand methodological naturalism as an assumption that religion is an entirely human phenomenon, thus methodological naturalism merely a practical rule of thumb about what to assume and what not to assume about religion as an object of study.

Thus Slingerland and Bulbulia portray methodological naturalism as a practical rule of thumb, elsewhere (Bulbulia, Slingerland 2012: 569) also depicting it as a monistic perspective in the sense that it rejects dividing the world into separate realms of physical nature and mind and assigns a near-zero probability to any theory which implies any kind of supernatural causation. They argue that a methodological naturalist should reject all doctrines which rely on ideas about the existence of phenomena not accessible to everybody. Many other share their understanding of methodological naturalism, treating it as a way of conceptualizing a shared understanding of the kind of assumptions that are allowed, the kind of theoretical arguments one can present and the kind of arguments one should not present. For example, Gregory W. Dawes (2011) also depicts naturalism⁷² as agreeing to a shared list of procedural requirements, thus also arguing that these procedural rules requirements can be clearly distinguished from the metaphysical commitments. Similarly to Slingerland and Bulbulia he also presents these procedural requirements as a demand that "any proposed explanation should be testable against a body of evidence that is accessible to any capable observer" (Dawes 2011: 8), while also insisting that this involves no a priori commitments to any kind of specific metaphysics (Dawes 2011: 9). Elsewhere also, among

⁷² Conceptually Dawes finds the concept of "methodological naturalism" problematic, arguing that it "confuses epistemological and metaphysical considerations" and therefore "plays into the hands of its theological opponents" (Dawes 2011: 6). However, as I showed above, his defence of naturalism and the procedural rules is very similar to what is elsewhere presented as methodological naturalism.

critics (Blum 2011)⁷³ and proponents (Bradie 2009)⁷⁴, methodological naturalism is understood as a matter of following specific procedural rules when it comes to epistemological and metaphysical matters.⁷⁵

Concerning the concept of methodological agnosticism we find ourselves in a rather similar situation. The best-known proponent this epistemological self-positioning has been Ninian Smart (1978, especially 75–78, 136; 1973, especially 49–59). Here as well ‘method’ means abiding by a set list of procedural rules in epistemological matters. Since many of the things religious people claim can be neither proved or disproved within the limits of academic practices, adhering to a methodological agnosticism means sticking to an agnostic position in these matters – they might be true or they might not be – and thus avoiding judgments and presumptions about these matters in the research itself. Oftentimes such an agnosticism is described as an act of “bracketing” one’s feelings and attitudes to make “use of empathetic imagination” (Smart 1978: 76) to understand and interpret the research focus in a fair manner.

Many others have also adapted this position in the study of religion. For example, Eric Sharpe also emphasizes the central importance of agnosticism as he presents the necessity of studying religion in a way which does not apply “the criteria of ‘truth’ and/or ‘falsehood’ to any of the material under consideration (Sharpe 1983: ix).⁷⁶ Similarly, Hanegraaff has insisted that scholars

⁷³ More specifically noting that “within religious studies, naturalism prohibits reference to God or gods, ancestral spirits, magic, etc. as causal agents or explanations, and generally resists any suggestion that such entities have real existence” (Blum 2011: 85) and: “although methodological naturalism does not necessarily deny the existence of supernatural phenomena, it operates on a naturalistic basis, if only for reasons of methodological rigor” (Blum 2011: 85).

⁷⁴ To be more specific he understands methodological naturalism in the following sense: “Appeals to divine agency are ruled out on the grounds that they do not advance our understanding of natural phenomena in any way. They explain nothing and do not provide us with any grounds for making predictions about anything” (Bradie 2009: 130) and therefore “at a minimum, science’s commitment to methodological naturalism is a commitment to the demand that the explanatory features we adduce in attempting to account for the workings of the world are such that they give rise to certain expectations that we have some reason to believe will make a discernable difference to our intersubjective experiences” (Bradie 2009: 136).

⁷⁵ Although not present in the writings of the religious studies scholars who defend the position of methodological naturalism, elsewhere both ‘naturalism’ (Halvorson 2016: 139) and ‘methodological naturalism’ (Forrest 2000: 14) have been described as *attitude*. They both point out that naturalism is not a solidified doctrine or a system of thought, but rather a method or a program that is open to modification in case of new scientific findings.

⁷⁶ The other two of his basic presumptions about the study of religion are: “The first is that the area of ‘religion’ is capable of being, if not strictly defined, at least outlined as a field of study. The second is that the study has an intrinsic value of its own, which is not necessarily bound up with the stated or assumed goals of religious commitment as such” (Sharpe 1983: ix).

“are dependent on believers expressing their awareness of a meta-empirical reality in empirically perceptible ways (words, images, behaviour etc.) but, *qua* scholars, they do not themselves have direct access to the meta-empirical. Because they can thus neither verify nor falsify its existence, or any claims made about it, methodological agnosticism is the only proper attitude” (Hanegraaff 1995: 101).

However, as such these discussions about attitude, ethos, methodological agnosticism and methodological naturalism deal with problems and questions very similar to earlier debates of objectivity and contemporary debates about neutrality. In his succinct analysis, Helmer Ringgren also presented the ‘objectivity’ of the study of religion as a matter of avoiding personal preferences and values in matters of scholarly study and presenting facts of research as they are (Ringgren 1970). Few if any would nowadays agree that the study of religion (or any scientific field of study, for that matter) is or can be genuinely objective. Even in the study of religion criticisms of objectivity already preceded the aforementioned article by Ringgren, as Wilfred Cantwell Smith (1959: 44–54) argued that truly detached academic reporting on various matters is an unrealistic ideal, thus study of religion should be far more dialogical than it has been in the past. Having generally abandoned the concept of objectivity in the more recent decades this debate has moved towards analysing the ‘neutrality’ of the discipline in general or the scholar more specifically (Donovan 1990, Byrne 1997, etc.). There also it is a matter of epistemological self-positioning, as some descriptions of the scholar’s self-positioning are found preferable to others.⁷⁷

Elsewhere this discussion about the self-positioning of the scholar can also take other forms. As noted earlier, Lincoln himself agreed that his theses attempt to lay out an attitude which is more critical and less empathetic than otherwise common in the study of religion (Lincoln 2005: 62). Lincoln is certainly not alone in this, as McCutcheon in his provocative essays also strongly argues in favour of a far more critically minded study of religion than is typically common (McCutcheon 1997). However, discussions of attitude towards the research object have been around for some time. Already a couple of decades earlier Werblowsky pointed out the complicated relationship scholars of religion have with their object of study (Werblowsky 1975: 154–155), noting how on the one hand you cannot be as positively attached as say theologians or musicologists, on the other hand you cannot be as critical as scholars of alchemy or astrology commonly are. The scholar of religion should position oneself somewhere in the middle, between these two opposing poles of the scale. But invoking such a scale itself and suggesting different positions on it also includes suggestions about the kind of epistemological presumptions, arguments and self-interpretations are preferred or allowable.

⁷⁷ Byrne, for example, finds the concept of ‘methodological naturalism’ very problematic, arguing that it is basically a position of implicit atheism and if religious studies were based on this kind of paradigm it would be “a weapon in the hands of secularism, aiding those who would expose religion as an illusion” (Byrne 1997: 343).

Lastly, these matters of self-positioning are also prominently present in some hermeneutical discussions. For René Gothóni (2000: 124–130) it becomes an issue in the fieldwork context – on the one hand you need to participate in the actions, yet on the other hand, you need to keep your distance. Gothóni notes how emphasis on a thorough understanding of pilgrimage practices led himself to feel and behave as a pilgrim for a short period of time (Gothóni 2000: 124–127). Gothóni is not alone in this. For example, Philip H. Ashby argued (citing Collingwood as the originator of the idea) a few decades earlier that a proper understanding of past (religious) contexts requires the re-enactment of the past, thus the scholar “must re-enact the past, engage in the religious longings of others now dead and of others who are his contemporaries. He must re-enact in his own being the religious striving, searching, and response of that which, as investigator, he seeks to understand” (Ashby 1967: 146). In the subsequent discussion Ashby emphasizes empathy and notes that this act of re-enactment does not mean that the scholar is required to “believe, to accept as true in an ultimate sense, that in which I am attempting to participate” (Ashby 1967: 147). It would seem Gothóni holds a rather similar hermeneutical position, even though he is mostly focusing on a fieldwork situation, whereas Ashby was discussing historical-philological research.

The discussion I have presented thus far has been essential to make their share topic of discussion and debate explicitly visible. Although the problem of understanding one’s situation as a scholar and its relationship to the supposed object of study has been treated in many different ways, using many different conceptual tools, I find it far more useful to think of this as a matter of self-positioning. When conceptualized as a question of positioning the central question at hand in these discussions – who is the scholar as a scholar and how does, has, will or should (s)he relate to his supposed object of study? – takes centre stage. Discussions about the ethos of the discipline or about the neutrality of the discipline or about methodological agnosticism or naturalism are more closely related to each other than it has perhaps been apparent in the past and it is very useful to think of them as part of the same dimension of the whole ‘field’ of methodology.

These epistemological matters of self-positioning are inevitably present in all scholarly research. The scholar always has a position and it always comes with epistemological presumptions. Some positions are more common in some research perspectives. As Kevin Schilbrack notes:

“In order to study religions, one must at least implicitly have answered certain questions about what one takes to be real and not real, knowable and not knowable, and good and not good. In other words, scholars of religion, like all human beings, live and act with certain metaphysical, epistemological, and axiological presuppositions” (Schilbrack 2005: 44).

And although Schilbrack does not make use of the concept of ‘method(ology)’, in the study of religion much of this discussion has taken place under the heading of ‘methodology’. While some have tried to rethink the concepts of method and

methodology, I have here instead preferred to present a more coherent and practically useful way to use these concepts (whose histories are long and complicated). It is true that describing it as a discussion of positioning instead of as a matter of method, ethos or some other mentioned concept can also appear as an attempt to dictate the use of words, but by doing this I am not so much saying that other scholars should definitely modify their usage of the conceptual tools as I am suggesting an alternative. I am sure many will also continue to discuss this as (separate) matters of methodology, attitude or neutrality. Regardless of the exact conceptual usages, it is for now important to keep in mind how closely these discussions are related to each other.

2.5. Positioning and scientificity

Before concluding this chapter and turning to epistemological matters the interrelationship of the two big topics I have been analysing thus far in this thesis deserves a brief look. On the one hand I have noted that the study of religion regularly comes with a certain understanding of scientificity – what is it about research that makes it scholarly reliable. Here contemporary scholars from the field of the cognitive science of religion have placed a lot of emphasis on their understanding of the scientific character of proper research, yet at the same time there is a well-established ‘Religionswissenschaft’-based understanding of the scientificity of academic scholarship. On the other hand we have elaborate discussions about method(ology), its application and role in and for the study of religion. The obvious and inevitable question here has to do with the connection and relation of these two aspects. How do conceptions of scientificity, research approaches and self-positioning interrelate?

Previously in this chapter, in section 2.3., I noted how every research approach is more compatible with certain specific procedural methods. Therefore, philological research is more likely to take place and acquire useful knowledge by applying a certain set of procedures whereas in experimental psychology researchers are very likely to make use of a very different set of procedural methods. The question of scientificity is clearly part of this picture. How one understands the character of one’s research and the ideal end-result one would like to reach has a major influence on what kind of an approach one adopts and what kind of procedures one prefers to make use of. However, at the same time this also works the other way around. Research approaches come with (implicit or explicit) goals and ideal states of research that they would like to reach. In combination with the select procedures, research approaches thus develop understandings about the character of proper scholarship. In short, what I am arguing here is that actual research practices guide our understanding of the scientific character of research itself, not just the other way around. Concepts and ideals of scientificity do not exist or persevere independently from actual research. All in all it is this intersection of different research approaches,

procedures and understandings of scientificity that brings about the multiplicity of meanings method(ology) can acquire.

Moreover, at the centre of this stands the scholar – the actual practitioner of research. As I emphasized in this chapter, the scholar always needs to clarify his/her position in relation to his/her supposed research object, method(ologie)s, research perspectives and other relevant matters.⁷⁸ What is particularly interesting here is that contemporary proponents of ‘scientific methods’ argue (as I have exemplified in the previous chapter and in this chapter) that in a scientific study of religion only a very specific epistemological position is available to the scholar in order to study religion in the same way as we study any other human phenomenon. In addition, that epistemological position (‘methodological naturalism’) is decidedly different from what has been commonly understood to lie in the centre of the academic study of religions in one form or another (‘neutrality’, ‘methodological agnosticism’, ‘impartiality’, etc.). Yet, as shown, they argue that for a genuinely scientific study of religion that relies on the natural sciences and the theory of evolution, methodological naturalism is the only thinkable and even possible way to do it. If this turns out to be true it would either require splitting the study of religion into multiple separate disciplines or would require a major transformation of the existing discipline.⁷⁹

2.6. Conclusion & looking ahead

In this chapter my aim has been to portray the complexity of method(ological) matters in the study of religion, highlight the conceptual and theoretical diversity of the discussion and propose a three-dimensional scheme to use in analysing this debate. As noted earlier, this scheme is not meant as a ‘true description how things are’, but rather merely as a heuristic tool. Each of these three dimensions – procedures, approaches, positions – is always present in all scholarly research. Some combinations are more common than others. For example, philological procedures, hermeneutical approach and agnostic position often go hand in hand. Alternatively, experimental procedures, evolutionary approach and naturalist position are a rather common combination. Following the same research approach, using the same procedures, but preferring to position oneself differently is very likely to lead to different results. This is a situation Bruce Alton has described very accurately:

“That is to say, there is a weblike circularity about the relationship between our questions, our methods and our answers. Briefly stated, the important strands are as follows. Our aims or questions *justify*, or operate to help in the selection of, our methods; and our methods applied to data justify our answers and their verification. But equally, our explanations will be

⁷⁸ I will return to this issue of positioning very thoroughly in the seventh chapter.

⁷⁹ I will return to the issue whether and what kind of a ‘shared foundation’ of scientificity could be possible in the sixth chapter.

constrained by our methods: that is, certain outcomes cannot be generated by certain methods. And methods are constrained by the type of questions we ask” (Alton 1989: 420, emphases in original).

Yet, as I already noted in the very beginning of this chapter, a proper, trustworthy method(ology) is widely understood as one of the basic foundations of scientific research. But, as I also have noted, academic research is accompanied by distinctively different understandings of scientificity that in turn can heavily influence how we understand our own research, what kind of method(ologie)s we prefer to adopt and how we visualize goals of our research. Thus, how we understand our method(ology) has a very important role to play in the study of religion. As I have detailed in this chapter, treatments of method(ology) have expanded in many different directions and have therefore become something much more than discussions on method in the very strict sense of the meaning (that is, a strict procedure). A very significant part of the methodological discussion has dealt with the epistemological position of the scholar. Many scholars have emphasized the close connections between methodological and epistemological issues, but a closer look will reveal that these seemingly separate aspects are even more intertwined than that. These issues are not just closely related, but at times analyses of methodology are directly dealing with epistemological questions and fundamentally cannot separate matters of method(olog)ical practice from these epistemological issues. By this I do not mean to argue that everything method(olog)ical is actually epistemological or better thought of as epistemological or that epistemological aspects are central to every detail of method(ology). Certainly there are method(olog)ical issues, choices of application and problems that are not primarily or even in any major way epistemological. However, there are also no method(olog)ical issues that have no epistemological aspect to it at all. Methodological choices and epistemological choices are too interrelated for that. To better understand the context of this methodological-epistemological discussion I have analysed the method-debate and proposed one way how to better make sense of the whole thing. Most of the epistemological issues are inherently and most importantly present in the discussions that deal with the question of positioning.

I will return to these matters in the subsequent chapters as there are some in the study of religion who would argue that some research perspectives are inevitably bound to specific epistemological positions and their theoretical basis does not allow for any alternatives. To determine whether this is indeed so and thus, whether study of religion requires ‘a major overhaul’ in its epistemology and methodology if it wants to include evolutionary approaches we need to take a closer look at related epistemological issues and how they been treated thus far in the context of the evolutionary approaches and whether evolutionary theory entails a specific epistemological position or not.

**PART II –
EVOLUTION, EPISTEMOLOGY AND
THE STUDY OF RELIGION**

3. The problem of epistemological presuppositions and inferences in the cognitive, behavioural and other evolutionary approaches

Issues of scientificity and methodology are just one part of the complex situation of scholarly self-positioning. As repeatedly noted in the first part of this thesis, a thorough analysis of the epistemological aspects of the position of the scholar of religion is necessary to get a full picture of the problem at hand. Thus in this chapter I am going to focus on the epistemological inferences and presuppositions present in behavioural and cognitive sciences of religion. Much of the epistemological discussion concerning religion has focused on the debate whether one can infer anything epistemologically noteworthy from the empirical research carried out thus far in the behavioural and cognitive sciences of religion. In the first section of this chapter I am going to give an overview of these discussions, because they have indeed been central to the whole epistemological discussion. Yet, when it comes to the methodological-epistemological position of the scholar, the question of presuppositions and presumptions is more immediately relevant than that of inferences. Because of that in the second and third section of this chapter I will focus on the issue of presuppositions. More specifically, in the second section I will be dealing with a certain combination of presuppositions that I would describe as the atheistic presumption. This presumption plays a major role in the forming of the basic research questions and the kind of potential answers these can and cannot receive. Subsequently in the third section of this chapter, I will take a look at the concept of naturalism. This is important, since naturalism is typically brought out to justify presuppositions that in effect amount to the presumption of atheism. All of this is necessary to, so to say, set the stage for the fourth chapter where I am going to look at whether epistemological positions can be evolutionarily justified or dismissed, placing special attention on the question of religion.

3.1. The cognitive science of religion and the question of epistemological inferences

Much (if not, most) of the discussion concerning the epistemological inferences has focused specifically on the theistic (Christian) God (Barrett 2007b; Leech, Visala 2011a; Näreaho 2014; etc.), yet many of these concerns are also important for the more generalized discussion concerning religious conceptions of the world as well. The reason for this widespread interest in the possible epistemological inferences likely resides in the ambitious and outspoken claims many of the cognitive researchers have made.

For one, Scott Atran begins his well-known book by describing religion as a “counterfactual” phenomenon that includes “cognitive commitments to factually impossible worlds” (Atran 2002: 4). Furthermore, he continues by describing

religious beliefs as “anomalous” (Atran 2002: 4) and “materially false” (Atran 2002: 5) and suggest that everybody, “whether they are religious or not, implicitly knows that religion is costly, counterfactual, and even counterintuitive” (Atran 2002: 5). Even more straightforward are the conclusions of Jesse Bering, who describes religion as “one of natural selection’s most successful hoaxes ever” (Bering 2011: 8), subsequently analysing it as an illusion (Bering 2011: 44–75) humans believe only because human minds have been evolutionary designed to believe such things, not because it is actually true. Placing a lot of emphasis on the cognitive ‘theory of mind’ functionality (Bering 2011: 167–190), he argues that the illusion of God “is an inherent part of our natural cognitive systems” (Bering 2011: 200) and “one very important solution to the adaptive problem of human gossip” (Bering 2011: 192). Thus, he concludes that religion is a useful illusion and the existence of God is very improbable (Bering 2011: 190–196). Elsewhere Joseph Bulbulia has argued that based on available psychological data and a Bayesian probabilistic approach the likelihood of religious beliefs being true is very low (Bulbulia 2013b). Similar arguments can be also found in numerous other works, but with the exception of Bulbulia this is mostly limited to the cognitive science of religion. Researchers from behavioural ecology and other approaches have mostly avoided any arguments about the epistemological inferences of their research. For example, a few behavioural ecologists have argued that religious beliefs are not permanent states of mind nor homogeneously present in the whole community, and neither are they put forth as propositional claims about the world, thus it would be misguided to analyse religions as such or “evaluate religions as though they offer objective truth claims” (Sosis, Kiper 2014: 257).

Still, in the context of the cognitive science of religion this has remained a hot topic for some time. Here I am going to review some of the most common arguments – ones that have received the most attention in subsequent epistemological discussion. In addition, it is true that these arguments have been discussed and argued over in numerous slightly different ways, but for the sake of clarity, I am going to generalize them into five most common arguments. However, this classification is not intended as any kind of a “true typology” of the complexity of arguments that have been presented. This classification is merely a tool necessary for presenting a clear overview of the existing arguments in a way that enables following the argumentative strand in an easy way as well as helps to highlight the main directions these arguments have taken. But obviously these arguments are in many ways related to each other and one could certainly also present alternative classifications and thus analyse them through a different typology. Out of these five here it is definitely the first two that have received most attention and weight, one could quite easily argue that the by-product argument (3.1.4.) and the conflicting beliefs argument (3.1.5.) are merely more specific forms of the unreliability argument (3.1.3.) and there is certainly merit to such an argument, but for clarity’s sake I am here going to keep them separate.

3.1.1. The genetic-historical argument

The first argument concentrates on the historical background of a specific belief or conviction. It relies on all the available data we have about the evolutionary, cognitive and historical background of a belief to indicate that causal factors which brought about this belief relied on the kind of factors that give no reason to believe that this belief appeared, because it was at some point in history brought about by the state of affairs that this belief itself describes. In other words, if research into the background of a belief or a conviction establishes no causal link between the belief and its object, this is supposedly an argument against its truthfulness. Aku Visala has highlighted the presence of such an argument in the writings of Steven Mithen who presents his data and then concludes that “there appears to be no need to invoke a moment of divine intervention that initiated the start of a revelation. For me, therefore, there is no supernatural, no God to be revealed” (cited in Visala 2017: 438). Yet as Visala (2017: 438–439) and others (Kahane 2011; Murray 2010; Leech, Visala 2011b; Leech, Visala 2012) are quick to point out, one cannot simply infer the non-existence of supernatural beings from the mere fact that someone has established a causal explanation for that belief that does not directly involve the causal participation of a supernatural being. It is possible to assess the content of beliefs (or propositions) independently from the causes that brought about the spread of this belief (Leech, Visala 2012: 168–169; Visala 2017). Every belief humans hold inevitably has some kind of a historical background, beliefs do not just appear out of nowhere. We could very well highlight a number of other common beliefs and views – for example we could point to the social and cultural causes that have led to the appearance of contemporary science – but we would not be willing to dismiss science simply because such historical explanations exist. Thus, the existence of causal explanations in itself is not enough to disprove the beliefs, understandings or convictions we might be or are holding. For that one would need to present additional arguments and proofs. One argument that is closely related to the genetic argument is the one I would describe as the sufficient explanation argument.

3.1.2. The sufficient explanation argument

What I would describe as the sufficient explanation argument focuses on establishing an explanation for the existence of a belief or a conviction. Here results of the cognitive and ecological research are used to present a detailed, full explanation of the emergence and development of human religiosity. Relying on the cognitive science of religion one can argue that we can account for the existence of religious beliefs and practices relying on such cognitive mechanisms as HADD, TOM,⁸⁰ counterintuitiveness, memory functionality (as shown by

⁸⁰ Concerning the exact meanings of concepts such as HADD and TOM (and so on) see section 1.1.1.

Whitehouse) and so on. Furthermore, placing all of that into the context of the evolutionary development of the human species one can supposedly present a sufficient explanation for the existence of religiosity without any need to include supernatural (beings) in that account. As noted, such an argument is rather closely related to the genetic argument – the supposed explanation both of these rely on, after all, is the same. Also, it is more often implicitly suggested by cognitive scholars than presented in explicit detail (Eyghen 2016).⁸¹ But, whereas the genetic argument is typically metaphysical (Kahane 2011: 105–109) – arguing in favour of the non-existence of supernatural entities – the sufficient explanation is rather arguing that based on all the available data it does not make sense to believe in the existence of supernatural entities since we can properly account for the existence of beliefs about them without any need to include further hypotheses about the actions of ‘external agents’ (Eyghen 2016: 970–971).

Yet, as several scholars are quick to point out, forming an explanation of religiosity in itself does not encompass a justification or refutation of religious belief (Murray 2009; Jong 2013). Murray for one notes that in such a case naturalists would also have to prove that religious beliefs would exist independently from the existence (or non-existence) of God. Explanation as such in itself does not take us that far (Murray 2009: 173–176). And in addition to that Jong notes how all of this can also be explained as the way how God as chosen to communicate with us. For that as well we would need some kind of psychological mechanisms, otherwise it would be impossible. Therefore, such a ‘full explanation’ for a theist can just as well be the explanation of how God has made it possible for us to believe in God and communicate with God (Jong 2013). Therefore, overall, the fact that it is possible to achieve detailed explanations of religiosity that account for its historical development and its multiple dimensions (social, psychological, philosophical, cultural, etc.) in a strictly naturalistic manner in itself says nothing about the existence or non-existence of supernatural entities.

3.1.3. The unreliability argument

The unreliability argument is perhaps the most intriguing one, since it directly addresses the question of what can we learn from evolutionary research about the epistemological reliability of our cognition. In short, this argument points out how religious beliefs are by-products of cognitive mechanisms that have a strong tendency to produce false positives (especially HADD) – they are ‘overly eager’, so to say – and this should make us suspicious of our religious intuitions. Therefore it is argued that they are simply the result of epistemologically unreliable cognitive mechanisms.⁸² This argument is often accompanied by specifically evolutionary

⁸¹ For example, he notes that this kind of argument is implicitly present in the writings of Daniel Dennett.

⁸² Clark and Barrett (2011: 665) highlight Dennett and Dawkins as defenders of such an argument, among others.

arguments that emphasize survival and reproduction as the priorities of evolutionary selection and suggest that cognitive mechanisms, which have made it possible for us to develop religious beliefs, are not properly truth-tracking enough to produce accurate beliefs about the supernatural, thus our religious beliefs are most probably not accurate. Occasionally these have been treated as two clearly separate arguments (for example, see Murray 2009: 169–171, 176–178), but since they are very closely related and are overall presenting the same argument (even if forming it slightly differently), they can be analysed together just as well.

To begin with the second part of the argument, if presented without any additional specifications this kind of an argument would also apply to the large majority of other aspects of the human life. If accuracy is indeed only relevant to the extent that is necessary for basic survival and reproduction, then perhaps our cognition overall is flawed? But then this argument faces the problem that by this logic empirical science itself would also become questionable and suspicious.⁸³ To overcome this problem of generalization one would need to make a far more detailed argument. This is where one can easily bring in the first part of the unreliability argument – supposedly our cognitive mechanisms are particularly over-eager and thus produce unusually many false positives. While this kind of a specification makes it possible to distinguish more narrowly the focus of the argument and avoid the “but then this also applies to science” counter-argument, it does not completely solve the problem. After all, even if we limit ourselves to such cognitive functions as HADD and TOM we are still faced with the problem that supposedly (that is, according to the common understanding of the cognitive science of religion) these cognitive mechanisms became common in human population, because they were beneficial for human beings. TOM, after all, is understood as the basic mechanism that makes it much easier for us to comprehend and analyse other human beings. If one were to argue now that actually TOM and HADD are very unreliable, then what about its supposed usefulness in social context? After all, if they indeed were producing so many false positives as to be epistemologically unreliable, why has the evolutionary selection process not selected against such faulty and energy-consuming mechanisms? Also, as noted by Kahane, “the role of the off track process in the explanation must be such that it leaves no space for the contribution of processes that would, in this context, track the truth” (2011: 106). In other words, this kind of a specified argument would not just have to show that one or another cognitive mechanism is epistemologically unreliable, it would also have to show that the possibility of epistemologically more reliable mechanisms compensating for this mechanism’s inadequacy is fundamentally out of question.

⁸³ For an influential analysis of this matter, see Wilkins and Griffiths (2013) who are basically arguing that we can show why evolutionarily it makes sense for our daily common sense beliefs to be truth-tracking as that would greatly benefit us in the evolutionary process and this benefit can be shown to also help us in our scientific practice. However, for a more extensive analysis of this matter – how reliable our common sense understandings can be assumed to be? – see section 4.1.4.

Thus even such a specified argument is problematic as it calls into question the evolutionary usefulness of the mechanisms overall (Leech, Visala 2012: 174). How are we to judge the epistemological accuracy of these cognitive mechanisms without already assuming to know how many agents are there in the world or without using these mechanisms to make that judgement? Furthermore, as Justin L. Barrett and Ian M. Church note:

“perhaps [false positive] occasions are vastly outnumbered by our failures to detect agents and agency all around us. To judge the accuracy of a device, a sure standard is required against which to judge the device’s measurements, and it is not at all clear what the sure standard for the presence or absence of agents and agency is. If it is true that the world is populated by hard-to-detect spirits, then we may be failing to detect agents all the time” (Barrett, Church 2013: 323).

Therefore the central problem with this argument really has to do with the presumptions we rely on in our judgments concerning the accuracy of the relevant cognitive mechanisms. Without a way to independently evaluate the reliability of the mechanisms we cannot even make an argument in favour or against their reliability without already assuming to know the answers regarding all sorts of metaphysical matters.⁸⁴

Moreover, one could look at this issue from a very different perspective as well and argue that even though our cognitive capabilities do indeed seem limited and relatively unreliable, this simply indicates that they are imprecise, but not fundamentally flawed. In such a case “humanity’s incipient and primitive moral and spiritual impulses, behaviors, and corresponding judgments may be truth-aimed but coarse-grained” (Clark, Barrett 2011: 666–667). Therefore, “the initial function of the god-faculty, if there is a God, may be to make humans aware, in the most ordinary of circumstances, of the sacred dimension of reality, rather than, for example, clearly defined Judeo-Christian conceptions of God” (Clark, Barrett 2011: 667).⁸⁵ In other words, this kind of a counter-argument points out how the unreliability of the cognitive mechanisms does not really tell us a whole lot about the correctness of religious beliefs, because it might just as easily be a sign of our spiritual imprecision. High-level religious competence in epistemological matters most likely has never been among the primary selection preferences of the evolutionary selection process, thus our cognitive mechanisms might be unreliable indeed, but at the same time still ‘heading in the right direction’.

Overall, there are two ways how to counter this argument. On the one hand, one can point to all the other instances where these supposedly unreliable mechanisms are considered reliable and highlight the inconsistency or on the other hand, one can show how this unreliability is merely a sign of our cognitive limitations in spiritual matters and not proof of its fundamental erroneousness. In any case,

⁸⁴ I will return to this issue in far more detail in chapter 4.

⁸⁵ A similar argumentation can also be found in Barrett, Church (2013).

the unreliability arguments in its current forms do not appear to achieve what they wish to achieve.

3.1.4. The by-product argument

Another relatively widespread argument is based on the common conclusion that religiosity is a cognitive by-product. As noted in my initial overview, much of the cognitive science of religion regards religiosity as a cognitive accident, a by-product of cognitive adaptations that also became possible through these adaptations, but it was never directly selected for in the evolutionary process. Thus, when it comes to religious beliefs our cognitive faculties (with special emphasis on HADD and TOM) were never really intended to produce such religious beliefs. For many this is enough to argue that religious beliefs are not accurate – our cognitive faculties became capable of developing and processing such beliefs accidentally, thus as argued by Paul Bloom, religious beliefs are “an incidental by-product of cognitive functioning gone awry” (cited in Clark, Barrett 2011: 662).⁸⁶

However, as many are also quick to point out, this argument elicits far bigger problems than the mere question, whether religious beliefs are epistemologically accurate, because the possibility of developing religious beliefs was never directly selected for in the evolutionary process (Murray 2010: 477–478; Clark, Barrett 2011: 662–664). If showing that something was not directly selected for – that it is not an evolutionary adaptation – is enough to argue that it must be epistemologically unreliable, then religious beliefs are far from the only things that would become suspect. Large parts of our contemporary culture and society rely on a combination of cognitive processes that certainly did not initially appear to perform these tasks. The most notable example here is modern science in general. Science as developed and practised today is just as much a cognitive by-product of cognitive faculties and mechanisms.⁸⁷ If we are going to question religious beliefs like that, we could just as well question evolutionary biology, theoretical physics and so on. Yet, this is most probably a consequence that propagators of this argument are not that willing to accept.

Furthermore, this very well highlights the complexity of human development. Many if not most of our cognitive functions and capabilities initially developed as adaptive responses to one problem or another, but also most if not all of them have been later adopted for other uses as well. Richard Sosis has thus emphasized that even though specific cognitive, emotional and behavioural elements might

⁸⁶ Elsewhere Clark and Barrett (2010: 185–188) also analyse the presence of this argument in Scott Atran and others.

⁸⁷ The fact that science most certainly is not an intended product of evolutionary selection is a widely recognized position in the cognitive science of religion as well, as for example witnessed by the well-known book by Robert N. McCauley, titled *Why Religion Is Natural and Science Is Not* (McCauley 2011).

have initially developed for different kinds of usages, they were later on *exapted*⁸⁸ for use in the complex system that is human religiosity (Sosis 2009: 323–324).⁸⁹ Thus, as aptly summarized by Kelly James Clark and Justin L. Barrett: “Cognitive faculties can and do legitimately extend beyond the domains for which they were “designed.” Most of our cognitive faculties do double duty: their original, primitive survival-enhancing duty and their much later reflective, expansive, life-enhancing manifestations” (Clark, Barrett 2011: 664). In sum, the by-product argument should be rejected, because we would then also have to reject most of the things that argument is based on (research data from evolutionary psychology, evolutionary biology, etc.) and because human cognitive faculties do not have to be specifically designed for every issue they encounter to be able to reliably deal with them.

3.1.5. The conflicting beliefs argument

While not as common and as widely discussed as the previous arguments, this argument has also received some attention (see especially Murray 2009: 172–173). Basically, the argument takes the following form (Murray 2009: 172): religious beliefs are the products of our cognitive mechanisms as determined and documented by the cognitive science of religion. Yet, as historians and anthropologists have shown, human cognitive tools give rise to all sorts of beliefs, many of which are mutually incompatible. Thus, religious beliefs arising from these mechanisms cannot be true, since they are in conflict with each other.

Yet, as several commentators have noted, this argumentation is far too simplistic to be convincing (Murray 2009: 172–173; Leech, Visala 2012; Leech, Visala 2011a). After all, in its most straightforward form it assumes that religious beliefs spawn directly from our cognitive organs without any cultural or social modification. Yet, this is not how cognitive science, evolutionary psychology or any other related life science understands the development of the human being. Culture plays a huge part in human life as well as in the evolutionary development of humans (Donald 2000, Geertz 2010a, Tomasello 1999a, etc.). The cognitive science of religion itself as well has shown that our cognitive mechanisms are not so rigid as to only produce the exact same results everywhere. HADD only produces a tendency to assume something and TOM only enables us to interpret certain behavioural signs as indications of directly unobservable mental processes, but neither provides humans with fully fleshed out beliefs. To go from such cognitive mechanisms to a worldwide diversity of worldviews and beliefs,

⁸⁸ To elaborate on the concept of ‘exaptation’, Sosis understands it as a “preexisting trait that acquires a new role for which it was not originally designed by natural selection /.../. Importantly, exaptations have functional effects but exapted traits are not modified when taking on their new role; if they are, adaptive modifications are known as secondary adaptations. Exaptations can emerge in two ways. First, they can emerge as an unintended consequence or byproduct of selection for another trait. These are non-adaptations that are coopted for a functional effect” (Sosis 2009: 323).

⁸⁹ For a similar argument see also Dow (2006: 84).

cognition requires a lot of “input” from the cultural context. In other words: “the diversity is actually produced by the cultural information that elaborates the basic intuitions produced by the cognitive mechanisms. The mechanisms themselves only produce certain intuitions to which different kinds of elaborated cultural constructions can then attach themselves” (Leech, Visala 2012: 174). However, if so, then the fact that we have a multitude of conflicting beliefs in this world is no longer a counter-argument to the reliability of cognitive faculties that have brought about these beliefs. Human cognitive faculties make it possible to develop religious beliefs, but this basic capability in itself is open-ended enough that it leaves room for many kinds of beliefs to appear. What exactly humans end up believing depends on their cultural environment.

3.1.6. A few concluding comments

Overall, this kind of arguments have led scholars to conclude that none of the existing debunking arguments can convincingly show the falsity of religious beliefs (or that their validity is impossible). Therefore, one could say that there appears to be a practical consensus that existing cognitive research on religion has little to nothing to say on metaphysical matters regarding the existence of supernatural entities.⁹⁰ Although, this does not necessarily mean that such debunking arguments are fundamentally impossible. It is possible that results of future empirical research accompanied with new kinds of theoretical arguments can indeed present bigger challenges than these current arguments. Still, as things are right now these arguments have not had much success. It should be noted, though, that this does not mean that it is fundamentally impossible to argue against religiously held beliefs based on natural sciences. Such arguments are entirely conceivable, especially in situations where religious communities rely on beliefs about the specifics of the natural world (such as the literally taken versions of “the world is 6000 years old” or “Earth is at the centre of the Universe”, etc.), but such beliefs would not be disputed based on the cognitive science of religion, rather they are debunked based on research from various natural sciences. Here I have focused solely on arguments derived from the ‘new sciences of religion’ and more specifically from the cognitive science of religion, since no one has really tried to derive elaborate debunking arguments from the behavioural ecology or from other evolutionary approaches to religiosity.

As I already pointed out in the beginning of this chapter, the main reason for reviewing these arguments and their related discussions has to do with how much attention they have received both in scholarly literature as well in more

⁹⁰ Aside already discussed and highlighted works, see also Barrett (2007b), Murray, Goldberg (2009), Sukopp (2010) and Jong, Kavanagh, Visala (2015).

popularizing essays.⁹¹ Yet, the argumentation concerning the unreliability argument is remarkably similar to many of the issues that will shortly become very relevant for the overall perspective of this thesis as well. After all, they touch on the major question – whether evolutionary theory as such can be used to justify any epistemological positions? In the context of this wider perspective I will return to these issues in the fourth chapter.

However, before turning to such issues there is another aspect to this larger topic of epistemology and the new research programmes in need of attention. Contrarily to the issue of *inferences* this aspect is relatively overlooked or at least rarely analysed in proper detail. What I have in mind is the issue of epistemological *presuppositions* in the new approaches and especially the matter of the supposed *costliness* of religiosity. This matter of presuppositions is a lot more directly important for the discussion of scholarly self-positioning as well, since positioning is specifically a matter of deciding which kind of presuppositions to base one's research on and which kind of presuppositions to avoid. As I intend to show, the basic assumption – religion is an evolutionarily costly phenomenon whose costliness requires a special explanation – runs through much of the research literature in the evolutionary research programmes. Moreover, this presupposition is regularly presented as an epistemological presupposition.

3.2. The issue of epistemological presuppositions in the evolutionary approaches to religiosity

Even though it has become common to argue that these new approaches are relying on a presumptive atheism (in addition to my own analysis in the earlier sections of this chapter, see also N. Barrett 2010, Schröder 2014: 41–45, Schüler 2014: 13–16, De Cruz 2016: 489–491, etc.), in many cases scholars do not really follow up this with detailed explication of this presumptive atheism and how it comes about. Therefore, what I intend to do here is analyse one central presupposition – *the presumptive costliness of religion* – that can be found throughout this field of research and show how it functions as an epistemological presumption, even though most of the time it is not explicitly presented as such.

3.2.1. The widespread presumption of costliness

The idea that religiosity is costly to human beings has been persistently present throughout this whole field of research right from the start. In Lawson and McCauley's (1990) initial attempt at presenting a cognitive approach towards religiosity, they argue that “not only are religious rituals symbolic, but they seem

⁹¹ After all, one of the more influential articles to implicate that debunking arguments can be derived from the cognitive science is Paul Bloom's article in the widely read non-academic magazine, *The Atlantic* (Bloom 2005).

to be actions without instrumental value” (Lawson, McCauley 1990: 137). Similar sentiments about the economical and practical uselessness of religiosity can be found in many other works as well. Atran (2002: 4–5) for example places the costliness of religiosity at the centre of his basic understanding of religion, saying that it is one of the three central characteristics of religion, subsequently arguing that religion is “materially expensive and unrelentingly counterfactual” (Atran 2002: 4), therefore religious practice “is costly in terms of material sacrifice” (Atran 2002: 4), “materially false” (Atran 2002: 5) and “costs resources that rarely are fully repaid” (Atran 2002: 6). Rüdiger Vaas (2009: 25–26) also understands religion as the greatest challenge to human sociobiology. For him religion similarly is a problem, since from an economic perspective religiosity appears as a “surplus luxury” (Vaas 2009: 25) and “the time and effort expended on it could be saved and better invested in seeking food and mates and raising one’s own offspring or the progeny of close relatives” (Vaas 2009: 25). Likewise, David Sloan Wilson argues that religion “often appears dysfunctional, because the costs are so conspicuous. Religious folk are expected to give their time, their money, their identity, and even their lives when necessary” (Wilson 2002: 162). Subsequently he emphasizes the opportunities religious people have to give up and the added costs of adopting beliefs and practices that remain inexplicable to outsiders (later emphasizing the practical benefits of altruism and cooperation, thus group-based adaptation).⁹²

Elsewhere, Edward Slingerland puts forth almost exactly the same line of thought as he notes that from an evolutionary perspective the very existence of religion “seems a bit odd” (Slingerland 2008: 453) and that religion includes “the expenditure of vast amounts of time and resources for no obvious material benefit” (Slingerland 2008a: 453). Similarly, Uffe Schjoedt finds that religion “is characterized by excessive and non-functional behavior” (Schjoedt 2013: 474) and thus phenomena like prayers, rituals, pilgrimages and so on are “causally disconnected from immediate and tangible rewards” (Schjoedt 2013: 474). This Schjoedt contrasts with secular actions that he argues are “motivated and compensated by concrete and tangible rewards” (Schjoedt 2013: 474). Boyer and Liénard (2006) have pursued this line of thought even further, arguing that rituals in general are an evolutionary puzzle, since they involve a notable waste of time and resources (Boyer, Liénard 2006: 612).

And of course the very idea – from an evolutionary perspective religiosity is a costly phenomenon – lies at the centre of the costly signalling theory of religion, as highlighted in section 1.1.2. (Sosis 2003, 2006; Bulbulia 2004a, 2014; Sosis, Bulbulia 2011; Sosis, Kiper 2014). Since I have already described the costly signalling theory in some detail earlier I am not going to go into it as thoroughly again here. The supposed futility of this historically extremely persistent and widespread phenomenon is the central evolutionary problem that requires explanation – without it there would be no need for the theory itself. But by

⁹² Sansom (2003) has also highlighted how the theory put forth by Wilson relies on the assumption that religiosity must be costly to human individually.

explaining this costliness, one has also explained religion as such. I have highlighted all these examples from the works of the more cognitively oriented scholars to show that this kind of a premise is definitely present in other research programmes as well. It is definitely not just limited to the costly signalling theory.

3.2.2. Optimality, foraging and costliness

It is important to notice how this understanding of costliness evolutionarily relies on an idealized conception of optimality, in other words – what the perfectly optimized organism would do (Maynard Smith 1978; Parker, Maynard Smith 1990; El Mouden et al 2012)? Also, on a more general level such an approach very much relates to the optimal foraging theory that is quite well known and widely applied in the evolutionary research (Pyke, Pulliam, Charnov 1977; Winterhalden 1981).⁹³ As noted by Parker and Maynard Smith, optimality theory relies on the premise that adaptation is a pervasive feature of all organisms and it can be best analysed from the perspective of natural selection (Parker, Maynard Smith 1990). This is something that should appear familiar to anyone acquainted with evolutionary research on religion. Whether religiosity is an adaptation or how it relies on adaptations has at times even been the central question to the whole field of studies (cf. Sosis 2009; Pyysiäinen, Hauser 2010; Powell, Clarke 2012). However, as noted by Parker and Maynard Smith (1990: 27–29), the criterion of optimization is something researchers themselves must choose. Also, one has to make assumptions about the fitness consequences of the different strategies. So, as noted by Maynard Smith, “in foraging theory, the common assumption is that the animal is maximizing its energy intake per unit time spent foraging” (1978: 34).

I would argue that much of the evolutionary study of religion also relies on this kind of an assumption of optimality – ideally human beings would always try to gain as much energy and material resources with as little effort as realistically possible for the human species.⁹⁴ And, from such a perspective, many things in human culture do not quite have immediately obvious uses. However, this is

⁹³ It deserves to be mentioned that at least in one instance such an emphasis on the idealized concepts of perfection and optimality have made a commentator note that such arguments in evolutionary biology are remarkably similar to theology. Indeed, he argues (with the help of many examples and thorough analysis) that in many cases evolutionary biologists are utilizing implicitly theological arguments when they develop such theoretical models (Nelson 1996)!

⁹⁴ In addition to all the examples I have already discussed, it is worth mentioning that in his famous book Boyer (2001: 120, also 150–155) argues that there are two essential types of goods for humans (without which existence is impossible): information about the world around them and the willing cooperation of other humans. Obviously, this is very similar to the optimality and costly foraging perspective – there as well information about the world is essential for the organism. The more you know about the world the better you can plan your resource gathering, all in all spending as little energy as possible to obtain as much resources as possible.

not an empirically observable fact or an inevitable consequence of the evolutionary theory. Rather, it is simply a common assumption that much of the optimal foraging approach relies on. This is something Pyke, Pulliam and Charnov also noted in their classic article:

“In general, there is no recipe for determining just what the currency and constraints should be in a particular situation, and it will always be the job of the naturalist to understand the biology of an animal sufficiently well to know which currency is being optimized. In almost all optimal foraging studies to date the currency has been assumed to be the net rate of energy intake, and the basic hypothesis has been that this intake rate will be maximized” (Pyke, Pulliam, Charnov 1977: 138).⁹⁵

And in most studies this certainly makes sense. However, most research that focuses on optimality is also not dealing with topics such as religious beliefs. This is a theoretical choice a researcher has to make, but without such theoretical choices, empirical research is not possible.

3.2.3. The epistemological costliness of religiosity

Now, having made that choice and having decided that only energy⁹⁶ and economical and material benefits can count as a currency in the study of human beings, advocates of the new evolutionary approaches are indeed facing the basic problem that religious beliefs and practices do not really appear to help humans in any notable way. Religiosity does not appear to increase fitness, evolutionarily speaking. But, this definitely does not mean that religious people do not have elaborate reasons why this or that practice is vitally important. However, for these evolutionary researchers such explanations are unacceptable, since they involve references to phenomena that are understood as being more than this material world here or wholly beyond this material world here. Evolutionary researchers describe such explanations simply as invocations of “somewhat unusual ontological assumptions” (Lawson, McCauley 1990: 137) or explicitly as errors of judgement and “religious mistakes” (Bulbulia 2007: 622). In such an evolutionary perspective there is simply no room for any kind of explanations of religiosity that included anything not strictly naturalistic-materialistic.⁹⁷ Proper evolutionary explanations from this perspective may involve only naturalistic phenomena and

⁹⁵ Furthermore, the genuinely optimal way of foraging has never existed and cannot ever exist. It is a theoretical ideal wholly dependent on the model the researcher has constructed (for criticism of this issue, see van der Steen 1999).

⁹⁶ Generally, this means energy acquired through eating.

⁹⁷ One explicit example from David Sloan Wilson’s well-known book: “Along with Durkheim, I predict that most enduring religions survive on the basis of their secular utility. Their design features include belief systems that, no matter how otherworldly, have the effect of motivating adaptive behaviors in this world” (Wilson 2002: 156, but see also the discussion on pages 163–168).

thus depicting religious phenomena as costly is not limited just to economical costliness, but also entails the suggestion that religious beliefs must be *epistemologically costly*.

In this sense, this application of the idea of costliness is also notably different from its usage in the evolutionary biology. Scholars there focus on ‘energy intake’ and on how much (or how little) time and effort it took to acquire that energy. At the same time biologists also rely on their knowledge about animal behaviour – and as far as we can tell animals are indeed looking for sources of energy. In other words, the ‘currency’ of the practice is the same both for the researched species and for the researcher.⁹⁸ But not so, when we come to religiosity! Here researchers rely on the presumption that the currency cannot be what religious people themselves understand as such. This leads us to the assumption of epistemological costliness.

Occasionally this insistence on the epistemological costliness is also put forth in explicit detail. Joseph Bulbulia has been the researcher who has most thoroughly pursued this line of argumentation. His depictions of religiosity as costly are not just limited to issues of economical and practical sub-optimization. He also raises the question of epistemological costliness, in other words: “how can they go so badly wrong without injuring themselves, in the way schizophrenics do?” (Bulbulia 2009: 45).⁹⁹ This is an issue of epistemological costliness – if ‘supernatural explanations’ of beliefs, practices and events are fundamentally ruled out and people still insist on them, then they must be understanding the world wrong. But in such a case religiosity is not just economically costly, but also epistemologically costly. This is where Bulbulia picks up an argument that very much reminds evolutionary epistemology, noting that such a tendency to “systematically err in their judgements” (Bulbulia 2007: 622) is puzzling, because “cognition evolved to enable agents to get the world right” (Bulbulia 2007: 622). If this is indeed the case, then “selection should have weeded out cognitive features that allow us to produce religious mistakes” (Bulbulia 2007: 622). Heavily relying on Durkheim, Wilson has also pursued this same line of thought, emphasizing the broad adaptiveness of human capacity for thought, but then arguing that religion “has no function and can be costly to the extent that it misrepresents the world and leads to inappropriate behaviors” (Wilson 2002: 53), because “religious belief is such a poor representation of the natural world, its “secular utility” must reside elsewhere” (Wilson 2002: 54). This is the argument of epistemological costliness in its most explicit form – if only naturalistic explanations are possible and religious explanations are not naturalistic, then from a naturalistic-evolutionary perspective religious beliefs are indeed epistemologically costly. Based on such a logic religious people are spending significant amounts of cognitive resources

⁹⁸ Just to be clear, it should be noted that this in no way contradicts the existence of costly signalling among animals – signalling can be costly just as well when the ‘currency’ of the practice is energy for both parties.

⁹⁹ He immediately notes, though, that despite this mind-boggling problem, there is no reason to think that religious people are not sane.

to hold on to views that do not bring about any advantages in the evolutionary selection.¹⁰⁰

The question, whether or to what extent cognition indeed did evolve to help people “get the world right” is something I will return to in explicit detail in a subsequent chapter as I analyse evolutionary epistemology, but for now it is important to see how such economic and epistemological presuppositions of costliness are very closely related to each other. After all, those economic costs would not be that costly at all, if it were not for the presumption that the benefits people claim to receive from religious practices (the good will of (a) divine being(s) or other such explanations) cannot possibly be true. Religious beliefs and practices begin to appear costly when we assume them to be wrong and thus also useless. But if the explanations religious people themselves offer to explain their behaviour, turned out to be right, such behaviour would be everything but costly. Rather, it would turn out to be extremely efficient. After all, if going to the church every Sunday, following all the necessary ethical norms and having faith in God is all it takes to gain eternal life, then these are but minor investments compared to the expected, eventual profits. Or, we could think of analogous examples from various other religious traditions. In any case, presumptions of economical costliness and epistemological costliness are inherently intertwined in the new evolutionary sciences – without epistemological presumptions religious practices would not appear economically costly.

3.2.4. A few concluding comments

There have been a few attempts to reconceptualise religion as an evolutionary phenomenon in such a way that it would not inherently assume the costliness of religion. Murray and Moore (2009) most notably highlight the way the costly signalling theory relies on both the assumption of practical costliness and the assumption of epistemological costliness (Murray, Moore 2009: 230–231). Subsequently they argue that the costly signalling model relies on a rather problematic conception of the origin of religion and it is far easier to show that religion is not a case of costly signalling, but a case of index signalling¹⁰¹ and therefore religion can be shown to be a form of signalling that does not include inevitable costs. However, such discussions are the exception, not the rule. Mostly

¹⁰⁰ Of course, as one might suspect, this is nothing new to the study of religion. Many earlier accounts of religion have relied on rather similar presumptions, they have simply presented them differently. As Gavin Flood notes: “The history of religions in many naturalist accounts (such as Freud’s) is inevitably the history of error which must be explained in the light of Enlightenment reasons: a view that is behind traditional sociological and psychoanalytic studies of religion” (Flood 1999: 70).

¹⁰¹ Index signalling means the kind of signals that are impossible to fake. These signals are always and inevitably true, whenever and wherever one encounters them. Furthermore, it is also immediately obvious to all involved parties that they are true. For a straightforward example of such a signalling, see Sosis (2006: 66).

evolutionarily oriented scholars have not found it necessary to question or even analyse how they are presuming the costliness of religion.

Instead, these researchers have regularly emphasized the validity of methodological naturalism as the basis of all scientific research and have justified these assumptions of costliness as inevitable parts of the research position. Of course, one could also portray this whole story the other way around – first highlight methodological naturalism as the premise and then show how the presumptions of costliness arise out of it. But, here I have chosen the alternative path – first look at the detailed assumptions as they appear in actual research approaches and then look at the reasons how these researchers have justified their presumptions.

Obviously, relying on some kind of underlying assumptions is inevitable in scientific research. These assumptions form the foundational basis of one's research. However, even so one needs to justify one's premises – or in other words, favouring one or another epistemological position – and show that the assumptions are preferable to other assumptions one could alternatively rely on. This is exactly the case here.¹⁰² And this is what various scholars have indeed done – there are extensive discussions concerning 'naturalism', 'methodological naturalism' and 'metaphysical naturalism' in various adjacent disciplines. Therefore, to properly evaluate the justifiability of (methodological) naturalism as the basis of evolutionary research on religion (and the exclusion of alternatives), these discussions and arguments deserve a closer look.

3.3. Naturalism in evolutionary research – as a presupposition and as a position

Predictably, discussions about the many types of naturalism are very extensive, stretching over multiple disciplines and acquiring distinct forms in most of them.¹⁰³ Thomas Sukopp (2007) for example talks about ontological, methodological and epistemological naturalism.¹⁰⁴ For Sukopp ontological naturalism means the assertion that there is nothing beyond the natural realm, the world, cosmos, universe is all there is, whereas epistemological naturalism asserts that if knowledge-generating processes are part of the one and only natural world and rely on scientific methods, then we should trust science in its ability to sometimes answer epistemological questions (Sukopp: 2007: 79–80). On the other hand, one of the leading naturalistic philosophers, Gerhard Vollmer (2007) proposes an elaborate, twelve-point list of the main positions of naturalism which (curiously!)

¹⁰² For example, 'methodological agnosticism' has always been regarded as a strong alternative position to 'methodological naturalism' (or 'methodological atheism' for that matter). All of these I already described and analysed in the second chapter and I will return to these choices again in the last chapters.

¹⁰³ For a thorough overview of the diverse and extensive debate about naturalism see the two collections of articles, Gasser (ed.) (2007) and Clark (ed.) (2016).

¹⁰⁴ On top of that, he does note that some also distinguish metaphilosophical and analytical naturalism (Sukopp 2007: 78).

at the same time emphasizes ‘as little metaphysics as possible’ and the need to rely on ‘realism’ among its central points (Vollmer 2007: 209–41). In addition, Vollmer also declares the scientific method the most trustworthy way to acquire knowledge, the material-energetic nature of all that exists and so on (Vollmer 2007: 29–41). In other words, even well-known naturalists cannot quite agree on the exact characteristics of naturalism. Still, in the context of the issues raised in the previous chapters, such disagreements are only relevant for the purposes of being aware of the wider background discussions. After all, the form of naturalism we are interested here is the one advocated by the evolutionary scholars of religion as highlighted in the second chapter of this thesis (but in relation to their conception of scientificity also in the first chapter). As shown, that concept of methodological naturalism is similar to Sukopp’s concept of ontological naturalism, as they emphasize the need to understand religiosity as a solely human phenomenon and insist that scientific research should only presume the existence and causal relevance of naturally occurring phenomena; supernatural or supra-natural or non-natural phenomena should not be included in scientific research or scientific explanations. However, they also emphasize that they are only using this position as a methodological premise or as a kind of an epistemological starting point, and they are not actually advocating ontological naturalism as such. They argue that they are not making ontological claims, they are merely using a simple set of ontological premises to establish the starting point of their research.¹⁰⁵ In other words, they are not so much denying the existence of the presumptions (and the subsequent conclusions) that I highlighted in the previous sections of this chapter, as they are claiming that these are vital and inevitable characteristics of any properly scientific research program. For the sake of clarity and precision I have decided to split this complex set of arguments into separate parts that can be highlighted and analysed one by one.

3.3.1. The universal acceptance argument

The first and possibly the simplest argument has to do with the widespread commonality of naturalistic research practices – if scientific practice in general relies on such a premise, then this must be acceptable for the study of religion as well. Basically, the naturalistic premise is justified through its prevalence – “this is the way we do science”. One can find this assertion in Bulbulia (2007: 621–623), but also in many other research papers and systematic treatments. All of this I have already highlighted in section 1.2.1., so there is no need to take up all those arguments and premises again.¹⁰⁶

¹⁰⁵ Again, for a detailed explication of their position with detailed references and quotations, see the discussion in the second chapter.

¹⁰⁶ Also see Ruse (2005) who similarly argues that methodological naturalism “is what natural science is all about” (Ruse 2005: 84).

In the context of the epistemological issues, it is here important to notice that this argument does not even try to justify naturalism epistemologically. Quite obviously, the supposed scientific consensus in itself says little to nothing about the assertion's epistemological justifiability. The more fundamental justification for this argument should be derived either from additional, specifically epistemological arguments that indeed do show that we should prefer the naturalistic premise in our scientific endeavours to alternative possibilities. Otherwise, as bluntly argued by Roger Trigg (1998: 33–36, but see also 46–47, 76–80), we would end up with a kind of an implicit scientism where scientific practice is justified through its faithfulness to a specific ideology and vice versa.

Advocates of naturalism have indeed proposed such additional arguments as well. Before turning to those arguments another aspect of this argument deserves some attention. Namely, it relies on an understanding that generally science is done in the same way across diverse fields, asking for the same fundamental questions and measuring success with the same criterion. As noted in 1.2.1., this 'measuring stick of scientificity' is based on a selective and idealized understanding of the natural sciences. All other fields of research should thus strive towards the ideal most closely attained in the natural sciences. Yet, it is not quite so obvious that this is definitely true. Finding universal laws of nature might be deliberate and almost common practice in physics, but one would be hard-pressed to say what the universal laws of nature are in biology.¹⁰⁷ Furthermore, as methodically explicated by Carol E. Cleland (2001, 2002), there are many natural sciences – geology most notably – that are not experimental in that sense at all. Instead, these sciences rely on a rather different scientific procedure than explicitly experimental sciences. For Cleland this gives cause for arguing that there are fundamental methodological and epistemological differences between historical (geology, biology, astronomy, paleontology, archaeology, etc.) and experimental sciences.¹⁰⁸

¹⁰⁷ 'Evolutionary selection' or other evolutionary mechanisms would not really qualify as rules of nature as they do not really predict anything. But that is the whole point of general laws of nature in physics – to be able to predict what will happen when (except for quantum physics, of course). Evolution, on the other hand, is supposed to be deliberately unpredictable. No matter how well evolutionary biology knows the processes of evolutionary selection, adaptation, mutation and so on, all of this still does not make it possible to predict what any species will develop into in the next fifty thousand or five hundred thousand years. Evolutionary biology can merely tell us what basic evolutionary processes are part of this development, it cannot predict the end result (like, for example, physics can predict the expected remaining lifespan of our Sun).

¹⁰⁸ As she puts it: „In summary, although there is overlap, there are nonetheless fundamental methodological differences between historical science and experimental science vis-à-vis the testing of hypotheses. These differences in methodology reflect the fact that experimentalists and historians typically find themselves in very different epistemic situations. Experimentalists are primarily concerned with evaluating repeatable generalizations. Their research is focused on generating predictions from a single (sometimes complex) hypothesis, and manipulating repeatable test conditions in a lab while controlling for extraneous factors that might produce false positives and false negatives. Scientists engaged in prototypical historical work, on the

Furthermore, advocates of naturalism like to emphasise the need to find *causes* for the religious phenomena we are studying. Finding the true cause(s) of the studied phenomenon is supposed to be a general common feature of all scientific research. Yet, this supposed general commonality of all science is severely complicated by the general lack of interest in ‘causes’ in contemporary physics. Hans Halvorson summarizes this in a blunt manner: “if you open any textbook of quantum field theory, you will find no use of the word “cause.” But if fundamental physics is not seeking the causes of things, then science doesn’t generally seek to discover the causes of things ... causation isn’t a central notion in fundamental science” (Halvorson 2016: 146).¹⁰⁹ What Halvorson instead considers central to all scientific research is its *systematicity*: “systematicity is in fact the feature that distinguishes scientific knowledge from other forms of knowledge” (Halvorson 2016: 137). For him above all science is a systematic way of acquiring truths about the world around us: “scientific method – when it’s working well – systematically generates truths about the natural world” (Halvorson 2016: 147).¹¹⁰ As such, Halvorson as a physicist and as a philosopher of science quite clearly disagrees with these advocates and their presumed common characteristics of scientific research. But, the point here is not that we should prefer one set of a common characteristics to another, rather this supposed universal commonality is not as easily (if at all) definable as advocates of this argument make it sound. As noted, even within natural sciences different disciplines include distinctively separate emphases and goals. Yet, the naturalist here could well argue that all this might be true, but with regards to the presumption of naturalism all the natural sciences are in an agreement, regardless of their other disagreements. Because of that, additional epistemological arguments also need to be looked at.

3.3.2. *The successfulness argument*

Another argument often used to justify naturalism in the cognitive, behavioural and other evolutionary approaches to religion appeals to the successfulness of natural sciences and suggests that this success in itself shows how and why naturalism ought to be preferred to alternative positions. Basically, it is argued

other hand, are primarily concerned with evaluating hypotheses about particular past events. They cannot reproduce these events in a lab. They can, however, look for present-day traces of them, and search for a smoking gun that unambiguously sets apart one hypothesis as the best among the currently available explanations for the traces thus far observed” (Cleland 2002: 486–487).

¹⁰⁹ Reutlinger (2017) also points out many additional ways how scientific explanation does not have to be causal at all. Causal explanations for him do play a role in scientific research, but they are far from the only option for a researcher.

¹¹⁰ It should be noted that Halvorson is far from being alone in this. Elsewhere Hoyningen-Huene (2013) has developed a book-length defence of the thesis that increased level of systematicity is the universal feature that distinguishes scientific knowledge from all other types of knowledge.

that natural sciences have shown themselves to be *progressive* sciences that accumulate knowledge, discard implausible interpretations and converge on a specific set of widely-accepted views. Contrarily to this the current situation in humanities (and thus much of the study of religion) is described as a “methodological confusion and malaise” (Slingerland 2014: 122). Naturalism is therefore justified through practice – it has turned out to be a successful way of researching the natural environment in many other sciences, thus it must be getting enough things right about the world around us.¹¹¹ However, study of religion “has for the most part yet to produce any progressive research programs” (Slingerland, Bulbulia 2011: 312). Naturalistic study of religion would then also justify itself through its successfulness. Religious studies can offer empirically testable hypotheses that can then be tested to bring about a cumulative intellectual growth and make it possible to distinguish scientifically reliable knowledge from mere speculation (Slingerland, Bulbulia 2011: 308–312; Bulbulia 2013a: 144–153). This in practice would justify the application of naturalism – we would no longer be stuck in this hopeless plurality of views and would actually have a proper methodology that made it possible to evaluate all the different existing approaches based on the same standard. Thus, naturalism ought to be accepted and adopted in the study of religion so that this discipline as well would develop into a progressive science.

Yet, such a justification of naturalism has several problems, all of which in one way or another are related to the question how should we assess the successfulness of different religious studies research programmes? In the context of similar experimental research hypotheses, the answer to this can be fairly obvious and this is what the advocates of this argument have emphasized as well. However, religious studies is a far more diverse and complex discipline than, say, strictly experimental psychology. A simple analogy with experimental natural sciences does not give us a clear criterion for evaluating analogous anthropological fieldwork projects. Furthermore, how to assess the successfulness of comparable interpretative analyses of textual sources is even less clear than that. Of course, for persistent naturalists hermeneutically inclined philological and (cultural) anthropological research is not proper academic research anyway as they do not include scientific hypotheses or other distinctive features of scientific research (for example see Bulbulia, Wilson, Sibley 2014: 168–170; for criticism of such views see Taves 2012, but also section 1.2.2. in general).

Simply dismissing some prominent research does not solve the problem of proper criteria as the successfulness argument emphasizes the need to integrate and synchronize all existing sciences. Simply throwing out all approaches that do not fit the proposed ideal would not so much justify the application of naturalism

¹¹¹ Among well-known naturalists who are not specifically focused on the study of religion Vollmer (2007: 41–43) also argues in a similar fashion, suggesting that although naturalism is rather a philosophical position than an empirically proven hypothesis, it is justified through the remarkable success of the naturalistic approach. Forrest (2000) also presents a similar argument.

as suggest that the ideal is reachable by abandoning large parts of the discipline as we know it right now. This of course might not be that problematic at all, if it were not for the issue that there are good reasons to argue that approaches not driven by hypotheses have actually been remarkably successful in the past century or so – but yes, only if one adopts a somewhat different criterion for measuring success. Namely, philological research (while, to an extent, relying on archaeology) has managed to uncover, decipher and interpret thousands and thousands of new textual sources in the past few centuries that have become essential for our understanding of many past and present cultures and religions. Without all the knowledge we have gained through such research we would know very little if anything about many past religious traditions or about the past of still existing religious traditions. The same goes for anthropological research – although mostly not hypothesis-driven and instead largely hermeneutical and descriptive, without all that anthropological work we would know very little about the religious beliefs and practices of most people in the world. In other words, these disciplines have made unknown or forgotten events, worldviews and groups of people knowable and analysable. It is therefore entirely possible to show just how successful these disciplines have been, but one would then highlight that ‘success’ not by appealing to the uncovering of fundamental causes or by its ability to conclusively rule out alternatives, rather attention would be drawn to our immensely expanded and improved knowledge about other cultures and religions of the world.

It is of course true that despite all that success, philologically or anthropologically inclined interpretive research often struggles with ruling out alternative interpretations and there appear to be multiple, competing interpretations and explanations for most religious phenomena. Yet, the fact alone that we can be arguing over the proper interpretation of some Sumerian myth or some vernacular Indonesian religious practice clearly proves that textual and anthropological research programmes have had quite a lot of success – without them such discussions would be impossible as we would not know much anything about Sumerians or indigenous Indonesian peoples anyway. Furthermore, as emphasized and highlighted already earlier – much of the research in these new sciences of religion relies on the existence of this abundance of ethnographic and philological data.¹¹²

In other words, these research programmes are unsuccessful and not progressive only if we evaluate them based on the very strict and narrow criteria of the naturalists. If so, this argument becomes dependant on accepting a specific conceptualization of ideal scientific practice, but if one does not accept that, one can rather easily show how non-naturalistic research programmes have had a lot of success. As such, the successfulness argument cannot be considered particularly successful. If it were true that non-experimental and non-hypothesis-driven research indeed has not had any notable success (regardless of which academically acceptable criterion one used to measure it) and found itself at a standstill,

¹¹² Concerning this see also section 1.2.4. and Peedu 2016.

then this argument would have a point, but as it is right now, it relies on accepting numerous other presumptions and clauses to become convincing. And what is even more perplexing, proponents of this argument are themselves extensively relying on data derived from the academic fields of research that they elsewhere dismiss as problematic and inadequate.

3.3.3. The argument of 'no ontology'

This argument takes a rather different path than the previous two. Instead of trying to justify the choice of (epistemological or metaphysical) presumptions, it argues that they are in fact not even trying to defend or justify naturalism, but are merely using it as a methodological starting point, as basic guidelines for research. In other words, this argument takes us back to the issue of 'methodological naturalism' that I initially analysed in the context of all the different meanings 'method(ology)' has (had) in the study of religion. There¹¹³ I pointed out how it would make sense to talk about 'methodological naturalism', 'methodological agnosticism' and other analogous 'methods' as ways of self-positioning and not as choices of method(ology) in the narrow sense of the term. However, 'methodological naturalism' as portrayed by its advocates is not merely an attempt at describing their epistemological standing point, it also serves as an argument in defence of naturalism.

As I noted earlier, it is argued that methodological naturalism is not in itself really a doctrine or a metaphysical position, it merely functions as a basic rulebook of sorts as it is typically argued. This basic rulebook is said to reject any kind of supernatural causation in theories and hypotheses and emphasizes the need to be able to test any proposed explanations against openly available evidence (see also Dawes 2011, Bulbulia, Slingerland 2012). However, in this context it is important to note that at the same time methodological naturalism is claimed to be practically free of any deliberate ontology. Bulbulia and Slingerland (2012: 567, 569) equate minimal ontological commitments and methodological naturalism. McCauley similarly argues that contemporary naturalistic approaches "remain noncommittal with regard to the array of metaphysical assumptions in which religions and their believers routinely traffic" (McCauley 2016: 462). Furthermore, this methodological perspective is supposed to inspire "caution, if not outright abstemiousness, with regard to related metaphysical and epistemological issues" (McCauley 2016: 462).

This is in effect what the argument of no ontology is about: methodological naturalism is not a metaphysical, ideological or philosophical position, it makes no claims about what the world around us is actually like. It merely uses a basic set of propositions as methodological guidelines to put in place a frame of reference to enable empirical research. If so, then naturalism as advocated and

¹¹³ See section 2.4.

practised is not really a problem, since it is merely used as a toolbox to advance research.

Is this actually true? Can one position oneself as a methodological naturalist without also in practice be(com)ing a metaphysical naturalist? This is something many have been rather sceptical about (Trigg 1998: 76–80; Gasser, Stefan 2007; Blum 2011; Slife, Starks, Primosch 2014; McLaughlin 2005). The problem is fairly straightforward. If we are going to do research in such a way that we exclude the possibility anything non-natural interacting (causally or otherwise) with anything in the natural world, we are in effect presuming the kind of world where events, agents and other phenomena that are not strictly natural have no practical relevance. Therefore, whenever anyone invokes the relevance of anything like that, an alternative explanation needs to be found for this that can explain the situation without the need to include that non-natural aspect. In this way it might still just be a ‘methodological’ commitment, but effectively such a research approach treats the world as if metaphysical naturalism is true. In theory it does not completely exclude the possibility of a ‘supernatural incursion’ at any point in time or space, but all its hypotheses, empirical research and theories are built on the assumption that actually everything we see in the world can be explained solely through shared experiences and empirical research and therefore this theoretical possibility is not particularly important. Or as Slife, Starks and Primosch describe this situation: “Supernatural events, in this case, are presumed to be not only unimportant in themselves but also *separable from* the natural so that they do not need to be taken into account to fully understand the natural” (Slife, Starks, Primosch 2014: 342). There is no room for ‘miracles’ or ‘supernatural causes’ of any other events, the world as studied and depicted by the methodological naturalist appears for all intents and purposes the same as that of the metaphysical naturalist. With the minor exception of the very beginning. The ‘deist option’ is still available for the religious person who wants to place the naturalist theories into one’s own larger framework, but all other options are in practice ruled out.

Yet, this is hardly a proper position of ‘no ontology’. If in actual practice the only difference between methodological naturalism and metaphysical naturalism comes down to the nuance that a methodological naturalist is leaving the door open for the theoretical possibility that (s)he could be potentially rebutted by a supernatural phenomenon, then the true difference between a methodological naturalist and a metaphysical naturalist is not exactly noteworthy. This is also why another commentator has noted how it makes little sense to argue that methodological naturalism acts as a set of rules to follow:

“This term is something of a misnomer: it can be misleading because it seems to suggest that naturalism or materialism is being used heuristically, as an assumption to be legitimated by its producing fruitful hypotheses and successful research programs. But naturalism is not a heuristic, it is a presupposition” (McLaughlin 2005: 20).

Methodological naturalism as portrayed by its advocates in/for the study of religion is indeed rather a set of presuppositions to be relied on epistemologically whenever struggling with multiple alternative explanatory choices. All in all we arrive at a situation where methodological naturalism and metaphysical naturalism do differ in theory, but unless a deliberate and obvious ‘incursion by supernatural’ takes place there will never be notable differences between them in practice. This has caused many to argue that there is no point in differentiating metaphysical naturalism from methodological naturalism since in actual practice they have the same result (Gasser, Stefan 2007: 159–161; Slife, Starks, Primosch 2014: 342; Näreaho 2014).¹¹⁴

Thus, the argument of no ontology remains rather unconvincing. Methodological naturalism does come with a specific set of ontological commitments and it does base all its research on those ontological presuppositions. To claim that these amount to “minimal ontology” and an avoidance of metaphysics is rather misleading. However, there is one additional major argument that naturalists can still appeal to, even if naturalism does indeed come with metaphysical commitments, is not universally accepted in all sciences and has not shown itself to be the only way to have a successful research programme. Namely, the naturalist can still argue that when it comes to evolutionary research, naturalism is in effect inevitable and there is no viable alternative to it in a practical research setting.

3.3.4. The argument of inevitable necessity

The argument of inevitable necessity is again one of those arguments that does not so much try to justify naturalistic self-positioning epistemology as it tries to show why we cannot do without naturalism. In this sense, it is often very closely linked to the universality argument I analysed in section 3.3.1. Indeed, Michael Ruse explicitly connects these two arguments in his presentation of this argument (Ruse 2005: 83–84). In short the argument of inevitable necessity proposes that one cannot do evolutionary research without a naturalistic basis. The evolutionary theory is a theory about the development and change of biological organisms that can be observed and studied above all through the naturalist perspective according to which we can indeed make sense of them by seeking for the natural mechanisms, causes and functions of their behaviour. No other research perspective has had anywhere near as much success in applying the basic theoretical principles to actual research questions, thus if we want to pursue evolutionary research, we have to do it naturalistically (Ruse 2005, McLaughlin 2005). This does not justify naturalism epistemologically or metaphysically, it merely points out that we have

¹¹⁴ It should be noted though, that almost only scholars of religion present this kind of an argument of no ontology. Among philosophers, one can easily find those who argue that metaphysical naturalism and methodological naturalism are practically very closely related. For example, see Forrest (2000) who even argues that the extensive practical usage of methodological naturalism in scientific practice has eventually led to the justification of metaphysical naturalism.

no other choice if we choose to do evolutionary research. Or as Peter McLaughlin puts it:

“Scientific naturalism is not a heuristic justified by its utility but the presupposition of a certain kinds of intellectual activity – which activity itself may of course be justified by its utility. This doesn’t make naturalism as a metaphysical position right; it only makes the assumption of naturalism inevitable in certain kinds of practice” (McLaughlin 2005: 20–21).

As one might expect, this line of reasoning is not without its problems either. Halvorson (2016: 138–142) analyses this extensively. He notes how defining natural things is not as easy as it might seem. First, one cannot limit natural things simply to those entities that current scientific theories include, because then we are committing to an extremely conservative stance that does not leave room for any future scientific discoveries. Secondly he points out how one cannot define natural entities in terms of time, space, energy or mass either, since even contemporary science defies such simplistic intuitions (think of quantum wavefunctions or photons for example). And thirdly he also argues that defining natural entities as those that are not supernatural, would amount to a definition that is problematically dualistic and negative – it does not really tell what natural objects are as it suggests what they are not. In conclusion Halvorson argues that the definition of a natural entity tends to be always slightly changing – as soon as a new scientific theory can incorporate some entity, it begins to be viewed as natural! – and therefore naturalism is more like an attitude, a stance or a research programme (Halvorson 2016: 139).¹¹⁵ This obviously is a problem for the argument of inevitable necessity, since in the context of this argument (but really, also in context of all the previous arguments as well) naturalism or more specifically methodological naturalism is portrayed as a specified and principally unchanging set of epistemological rules and guidelines for theoretical and methodological choices.

Nevertheless, even if the naturalist manages to overcome this problem – perhaps by arguing that even though naturalism may be always slightly shifting, depending on what empirical research can discover¹¹⁶ – there is another, far more

¹¹⁵ Elsewhere, Roger Trigg has also argued very similarly, pointing out how “reality should not be arbitrarily confined to what is accessible to human science. Modern physics, whether in quantum theory, chaos theory or elsewhere, can provide many examples of aspects of physical reality which are in principle beyond our reach. A physicalism or naturalism which makes science, and perhaps merely present-day science, the arbiter of what exists, is pursuing a dangerous course. It is making reality once again depend on human judgments and not the other way around” (Trigg 1997: 111).

¹¹⁶ In fact, in one instance Joseph Bulbulia argues something like this: “Science assumes methodological naturalism. We do not stipulate the gods out of existence. But we begin with the idea that nature is secular and see how far this assumption takes us. For all we know naturalists of the distant future will appeal to gods in their explanations for our belief in them. But for now, our aim is to produce a good explanation from minimal assumptions about the complexity of the world” (Bulbulia 2007: 621).

difficult problem for their arguments. This has to do with mathematics. If (methodological) naturalism is to operate only with natural entities, natural functions and natural causes, then how exactly does this include “mathematical objects” that much of science relies on? How does one justify the inclusion of these objects that cannot be studied empirically? In fact, this is the reason why one well-known evolutionary theorist has argued that evolutionary theory and evolutionary research actually violates the requirements of methodological naturalism (Sober 2011). This is a problem many others have also wrestled with over the years, but the situation right now is still rather pessimistic – one can either naturalistically justify the use of only a small part of mathematics or none at all (Roland 2016). This is something that has also caused Sober’s criticism of methodological naturalism and has motivated many to agree with him (for a more recent take on this problem see also Elliott 2017). As Sober and others note, numbers appear to be Platonic entities that cannot be properly included into a strictly naturalistic and empirical criteria of justifiability. Sober goes so far as to argue that basically numbers can be understood as kind of supernatural entities that the evolutionary theory relies on just as much as it relies on genes, organisms and populations. Yet, if so, it does not make much sense to argue in favour of methodological naturalism as the basis of evolutionary research, since evolutionary research has never limited itself to naturalistic entities anyway (Sober 2011). Quite obviously evolutionary biology cannot do without mathematics.

3.3.5. Where does all of this leave us?

Now, I find it quite likely that the problem of mathematics is probably the strongest counter-argument against the concept of methodological naturalism, since one would need to come up with a way of showing how complex mathematical tools are actually empirically observable or in some other way ‘cognizably present’ in the natural world to overcome this problem. However, in the context of the evolutionary study of religion, epistemological issues are central to the whole discussion. And with regards to epistemology the central question really does become whether evolutionary theory itself leads to any specific epistemological conclusions or not? After all, we do need mathematics, but perhaps evolutionary theory as such – even with the inevitable inclusion of mathematics – leads inevitably to one or another epistemological conclusion? Perhaps evolutionary theory necessitates a particular kind of a philosophical position and casting aside such a position would be in conflict with the inner logic of the theory itself? If that turned out to be true, quite obviously evolutionary research would have to take that into account and either keep that in mind or deliberately base one’s empirical research on that conclusion. One could call this also an alternative version of the last argument – naturalism is inevitable for evolutionary research because evolutionary theory calls for a naturalistic basis (in which case it is also possible that evolutionary theory and actual biological research practice – which

includes mathematics – are perhaps to an extent in conflict with one another). This is an issue I intend to analyse thoroughly in the next chapter of this thesis.

But for now it has been important to see that none of the more common arguments used to justify the adoption of methodological naturalism in the study of religion have shown that only methodological naturalism can be justified as the basis of the academic study of religion. Neither have they conclusively shown that naturalism is the only option for an evolutionary study of religion. Of course, one cannot conclude from this that naturalism is a fundamentally inadequate position for a scholar of religion, but it does not appear to be a privileged one, as some have argued. However, as noted, the argument that naturalism is the only option for an evolutionary study of religion could yet find further support if one was able to show that a naturalistic epistemological position can be derived from the evolutionary theory.

3.4. Conclusion & looking ahead

In this chapter I have focused on the epistemological issues that have mainly come up and are central to the cognitive and behavioural approaches to religiosity. As shown, much of this discussion indeed deals with the question whether one can derive any epistemological inferences from such evolutionary research. With minor and largely insignificant exceptions (like beliefs about specific, empirically measurable phenomena) the current scholarly consensus – and with good reason – proposes that one cannot infer anything epistemologically notable from the cognitive science of religion (or from any of the other evolutionary approaches either). Yet, as I have tried to highlight in the subsequent sections of this chapter, the real issue here is not so much one of inferences as one of presumptions. The current set of assumptions largely assumes naturalism and thus finds religiosity epistemologically costly. This is only so, because the explanations religious people themselves offer are rejected as invalid or inapplicable from the naturalistic perspective.

Typically, this naturalistic set of presumptions has been justified by arguing that naturalism is a scientific necessity for scholars of religion. In the latter sections of this chapter I thoroughly analysed arguments that have been presented in defence of (methodological) naturalism as the basis of all academic research and pointed out why many of the arguments at a closer look become problematic or simply insufficient. The universal acceptance argument merely says that we should do what many others do, but that in itself is not enough to justify anything. The successfulness argument is probably true to the extent that in several sciences the naturalistic basis has indeed had quite a lot of success. But, it is entirely misleading to argue that alternative research perspectives have not had any real success. Quite the opposite, in fact. The argument of no ontology has simply turned out to be wrong, or to be more precise, technically true, but in such minor detail, that in actual practice this truthfulness is not really applicable. Lastly, the argument of inevitable necessity has turned out to be quite problematic, since

‘natural’ is not exactly a static and clearly defined category; furthermore, scientific practice includes mathematical tools that cannot really be naturalized.

All of this leaves us in a situation where methodological naturalism as a position does not actually appear to have as strong of a justification or foundation as its advocates have tried to argue. It certainly has not shown itself to be the only viable, reliable, academically justifiable option as some have tried to argue. However, it is also clear that it is not completely unjustifiable either. One cannot deny all the important and thought-provoking research that has relied on a naturalistic basis in one way or another. Therefore, we should rather focus on the question dealing with the justifiability of pursuing research solely from a naturalistic self-positioning that would supplant alternative positions, including in research approaches where those have had quite a lot of success as well. This is where the “relationship” of epistemology and evolution becomes directly relevant. If one can show that a philosophical position can be derived from the evolutionary theory or that evolutionary theory gives reason to believe that one or another epistemological position is more likely to be true than others, then that becomes a very strong argument in favour of that specific position, in general, but also specifically as the basis of all evolutionary research. Because of that in the next chapter this issue will be thoroughly analysed.

4. Evolution, epistemology and religiosity

Most of what I have already written and discussed deals with the evolutionary theory in one way or another, also addressing various epistemological issues in one way or another. All throughout this religion has been the setting or the overarching question that all the discussions and analyses relate to or attempt to make sense of. However, what I have not directly addressed nor included in the discussion thus far is the research programme that has approached the question of evolution and epistemology head on. Whether we derive any (and if so, what kind of) epistemological inferences from the internal logic of the theory of evolution and available biological research is something researchers and theoreticians have argued over for some time. To get a full picture of the issues related to (methodological) naturalism, new evolutionary approaches towards religiosity and the position of the scholar of religion one needs to also look into research done in the evolutionary epistemology. After all, as already noted previously, if we discovered that it is indeed possible to justify one epistemological position over another based on the evolutionary theory, that would have major repercussions for the study of religion as well.

Therefore, in this chapter I intend to focus on two main things. First of all I am going to take a thorough look at the evolutionary epistemology and show what kind of approaches and research questions have dominated that research programme, as well as highlight why (as things stand right now) we cannot justify any specific epistemological position based on the theory of evolution. To a large extent I am going to be relying on my two earlier, long and thorough articles (Peedu 2015c, 2015d). There I have focused solely on the evolutionary epistemology and dealt with all its aspects in much more detail than I am going to be doing here, so for a more in-depth analysis of evolutionary epistemology one ought to definitely take a look at those articles.¹¹⁷ In this chapter, additionally, I am going to highlight all the notable treatments of religion and religiosity in the evolutionary epistemology, in other words, how researchers in this approach have explained religion.

Lastly and most significantly, however, I intend to present an alternative concerning religiosity that is based on evolutionary epistemology and wholly consistent with the theory of evolution, yet also most certainly not naturalistic in the sense propagators of methodological naturalism insist that evolutionary theory necessitates a naturalistic perspective. This is going to be essential for the next chapter where I am going to show why the possibility of such alternatives relates to a longstanding theoretical issue – the Duhem-Quine thesis of under-determination – from the philosophy of science.

¹¹⁷ Presenting an equally thorough and extensive analysis of evolutionary epistemology here would simply make this chapter unnecessarily long and thus potentially mislead those who might then assume that this thesis is centrally about evolutionary epistemology. The discussion presented here is therefore only as detailed and thorough as is necessary for the overall picture as such.

4.1. Evolutionary epistemology and the possibility of philosophical inferences

At first it is necessary to specify what is here meant by ‘evolutionary epistemology’ as such. As it happens, the label/name does not designate just one research perspective, but rather multiple similar ones, not all of which are relevant in this context. As Michael Bradie (1986) has very succinctly pointed out, ‘evolutionary epistemology’ stands for two noticeably different lines of research. On the one hand evolutionary epistemology has meant the kind of research that relies on knowledge about humans as biological organisms as its basic frame of reference. In such a case, evolutionary mechanisms must be also at work in the development of human cognitive capabilities and it must be possible to determine the reliability and aptitude of our cognitive capabilities and mechanisms based on what we know about their evolutionary development. Bradie calls this the evolutionary epistemology of mechanisms. On the other hand ‘evolutionary epistemology’ has also designated a relatively different line of research. There the focus has been on science¹¹⁸ as a phenomenon and researchers have tried to analyse and explain the historical development and success of science (as a social, cultural and historical phenomenon) by making use of evolutionary analogies and explanatory models. Bradie calls this the evolutionary epistemology of theories. I will focus only on the first of the two, since issues of evolution and epistemology here are relevant only as dealt with there.¹¹⁹

Later on Bradie (2004, 2011) has also further specified his concept, splitting both research programmes into two sub-perspectives and describing those analogously as ‘ontogenetic’ and ‘phylogenetic’ ways of addressing the larger research questions. However, while his earlier distinction between the two main lines of research in evolutionary epistemology has been widely accepted and adopted in subsequent discussions, researchers elsewhere have not adopted this further specification. Furthermore, most of the researchers in the evolutionary epistemology have always tried to connect and unify the two sub-perspectives, thus I do not find it useful to adopt this further specification here.

In short, it can be said that at its most basic level evolutionary epistemology relies on the premise that evolutionary selection favours the development and spread of such characteristics and features that in one way or another improve the survival and reproduction of the biological organism. This indicates that the development and functionality of the sensory and cognitive processes of human beings should be also strongly influenced by this basic inclination. Because of that researchers have asked, what does this say about our cognitive mechanisms and abilities as such and whether we can perhaps answer important epistemological questions – as analysed by philosophers – based on evolutionary research.

¹¹⁸ Mostly just on natural science though.

¹¹⁹ From this point on, whenever I talk of ‘evolutionary epistemology’ I specifically have in mind the approach that deals with epistemological issues related to the reliability and development of our cognitive capabilities – unless I specifically say otherwise.

In this sense discussions in the evolutionary epistemology rely heavily on natural sciences, especially biology. Researchers in this field often spend large parts of their research papers and books discussing the specific functionalities of (human) cognitive mechanisms – still, knowledge as such remains essential to their discussions.¹²⁰ The central premise of such analyses of empirically researchable cognitive mechanisms is that evolutionary selection must have favoured organisms and species that were better adapted to the environment. However, knowledge about the environment is essential for survival and reproduction – the better you know your environment, the easier it is to find food, avoid dangers and find mates. Evolutionary selection must have preferred organisms with more advanced capabilities of acquiring information about the environment over those who were not as capable in that. Therefore, useful knowledge improves the fitness of the organism and it can be considered an evolutionary adaptation. (Campbell 1982; Lorenz 1977; Vollmer 1990; Wuketits 1990; Plotkin 1997a, etc.)

Some have even gone so far as to equate evolution and cognition process (Wuketits 1986) or life and cognition (Heschl 1990), but regardless of the exact phrasing, understanding knowledge-acquiring as central to all evolutionary processes is fundamental to the evolutionary epistemology. Also, it is generally assumed in the evolutionary epistemology that knowledge acquired through natural sciences is trustworthy and can be used as the basis of subsequent research. This is important to keep in mind, because evolutionary epistemology must inevitably assume the reliability of some knowledge to make research as such possible. Despite that, it is obvious that even knowledge we have acquired through the research methods of the natural sciences still relies on the same cognitive capabilities and mechanisms as all other knowledge-gaining processes. This choice has both made detailed research and argumentation possible as well has invited various criticisms of their proposed conclusions. In the subsequent sections I am going to look at these issues. However, before that it is important to give some context, since everybody cannot be assumed to be familiar with the specifics of the evolutionary epistemology. To do that I will give a short historical overview of the main trends and developments of this research programme.

4.1.1. A short overview of the history of evolutionary epistemology

It is useful to distinguish between two main periods in the development of the evolutionary epistemology. The first extending from the beginnings in the 19th century and Charles Darwin until 1974, when Donald T. Campbell published his foundational article (Campbell 1982) and gave the research programme a name and a focus. And the second stretching from Campbell's article until now. Research on these epistemological issues in the earlier period – from the few

¹²⁰ It should be noted, though, that scholars in the evolutionary epistemology use and understand “knowledge” in a slightly different way than is common elsewhere. I will come back to this in section 4.1.2.

speculative ideas Darwin had in relation to epistemological questions until Campbell's work in the 1970s – remained relatively unsystematic and lacked the conscious focus and pursuit of a coherent large-scale picture that the later research from 1970s to 1990s possessed. It is worth keeping in mind that the earlier period of the evolutionary epistemology is only really part of the complete picture through the lens of Campbell's article. Without that later focus earlier research would not appear to represent different forms of the same thing either. Still, this did not stop earlier researchers and theorists from speculating on similar topics – after all, the seeds for it were already present in the writings of Charles Darwin. Although he never really went deep into what the evolutionary development of human beings would mean for the evaluation of humans' cognitive abilities, he did foresee the potential for research regarding this kind of questions.¹²¹ In the second half of the 19th century, various notable thinkers tried to develop Darwin's initial suggestions further. Most probably Thomas H. Huxley was the first to discuss the possibility of explaining cognition based on the Darwinian evolution as noted by Henry C. Plotkin (1991: 482), but Herbert Spencer became a far more influential advocate for the development of evolutionary explanations of human psychology (Wuketits 1987a; Markl 1987). Beside those various evolutionary theoretical proposals concerning human cognition were also put forth by the likes of Mach, Helmholtz, Boltzmann, Poincaré and others (see Flamm 1987; Čapek 1968; Markl 1987; etc.), but the other most significant theoretician on this subject in the late 19th century was most certainly George Simmel who devoted a separate article (originally published in 1895) on this topic and also clearly differed his contemporaries in his views on the issue (Coleman 2002; Hooker 2013). For Simmel practical utility was at the centre of all knowledge acquiring processes. Whatever we know is never just a representation of our natural living environment, but has always been learned due to its practical usefulness (Simmel 1982).¹²²

However, analyses of such issues by the scholars of late 19th century remained general and epistemological topics were only addressed as much as it was necessary in the context of their larger interests and goals. In the early 20th century

¹²¹ For example in the first edition of *On the Origin of Species by Means of Natural Selection* he notes: "In the distant future I see open fields for far more important researches. Psychology will be based on a new foundation, that of the necessary acquirement of each mental power and capacity by gradation. Light will be thrown on the origin of man and his history" (Darwin 1859: 488).

¹²² For example, quite notably he argues: "When we say that our concepts must be true for the actions based on them to be useful, we have no evidence for the truth of our concepts other than the actual benefit we have obtained from these actions. ... We can determine only whether actions arising from such knowledge are useful or harmful. We might say instead, therefore, that there is no theoretically valid 'truth' on which we can base appropriate actions. Rather, we call these concepts true which have proved to motivate expedient and life-promoting actions. ... The truth of concepts need no longer rest on its agreement with any kind of reality. Truth becomes that quality of concepts which makes them the cause of most beneficial action. Whether the content of these concepts is similar to an objective order of things or related to them in any way remains undetermined" (Simmel 1982: 64).

various scholars¹²³ did pursue similar topics under the rubric of “biological epistemology” (see Danailov, Tögel 1990 for a brief overview), but conversely to the continuing influence of the 19th century scholars, these scholars and their ideas from the early 20th century have not had much relevance for the discussions of the late 20th century.

A new period of interest began with Konrad Lorenz in 1941 as he published an intriguing article in which he argued that Kant’s concept of *a priori* can be interpreted biologically (Lorenz 1982). It should be noted, though, that the article only began to receive widespread attention in the 1970s and 1980s. In sum, Lorenz argued that Kant’s ideas can be explained by contemporary biology, interpreting *a priori* knowledge as the biological limitations different species have acquired through the evolutionary selection. Furthermore, for Lorenz the hooves of horses and fish fins are examples of inborn knowledge that living organisms naturally possess (Lorenz 1982: 124–125). Without such innate knowledge it would be impossible for living beings to survive in this world. In the subsequent decades Donald T. Campbell became the most notable scholar of evolution and epistemology. He was centrally interested in showing that the process of blind variation and selective retention is universal to all knowledge acquiring processes. In other words, for Campbell all knowledge acquiring takes place in such a way that the initial “fragments of knowledge” appear randomly (or: blindly) and the subsequent selection determines what will be retained and preserved and what will fade away (Campbell 1960). For Campbell this process is the basis of the whole evolution of life, from virus-like organisms to contemporary physicists. Furthermore, for Campbell this process is progressive – physicists know far more about the world than early proto-organisms.

In addition to Lorenz and Campbell researchers and theoreticians here and there also discussed similar ideas, but the genuinely active period for the evolutionary epistemology only began with Campbell’s aforementioned foundational article (Campbell 1982). There Campbell argues that at minimum an evolutionary epistemology would be the kind of epistemology that takes into account everything we know about the evolutionary development of humans. He understands evolutionary epistemology primarily as ‘descriptive epistemology’. As such, for Campbell knowledge acquiring is a hierarchically differentiated process where unconscious instincts form the lowest level of knowledge and contemporary scientific knowledge is the highest level of knowledge (Campbell 1982: 76–92). But Campbell does not limit himself just with that kind of a descriptive approach. He argues that based on all we know about the development and evolution of human cognitive capabilities it is possible to argue in favour of the epistemological correctness of hypothetical realism (Campbell 1982: 101–104). Realism for Campbell is hypothetical, because proper, scientific knowledge is never final and always open to further improvement and corrections.

¹²³ Such as Wilhelm Windelband, Ludwig Stein and Paul Volkmann (see Danailov, Tögel 1990).

Campbell's article quickly becomes very influential and most of the discussion topics, research questions and other aspects of the developing research programme in general can be derived from his writings. In addition to Campbell, later research in evolutionary epistemology also relied heavily on Lorenz who publishes a much more extensive discussion of his earlier ideas concerning the possibility of analysing all epistemological issues through the lens of biology (Lorenz 1977). Similarly to others he also argues in favour of hypothetical realism as the epistemological position we should adopt based on what we know about the evolution.

Alongside Campbell and Lorenz another influential advocate of the evolutionary epistemology in the 1970s was Gerhard Vollmer who published his own take on evolutionary epistemology in 1975 (Vollmer 1990). Overall, his analysis of the matter was on the one hand more detailed than that of Lorenz, but on the other hand also far more ambitious than that of Campbell. Vollmer argues that science has developed far enough that we can now evaluate the cognitive knowledge-acquiring abilities and capabilities of humans based on natural sciences and thus solve epistemological problems with the help of natural sciences. Vollmer also argues in favour of hypothetical realism, which causes much of subsequent debate in the 1980s and 1990s to analyse this shared position of all the major theoreticians of the 1970s.¹²⁴ Although effectively arguing in favour of realism, similarly to Lorenz, Campbell and others, Vollmer as well emphasizes the “*hypothetical*” part, because he as well sees all scientific knowledge as inevitably and always limited, enabling only a partial explanation of the world. In this sense calling it “hypothetical” is their way of saying that potentially in future researchers might find evidence for dismissing this epistemological position. In short advocates of hypothetical realism are arguing in favour of a straightforward scientific realism – simply with a small clause added to it.

Although much of the debate in the 1980s continued to be focused on the theoretical side of research, such ambitious claims highlighted the need to look for ways how to empirically analyse and test the claims of the many theoreticians of the evolutionary epistemology (Riedl 1984: vii; Plotkin 1987a, 1988a, 1991; Wuketits 1997a). On a general level, it could be said that in the 1980s there two main research perspectives dominated the field. On the one side there was the so-called Austrian school centred on the Konrad Lorenz institute (Rupert Riedl, Erhard Oeser, Franz Wuketits, Robert Kaspar, etc.) and Gerhard Vollmer in Germany whose views largely coincided with the Austrian school. On the other side there was the somewhat more heterogeneous group of Anglo-American researchers such as Donald T. Campbell, Michael Ruse, Henry Plotkin and Michael Bradie. But despite emphasizing the importance of and need for empirical research, actual research in the evolutionary epistemology in the 1980s continued

¹²⁴ A short summary of subsequent sides of debate: Vollmer (1998, 2004, 2012) continues to argue in favour of it alongside Lütterfelds (1987), Oeser (1988) and Wuketits in his earlier writings (Wuketits 1988, 1990: 34–40). Others have found their arguments unconvincing or simply wrong: Ruse (1989, 1990), Bradie (1989, 1990), Falk (1993), Thomson (1995), etc.

to be largely theoretical. This is rather well highlighted by the activities and writings of the Austrian-German approach to evolutionary epistemology – most of them are philosophers or theoretical biologists in their academic background and research interests. Later on this caused criticisms such as that of Callebaut and Stotz (1998) who argued that the main problem with evolutionary epistemology is its unnecessarily excessive focus on the ideas of the founders of the research programme and a general lack of actual empirical case studies.¹²⁵ Of course, advocates of evolutionary epistemology such as Vollmer (1990), Wuketits (1990), Riedl (1984) and Lorenz (1977) argued that there was lots of empirical evidence to support their claims, but by this they meant the existing body of work in biology and other natural sciences in general. In all the research they refer to, none of it is testing specifically the hypotheses put forth by evolutionary epistemologists.¹²⁶ As such the Austrian-German approach can be characterized as adopting existing knowledge in natural sciences as the fundamental basis of all analysis and then trying to deduce philosophical conclusions out of that body of knowledge.

The most noteworthy alternative to that school of thought comes from Henry Plotkin who developed a hierarchical scheme of the knowledge-acquiring process (Plotkin 1982, 1987b, 1988b, 1997a). Throughout his research Plotkin is centrally interested in developing a scheme that can be tested empirically (Plotkin 1988a: 439–444). Plotkin understands all knowledge acquiring capability as adaptations. Furthermore, rather similarly to Lorenz he also understands all adaptations as knowledge – hands and legs as we have them embody knowledge about the environment we find ourselves in. In that sense for Plotkin, learning and acquiring information means the incorporation of that new knowledge into the knower – this is a process that also inevitably changes the knower oneself as well (Plotkin 1997a: ix–xv). This kind of an approach makes Plotkin noticeably different from other evolutionary epistemologists of the 1980s and 1990s. For Vollmer (see especially Vollmer 1984) studying the human capability of acquiring knowledge means the analysis of “*what are humans capable of sensing?*” (which results in extended discussions of the capabilities and limitations of all human senses), but for Plotkin the central question is rather “*what are humans capable of learning?*” Plotkin finds this far more important because humans are not just passive receivers of knowledge through their senses. Rather, whether we actually acquire any knowledge from everything we perceive through our senses depends on our learning capabilities. Thus, to understand fully how living organisms are able to acquire new knowledge i.e. learn Plotkin finds it vital to develop a universal theory of learning (Plotkin 1982: 443–444). This is what he pursues in great extent in his subsequent research as he aims to develop a four-level scheme of

¹²⁵ See also Plotkin (1997b) and van der Steen (2000).

¹²⁶ One popular way of making use of existing research was, for example, the comparative analysis of the cognitive organs of different species (see Bartley 1987: 34–38; Bechtel 1990: 72–73; Oeser 1996: 18–19).

human learning.¹²⁷ Overall, Plotkin's project differs from others in that its basic hypothesis about learning and adaptation should be empirically testable, yet at the same time he does not really find discussions about the possibility of deducing hypothetical realism or any other position from evolutionary epistemology particularly interesting nor is it really clear how the empirical study of his larger project would tell us anything about those larger philosophical issues that are at the centre of the discussion elsewhere in evolutionary epistemology.

By the 1990s interest in evolutionary epistemology began to waver. The persistent lack of proper empirical research proposals certainly played a part in it, but the questionable ability of evolutionary epistemology to give actual answers to classical epistemological questions also began to really weigh on the research programme overall (Clark 1987, Höhle 2005). Thus in the 1990s on evolutionary epistemology slowly began to lose its popularity or delved into (meta)analysis of the research programme itself and what is it actually supposed to be about (for example see Oeser 1996; Hoesl 1993, 1995; Plotkin 1987a; Hardcastle 1993; etc). In addition to that many have recently argued in favour of one or another form of functionalism¹²⁸ instead of (hypothetical) realism (Wuketits 1995, 1997b, 2000, 2006; Dietrich 1997, Derksen 1998, de Regt 1998). Among other reasons this has probably come about due to a change in how the relationship of the environment and the organism is understood in biology – living beings are no longer viewed as simply passive objects of the active forces of the environment, but rather as active and important participants in that process.¹²⁹ Furthermore, researchers began to pay more attention to the issue that organisms are not just generalized knowledge-acquiring mechanisms (within their sensory and cognitive limitations of course), but are predisposed to focus on specific things in their learning and knowledge-acquiring (Plotkin 1997a: 162–163). In addition, the evolutionary priority of survival and reproduction led many of the aforementioned scholars to question whether any form of realism really is what the evolutionary selection is guiding human beings towards. Acquiring knowledge is not beneficial in itself, but only insofar as it helps us survive and reproduce.¹³⁰

Although various paths of argumentation and theory have been discussed in the subsequent recent discussions as well – such as the possibility of using evolutionary epistemology in a Reidian approach of common-sense philosophy (Boulter 2007a, 2007b; De Cruz, De Smedt 2012) or as an attempt to develop an applied evolutionary epistemology out of the previously theoretical discussions (Gontier 2010, 2012, 2013) – none of these have really attracted interest comparable to the extensive discussions and theoretical pursuits of the 1970s and 1980s. It could be said that in a way evolutionary epistemology has reached the

¹²⁷ He distinguishes between the genetic level, the developmental level, the individual learning level and the socio-cultural level. For an extended review and analysis of this see Peedu (2015c: 34–36).

¹²⁸ And in some instances actually rather similarly to what Simmel was saying a century ago.

¹²⁹ As one influential paper in that regard see for example Lewontin (1982).

¹³⁰ For a more thorough review of the functionalist position see Peedu (2015c: 38–39).

point where the major arguments put forth in evolutionary epistemology have not received wider acceptance (instead rather, extensive criticism) and yet, the basic evolutionary premises evolutionary epistemology relies on have not been and cannot be questioned either. To better understand this curious and yet noteworthy position evolutionary epistemology finds itself in, I am now going to look into some of the central issues of evolutionary epistemology.

4.1.2. "Knowledge" in evolutionary epistemology

The issue of "knowledge" is perhaps one of the most interesting aspects of evolutionary epistemology. Discussion over the concept itself has mostly dealt with questions such as what is knowledge from an evolutionary perspective or what should be conceptualized as knowledge when we look at the evolutionary development and selection of human beings (as well as other living organisms)? I would argue that it is justifiable to distinguish between two main conceptions of knowledge in the evolutionary epistemology, both of which I have already noted in my historical overview of evolutionary epistemology.

On the one hand we have the kind of approach that understands knowledge very similarly to the conceptualizations of knowledge in Western philosophy and cultural history. Knowledge here means an apprehension of the way of things are; describing something as knowledge indicates representative or confirmed information concerning the world we find ourselves in and it may be conceptually expressible (but not necessarily so). If one conceptualizes knowledge in such a way, then it is possible to differentiate between knowledge and the acquiring of knowledge, as well as between the acquiring of knowledge, the comprehension of knowledge and the storing of knowledge. This is the way knowledge has been primarily conceptualized by the Austrian and German representatives of the evolutionary epistemology as they have tried to work out ways how to biologize philosophical epistemology (Wuketits 1986; Wuketits 1990; Vollmer 1984; Vollmer 1990).¹³¹

On the other hand, those who have equated adaptation with knowledge have developed a remarkably different perspective on "knowledge". If the previous approach understood knowledge primarily as information that the organism is either capable of acquiring and mastering or not and capable of understanding and applying or not, then conceptualizing knowledge as adaptation brings about a significantly different understanding of "knowledge". Lorenz (1977: 21–25; 1982: 124–125) is the first to interpret knowledge in this way as he talks of the knowledge acquiring process as an adaptive process. As noted previously, in such

¹³¹ It should be noted, though, that when they talk about 'epistemology' and the biologization of classical philosophical problems, they above all have in mind Cartesian-foundationalist epistemology. Although they never explicitly discuss this question, it is probably justifiable to suggest that they presume all other approaches to be easily biologizeable as well once Cartesian-foundationalist epistemology has been biologized.

a case horse hooves can be conceptualized as innate knowledge of the surrounding environment that the horse is going to find oneself in. Plotkin (1987b; 1988b; 1997a) has developed this much further. Plotkin is fundamentally opposed to the idea that knowledge could be viewed as a kind of a “thing” that one can acquire and store. In other words, he does not think that it is biologically justifiable to treat knowledge as storable information. Knowledge for Plotkin in the most general sense is the constantly changing relationship of the living organism and the environment (as well as the constantly changing relationship of the different parts of the living organism itself). In general, it could be said that if Wuketits does not differentiate between cognition and knowledge, Plotkin does not differentiate between knowledge and adaptation and in this sense, indeed, horse hooves, fish fins or even human intestines can be conceptualized as knowledge.¹³² From this perspective conceptually expressible knowledge (including knowledge as it is traditionally understood in philosophy) is only a rather small and limited (and often quite secondary) aspect of everything that can and should be understood as knowledge.

But Plotkin also differs from the other approach because his goal is to develop evolutionary epistemology into a natural science. In this sense Plotkin’s concept of knowledge also greatly complicates proper disciplinary dialogue with philosophy and the project of biologizing epistemology as well. After all, as argued by Vehkavaara (1998), if one were to conceptualize knowledge in such a way, then it might not really say a whole lot about the truth(fulness) of knowledge as that is traditionally understood in philosophy. If knowledge is understood as the structural order (and compatibility) of the different parts of the whole, then it is only possible to evaluate the successfulness of the actions that this structure of knowledge has made possible, but it is no longer possible to apply the classical concept of knowledge – “knowledge” is simply no longer “information about the world”. The only criteria available for the evaluation of knowledge in such a situation is the successfulness of its application (Vehkavaara 1998: 215–216), but that does not tell us whether it is also a representation of the way things are in the world or not.

Of course, Plotkin might not find that problematic at all, since direct biologization of philosophical epistemology has never been a significant part of his project. For him philosophical knowledge is simply a narrower aspect of knowledge as such. Still, adapting this kind of a concept of knowledge would probably become a problem for those who still thrive towards biologizing philosophical epistemology, since it would make it impossible to talk about the truth-directness¹³³ of knowledge or about the evolutionary necessity of understanding

¹³² After all, the physical make-up and structure of the intestines can be seen as knowledge about available edible materials in the world!

¹³³ I use the concepts of truth-direct and truth-directness to indicate the basic idea in evolutionary epistemology, that even if the sensory organs and cognition of the living organisms are not able to acquire completely accurate information about the surrounding environment, evolutionary theory still implies that living organisms (humans included) cannot be completely wrong either. What we know about the world has to be accurate to an extent, otherwise survival and reproduction would be impossible. But as such our knowledge of the world is

the world. For Plotkin knowledge is simply a useful concept for interpreting and explaining empirical material about the interrelationship of organisms and environment.

4.1.3. Can one study epistemological issues empirically?

Whether epistemological issues can be studied empirically or not has been another central research question in the evolutionary epistemology. The reason for this is fairly obvious: if one wants to really take the more ambitious claims of the research programme seriously, then it is not enough to show how such and such inferences are the logical consequences of the evolutionary theory. Biology is an empirical discipline, if one wants to biologize epistemology with the help of evolutionary theory, one needs to show how epistemological questions are empirically researchable.

This is where the limitations of the evolutionary epistemology – as it has been pursued thus far – become apparent. Despite persistent insistence that their theoretical programme is empirically researchable (Vollmer 1990, Riedl 1984, etc.), there are no notable examples of that. Evolutionary epistemology has always depended on all sorts of empirical research done in the cognitive and biological sciences, trying to deduce epistemologically relevant bits and pieces from those. However, such research projects are not focused on the central hypotheses of the evolutionary epistemology.

A quick look at the attempts to empirically study epistemological issues can make this particularly apparent. At least since Lorenz (1977), researchers in the field have argued that the comparative study of the cognitive abilities is the way one can study epistemological issues empirically. The basic idea is simple: since we know that the cognitive capabilities of different species (but to lesser extent different organisms as well) vary, then detailed comparative studies of their abilities should reveal their knowledge-acquiring capabilities as well (Campbell 1982; Plotkin 1987a; Bartley 1987, 34–38; Oeser 1996, 18–20; Wuketits 1997a, 59–62; Barth 2012, 89–91). Giurfa (2012) with his comparative analysis of the learning abilities of bees and other social insects and Huber and Wilkinson (2012) with their comparative study of human and animal cognitive abilities serve as good examples of such research.

Yet, how can one really deduce philosophical conclusions from such research? Without additional hypotheses or knowledge these studies remain merely informative looks into the development and functionality of various cognitive organs. Such research projects do not really tell us how accurate or truth-directed these organs are; furthermore, there is no way how to conclude from them whether

probably rather limited. Therefore, truth-directed(ness) indicates that even if our knowledge is partial and limited (in ways we cannot easily, if at all, predict or analyse ourselves!), what living organisms generally or humans specifically know about the world has to at least be ‘on the right path’.

human knowledge relates to the world in a pragmatic way, in a realistic way or in some other way. Still researchers in the field of evolutionary epistemology claim that it is possible to argue in favour of one or another epistemological position based on this type of comparative research. For this they rely on the basic assumption that all the cognitive abilities of all organisms are basically commensurable (Campbell 1982; Bartley 1987: 36–38). ‘Commensurable’ here means that sensory and learning capabilities of all living organisms can be evaluated using one big measuring criterion to determine how accurately or inaccurately one or another organism has understood the world around itself.

This presumption of commensurability is of course consistently usable when we focus on just one sensory ability – obviously we can quite easily determine that dogs’ sense of smell is far superior to that of humans. However, how can we really determine whether bats’ echolocation or electric fishes’ electrolocation enables a “more accurate” understanding of the world? Due to similar problems Christensen and Hooker (1999) are rather critical of Campbell and other evolutionary epistemologists who have followed him. None of them have been able to present convincing criteria for the evaluation of different ‘epistemic capabilities’, but without that a proper comparison of aforementioned electric fishes and bats (not to mention, humans) remains unfeasible. Generally for evolutionary epistemologists the decisive tool for measuring the accuracy and ability of various sensory and cognitive capabilities should be existing scientific knowledge about the world, but for that one would need to presume the superiority of human sensory and learning abilities (including about abilities we do not possess ourselves!). Also, one would have to presume the superiority of scientific knowledge over all other types of knowledge. But if so, then the claim that humans understand the world better than the electric fish is not so much proven as it is assumed.¹³⁴

Therefore, such research comes with two major problems for the evolutionary epistemologists. First of all, it is very circular – the supremacy of humans is first presumed and then scientific knowledge is used to show how others are inferior. Secondly, the comparative study of cognitive abilities does not tell us anything about the correctness of hypothetical realism, pragmatism, functionalism or some other generalization about the character of human knowledge. Thus, at least as things stand right now there is no empirical proof (or disproof) for any one of the aforementioned epistemological perspectives.¹³⁵

¹³⁴ Aforementioned Barth (2012) is an excellent example of this. First he assumes that humans know what the world is really like and then he evaluates how correctly organisms have sensed colours or vibration or other things in one or another situation (Barth 2012: 91–94).

¹³⁵ It should be noted, though, that empirical research into such questions is probably at least theoretically possible. For that we would need significantly larger, more complex and longer experiments than anything undertaken right now. At minimum a proper empirical study of the issues raised by evolutionary epistemology would entail an experiment where the appearance and disappearance of all the potentially cognisable phenomena has to be under the full control of the experimenter. In other words, the experimenter has to have a full control over the environment where the experiment takes place. The experimenter has to be able to summon all sorts of phenomena that he wishes to use to affect and manipulate the environment within

4.1.4. How much do we actually need to know?

The whole issue becomes even more complicated once we take a more detailed and nuanced look at what the evolutionary theory actually implies about cognitive abilities. After all, the capability of understanding the world and acquiring knowledge about the world is not in itself evolutionarily important. It is only important as far as it helps with things that play an essential role for organisms in the evolutionary selection, namely survivability and reproduction. Developing knowledge acquiring abilities more advanced than what is necessary for those two central goals is simply not relevant, even if they did enable a better comprehension of the surrounding environment. Because of that we can only say that at best human knowledge about the world should be truth-directed. However, one has to keep in mind that describing knowledge as truth-directed does not specify the sense in which this directedness is understood – all the options are still open, from representationalist realism to constructivist functionalism.

This aspect of the whole issue has made researchers very interested in determining how much accurate knowledge is actually possible, necessary or useful for humans (or for living organisms in general). Sharp criticisms of the central idea – information about the world is vitally important – have been among the central reasons why this question has received as much attention as it has. These critics have pointed out that in many cases acquiring representationally accurate or even truth-directed knowledge might not be useful for the living organism, or alternatively are simply too costly¹³⁶ (Wilson 1990; Hardcastle 1993; Derksen 1998; Sullivan 2009; O’Hear 1997, 57–66; O’Hear 2012; Zehetleitner, Schönbrodt 2015). Lastly, it has to be kept in mind that such criticisms of the knowledge-favouring interpretations of the evolutionary theory are centrally focused on the idea of representative knowledge.

the test area. Furthermore and far more troublingly for contemporary science: such an experiment should probably last for at least a few hundred years (but for stronger and more conclusive results thousands if not tens of thousands of years might be necessary). Whatever the exact length, it has to be long enough for an evolutionary selection to take place so that one can then evaluate the effect one’s manipulations have had on the studied organisms. Lastly, the organisms that participate in the experiment cannot be aware that they are actually living in an experiment. By now it should quite obvious why this kind of an experiment is highly unlikely to ever happen and anything less than this would have results of questionable usefulness for the evaluation of the issues raised in evolutionary epistemology.

¹³⁶ The aspect of costliness is here centrally relevant, because all information-acquiring processes take time and energy. But acquiring energy also takes energy and time. Additionally, the regular normal functioning of the living organism (its organs, etc.) takes energy as well. Because of this acquiring more detailed or more closely truth-directed knowledge might simply turn out to be too costly for the organism (including situations where at least principally the organism would be capable of acquiring more knowledge or better knowledge, but prefers not to, because that would go against its more important preferences). Alternatively, a living organism could have developed into such a form that it is fundamentally incapable of acquiring truthful or even truth-directed information about one or another thing. In such a case the costliness of greater knowledge-acquiring capabilities is centrally relevant as well.

These criticisms point out various situations where the cognitive limitations of living organisms become most apparent.¹³⁷ Zehetleitner and Schönbrodt (2015) have highlighted situations where erroneous beliefs can turn out to be beneficial. For example, monkeys systematically avoid snakes of certain colours – presuming that they are poisonous – even though not all this kind of snakes are poisonous. Yet, overall it is still beneficial for them to avoid this kind of snakes in general. This is also an excellent example of the cost-benefit balance: acquiring more nuanced knowledge about the poisonousness of snakes would require a significant amount of energy and effort, thus making it too costly. Instead, monkeys prefer to follow a simpler, but also significantly less costly rule of the thumb.

Similarly, by relying a hypothetically possible scenario Wilson (1990) highlights a theoretical possibility concerning humans. He points out that it is entirely possible for a new gene to appear and cause a change in the behaviour of humans that is beneficial, yet evoking entirely incorrect assumptions about the situation. For example, we might have two peacefully co-existing groups of people. This new gene might cause one group to become increasingly suspicious of the other to the point where they consider the other group an existential threat to their own well-being. All of this regardless of the actual peaceful relations they have always had. Thus, they decide to eradicate the neighbouring group and since they experience a heightened sense of fear and danger they are more motivated to fight and because of that succeed in eliminating the neighbouring group of people. Yet, all of this would be based on an incorrect assumption about the hostile nature of other people, yet it did result in a major success for their own group as they gained from land and resources solely for their own future benefit.

Elsewhere Sullivan (2009) has pointed out the limited nature of our visual sense of the world. He argues that it is practically useful for humans to think of the world as a place that is comprised of objects and their characteristics. If our eyes were more advanced (in other words, if we could see microscopic phenomena), things we consider coherent objects would no longer appear as such (Sullivan 2009: 74). One can also find similar arguments in many other adjacent fields of research. After all, many of the things researchers in the cognitive science of religion have pointed out would also apply here. One can just think about the Theory of Mind, its central role in human cognition and the subsequent flaws of thinking that come with it.¹³⁸ O’Hear has even found it possible to develop such arguments further and propose that based on the evolutionary development of humans we can only argue for the epistemological competence of humans in the context of the prehistoric savannah living environment, but we cannot deduce anything about the reliability of more modern ways of pursuing knowledge (including contemporary scientific practices!) (O’Hear 2012: 87–88).

¹³⁷ It has to be kept in mind here that all knowledge-acquiring processes of all organisms are always to some extent limited. Absolute knowledge would require limitless energy.

¹³⁸ See for the relevant discussions in Leech, Visala (2011b: 554–555), Barrett, Lanman (2008: 115–116), Bulbulia (2004b: 658–661), but also see section 1.1.1.

Although focusing on specific cases, these examples set the stage for significantly more far-reaching arguments, since all of them in different ways related to the larger issues of the practical limitations an organism inevitably must face and the limitations caused by the energy requirements that come with every action and choice. Timothy Shanahan (2008) has highlighted some inevitable structural limitations faced by all organisms by asking – why do zebras not have machine guns? Surely, they could defend themselves far better if they had developed natural defensive weaponry? Yet, if we look at how zebras have developed as organisms and their fundamental body structure, it becomes apparent that they have simply taken a very different evolutionary path. Developing biological defensive weaponry would of course improve their survival abilities, but it is also biologically impossible for them at this point of their biological-structural development.

The same issues are also present when we look at the epistemological abilities of living organisms in general: there is simply not enough time and energy to fully concentrate on such things, nor do very advanced world-comprehending capabilities appear to offer equally beneficial evolutionary benefits and thus overall organisms' world-understanding capabilities are likely to remain limited, fragmented and restricted. After all, as Valerie Gray Hardcastle (1993) and Nicholas Rescher (1990: 112–117) have pointed out, increased epistemological capabilities are only useful if the amount of energy spent on them is not bigger than what they gain in better comprehension of the world. And in this sense in many situations it may be evolutionarily more beneficial to be stupid than smart (Hardcastle 1993: 177–178)! Or as Wuketits puts it:

“For example, an earthworm will never exhibit the same behavioural capacities as a dog or an ape. The earthworm's “world picture” is much more primitive than that of dogs or apes. However, this does not necessarily mean that the earthworm is less fit; it might be that, under certain circumstances, the earthworm is fitter than dogs, apes, or other “higher” animals” (Wuketits 1990: 63–65).

Elsewhere Steve Stewart-Williams (2005) also shows how frogs might not be able to see anything else but the movement of things, but for them that is adaptationally enough.

Finally, a more systematic approach towards this issue can be found in Johnson et al (2014) where they distinguish between five main ways how evolutionary selection can possibly prefer false beliefs. First, there are adaptive misbeliefs – things that make one evolutionarily more successful, but are not necessarily true (Johnson et al 2014: 210–212). From the examples I highlighted one can here especially think of Wilson (1990), but also Zehetleitner and Schönbrodt (2015). Secondly, there is the error management theory perspective – evolutionary processes prefer the kind of approaches that are not too costly, thus it is likely to prefer solutions that are not quite correct, but which at least make it possible to avoid major mistakes (Johnson et al 2014: 212–215). The previously highlighted

discussions of Hardcastle (1993) and Rescher (1990: 112–117) very much relate to this aspect. Thirdly, there is the issue of deception – in some situations it might turn out to be beneficial to mislead others and thus increase preference towards false beliefs (Johnson et al 2014: 215–216). Fourthly, one can think of the potential epistemological consequences of the signalling theory as advocated by Rappaport, Sosis and others: from such a perspective signalling ‘correct things’ to the community can turn out to be more beneficial than actually pursuing ‘true beliefs’ (Johnson et al 2014: 216–217). Lastly, he also points out the influential human inclination towards imitating others. Should any of the earlier paths lead to misleading beliefs, humans are very willing to imitate each other and adopt the beliefs and behaviours they encounter among others (Johnson et al 2014: 217–219). Even more recent discussions this matter of truthfulness of beliefs and biological constraints has also been analysed by Wilkins and Griffiths (2013) who note that ‘truth-tracking’ should be seen as a certain kind of ecological interaction with the environment thus, for example, it is comparable to the efficiency of foraging or other such matters of efficiency, thus leading to the generalization that in light of inevitable limitations and costs:

“the evolutionary optimum of ‘truth tracking’ should be defined as obtaining as much truth and as little error as possible, given the intrinsic trade-offs between them, with the balance determined by the value of the truths and the cost of the errors, and with possible solutions constrained by the cost of cognitive resources” (Wilkins, Griffiths 2013: 138)

In general, all the specific cases as well as the theoretical arguments here show how complicated the whole issue genuinely is. However, they do not fundamentally undermine the central tenets of the evolutionary epistemology. It is easy for the evolutionary epistemologist to argue that one or another example is merely a specific case in relation to one type of cognitive ability or one species and actually our very ability to recognize such situations proves humans’ higher cognitive and epistemological abilities and thus gives further strength to their science-centred argumentation. This is pretty much how Wuketits (1990) and Stewart-Williams (2005) have argued following such examples.

Of course one could accuse such an argumentation of deliberate circularity, but even if we leave that aside evolutionary epistemology still faces major problems with regards to the original question: how much do we actually need to know? Thus far researchers in the evolutionary epistemology have not been able to come up with clear criteria for (a) identifying the absolute minimal necessary amount of cognitive-epistemological abilities,¹³⁹ (b) evaluating the general level of trustworthiness of human knowledge,¹⁴⁰ (c) or general criteria for the evaluation

¹³⁹ Either specifically for some species (for example, humans) or in general. Either one would be an improvement compared to the current situation.

¹⁴⁰ Since the trustworthiness of the epistemological capabilities of all other organisms are always evaluated from the human perspective, this is centrally relevant for the evaluation of all the epistemological trustworthiness of any or all living organisms.

of the cognitive-epistemological capabilities of living organisms.¹⁴¹ However, without such criteria explanatory schemes offered by evolutionary epistemologists remain competitive theoretical hypotheses that cannot be tested or controlled. This, of course, does not disprove any of those hypotheses either, but the field of research as it stands right now is lacking a proper foundation for differentiating between more and less convincing perspectives.

4.1.5. Is it possible to justify any specific philosophical positions based on the evolutionary epistemology?

Possibly the hottest and certainly the most persistent debate in the evolutionary epistemology is focused on whether we can find conclusive support for any specific position or “ism” from the evolutionary theory. For some (for example Vollmer) this question is indeed so central that all other issues evolutionary epistemology deals with are only relevant so far as they help to solve this one.

In general, as already noted in the historical overview, there are two prevailing, competing views in this matter. On the one hand, many argue in favour of hypothetical realism, from Campbell (1982) to Vollmer (1990), Oeser (1988), Riedl (1984) and Wuketits (1988). In sum, they argue that having truth-directed knowledge about the world is so important for living organisms in their pursuit of maximizing survival and reproduction that the information they acquire about their living environment has to be adequately representing the place they find themselves in. Living beings must have realistic knowledge of the world around them, even if only in limited amounts and on select issues. Therefore our knowledge of the world must be of the ‘representative realism’ kind. Furthermore, the trustworthiness of scientific knowledge is central to their pursuit, thus they also insist that scientific knowledge serves as a realist representation of the world.¹⁴² They prefer to call this position not just realism, but hypothetical realism because scientific knowledge is incomplete and in principle could be falsified, thus their position at best will always remain hypothetical.

Defenders and advocates of the pragmatic and functionalist positions¹⁴³ (Derksen 1998; de Regt 1998; O’Hear 1997; Diettrich 1997; and also Wuketits in his later writings (1995, 1997a, 2000, 2006)) rely on the same basic premises, yet reach a rather different conclusion. They put far more emphasis on the dynamic

¹⁴¹ This is obviously closely related to the criticism of Christensen and Hooker (1999) that I highlighted in the end of the previous section considering the general lack of criteria for the comparative evaluation of different cognitive abilities.

¹⁴² It should be noted that because of this, if it did turn out that our knowledge of the world is actually pragmatically or functionally inclined and not a realist representation of the world, the theorists in support of this position would also see it as a major problem for the representativeness of scientific knowledge as well.

¹⁴³ I am here going to analyse them together because at a closer look they are actually very similar to each other and their minor differences are not relevant in the context of this discussion.

and flexible relationship of the organism and the environment, they point out the notable and inherent cognitive limitations of all organisms and they stress the need for practically useful knowledge (not just knowledge of the world as such). And therefore they argue that our knowledge acquiring abilities are primarily pragmatic. These abilities are not meant for understanding the world as such, nor are they able to gather knowledge about everything that happens around us. It could be said that for the pragmatist, representative knowledge of the world would simply be too costly to acquire in the complicated situation living organisms find themselves in. By this they are not excluding the possibility of situations where realistic representation of the world might actually turn out to be pragmatically useful, but they would argue that these are merely isolated exceptions and in general realistic knowledge about the world is not worth the effort.

However, it is true that it is possible to derive both perspectives from premises the evolutionary theory offers us. Yet, both of them also share the problem that neither side has managed to prove the erroneousness of other side's arguments. Furthermore, thus far it has not been possible to empirically study, prove or disprove either one of the two perspectives. It would appear that in the context of the limited nature of our research methods, it is theoretically possible to derive all sorts of different conclusions out of the evolutionary theory, without really being able to exclude alternatives either. This has caused many to argue in favour of the inevitable philosophical ambivalence of the evolutionary theory (Bradie 1990: 33–38; Stein 1990; McLaughlin 2005). De Cruz and De Smedt (2013) have indeed taken this so far as to show that in principle it is possible to derive both supportive as well as dismissive arguments from the evolutionary theory in favour or against every single position.

I will return to this in the second half of this chapter as I look into the issue of religiosity and evolutionary epistemology, but here it is important to note that as long as the two aforementioned issues – the lack of proper criteria for the evaluation of the knowledge-acquiring process and the lack of empirical research – have not been overcome, one cannot really prove or disprove any one of the epistemological or metaphysical positions one might deduce from the theory of evolution. However, all of this still does not prove wrong the basic premise of evolutionary epistemology. Even in this uneasy situation, the evolutionary epistemologist can still argue that if the theory of evolution is true, some variant of the presented arguments must be true. This does not really tell us much, since it still leaves the door wide open for all sorts of positions. Yet, even here many of the evolutionary epistemologists would object to my arguments, noting that empirical research is possible and there has been plenty of it. By doing this they are not disputing my claim that there has not been any direct research into the hypotheses raised in evolutionary epistemology, rather they are arguing that natural sciences have proven to be so reliable in the human knowledge acquiring pursuit, that we can simply rely on everything done in natural sciences regardless of the circularity arguments raised against such a perspective. This is an argument that needs a closer look.

4.1.6. The issue of circularity – is science a reliable basis or not?

As noted, it is central to the evolutionary epistemology to presume that scientific knowledge is the most trustworthy type of knowledge available to humans. Because of that it is assumed to be justifiable to treat it as the basis of all subsequent epistemological research. Quite predictably, this way they open themselves to the criticism of circularity. However, they do not see this as a problem.

In its classical form this argument can be found in Vollmer (1990: 165–170) as he argues that scientific knowledge has made it possible to go beyond our humanly limitations and thus reach objective knowledge. Scientific methods make it possible to observe and study things that would remain inaccessible for human beings if we relied solely on our own sensory abilities. Obviously, this has caused many to argue that evolutionary epistemology does not have anything noteworthy to say to or about philosophy, since they are merely interpreting scientific knowledge based on their premises and goals, but they are not answering any philosophical questions nor solving any of them (Falk 1993, Thomson 1995, etc.). Yet, evolutionary epistemologists do not see this criticism as much of a problem, since they have never denied the existence of this kind of a circularity in their programme. They draw attention to two main reasons why they think this kind of a circularity is actually justifiable.

First, they are very eager to note how classical philosophical epistemology has never really managed to start from a ‘complete zero’ either (Vollmer 1990: 211–217; Vollmer 1987; Bradie 1989: 401–403); instead suggesting that this kind of a perspective is unachievable anyway. As one evolutionary epistemologist notes, even Descartes relied on the best scientific knowledge available at his time, thus we as well ought to rely on everything available to us (C. U. M. Smith 1989). Therefore, they argue that classical epistemology has failed to reach its goal and evolutionary epistemology ought to be considered the more preferable approach that is actually capable of achieving its goals and solving the problems it presents (Riedl 1984: 5–12; Heschl 1993).

Secondly, they are also focusing on situations where circularity is actually a positive feature. Vollmer (1987: 183) highlights the way we produce hammers – with other hammers of course. De Cruz et al. (2011: 526–530) on the other hand point out how we distinguish edible objects from non-edible objects – here relying on all the earlier knowledge is also very useful. Basically, they are arguing that this kind of a logic also applies to scientific knowledge and thus reliance on all earlier scientific research is justifiable (Vollmer 1987: 182–188). Vollmer does not find it problematic either to argue that based on scientific knowledge our ability of induction is an evolutionary adaptation and thus it is a truth-directed and an epistemologically useful function (Vollmer 1990: 158–161).

Still, there are good reasons to disagree with such arguments. As noted previously, these arguments about the reliability of science suggest that scientific tools have made it possible for humans to go beyond our normal cognitive limitations. Knowledge about things we cannot directly observe with our own sensory abilities has been “packaged” into such a form that humans as well can learn about them

and observe them. Both telescopes and microscopes serve as classical examples here. Yet, to justify this one ought to either show that scientific research tools are indeed trustworthy auxiliaries for epistemological pursuits, or at minimum one ought to at least show that at least with our cognitive abilities no problems or limitations can be detected regarding these scientific tools. Unfortunately, evolutionary epistemologists have not done this and as Clark (1986) points out, they have instead very successfully highlighted the cognitive limitations of human beings for all such endeavours. All the knowledge humans can acquire must always be presented in such a way that our limited cognitive abilities are able to receive and understand them (Clark 1986: 155). Basically, if one is to argue that science makes it possible for humans to overcome one's limitations, then science should be able to "translate" too complex knowledge without losses into such knowledge that we can comprehend. Yet there are reasons to be hesitant about this. For one, how could we actually determine to veracity of this "translation" to find out whether knowledge was indeed "repackaged without losses"? And secondly, as some have noted based on studies of simple cases, technical instruments used in science might not be as unquestionably reliable as evolutionary epistemologists make them seem after all (Ratliff 1971).¹⁴⁴

Also, it should be apparent by now that evolutionary epistemology does not offer any strong arguments in favour of the remarkable representativeness of scientific knowledge either. As Rolston (1995) very succinctly notes in his criticism of Wuketits (1990), evolutionary epistemologists on the one hand want to show how all human knowledge is influenced and dependant on our biological background and the process of evolutionary selection, yet on the other hand they argue that human knowledge in its scientific form has superseded one's limitations and thus reached a level of trustworthiness. But if one is really going to take the evolutionary argumentation seriously, then it is rather problematic to argue at the same time that humans have actually partly overcome their biological development in some aspects of their activity! Of course, advocates of evolutionary epistemology could still argue that isolated cases do not disprove otherwise widespread reliability, yet the bigger problem here is that we would still be lacking proper methods for distinguishing such 'isolated cases' for the supposed, more general field of cases with which there are no problems.

Furthermore, turning back to the specific arguments presented in defence of circularity, it is important to notice how the actual circularity researchers are practising in the evolutionary epistemology differs from the examples they have used to justify it. When we produce new hammers by using existing hammers, the production of hammers is the goal of our activity. The same applies to the

¹⁴⁴ Furthermore, as neurological studies have shown, understanding or recognizing something also includes an inevitable destruction in information, since even the simple act of recognizing someone's face leads to the ignoring all the data unnecessary for that act of recognition. This same neurological behaviour of recognition and ignoring is thus also inevitably present in science as practised by human beings (d'Aquili, Newberg 1999: 36; Newberg, d'Aquili, Rause 2001: 29–30).

example of distinguishing edible objects from non-edible objects, where goal is clearly to acquire of energy. In both cases we are – within our cognitive limitations – capable of determining whether the process was successful or not. But in evolutionary epistemology it is commonly presumed that scientific knowledge is the representative depiction of the world around us and based on the evolutionary theory they argue that our knowledge of the world most probably presents the world through the lens of hypothetical realism. In other words, this perspective first presumes that human knowledge represents the world in a realist manner and based on that argues that humans have a tendency to acquire representationally realist knowledge about the world. Yet, in all of this, it is not at all clear how we should be evaluating the successfulness of this circular process. Indeed, how can we determine whether this process did give us new or additional knowledge or not? In this sense, the actual circularity they practice is noticeably different from the examples they have used to justify this process. Unlike the processes of hammer-production and food-finding, the realist interpretation of scientific knowledge and the subsequent inference of realism based on that does not offer us clear criteria as to how we evaluate the successfulness of this process. Success should here mean an increased or improved understanding of the world, but due to the inevitably limited position of the human being we are simply not capable of evaluating the successfulness of the circular process in such a situation. Or, at least no one has thus far managed to come up with a way how we could do this.

4.1.7. In conclusion: evolutionary epistemology, the current situation

The analysis I have presented in this chapter thus far should indicate just how complex the current situation is. On the one hand, there are several clear conclusions one can make about the necessity and usefulness of truth-directed knowledge for all living organisms in the evolutionary development. On the other hand, we are lacking proper methods, tools and conceptual criteria for the proper evaluation of that developmental process. For the advocates of evolutionary epistemology this has caused much stress, since their research programme has not had as much success with biologizing traditional philosophical epistemology as they have hoped and thus it has not succeeded in replacing philosophical epistemology. Yet, evolutionary epistemology has not managed to establish for itself a solid empirical foundation either and thus researchers in the natural sciences view it with equal suspicion.¹⁴⁵

In a way, all of this might make some argue that evolutionary epistemology is a failure as a research programme. After all, it has not managed to reach any of its initial goals, nor has it managed to develop itself into an empirical research programme or/and into a way to biologize epistemology. Nevertheless, this

¹⁴⁵ For a more thorough analysis of the issue whether evolutionary epistemology really is an attempt to biologize epistemology or simply an alternative research programme, see Peedu (2015d: 77–80).

failure can be a very intriguing conclusion in itself. For one, a negative result does not mean scientific irrelevance or that nothing of importance has been learned through it. After all, if researchers at CERN had never found the Higgs boson, that in a way would have been a failure, a negative result as well. Still, it would have also been a very significant result. And in this sense the most notable result of the evolutionary epistemology is the negative result: due to the limitations of human cognitive abilities it is not possible (right now or maybe never) to answer philosophical questions by relying on research in the natural sciences. Theoretical possibilities remain, but it is not possible to study these empirically.

Additionally, this “negative result” also has one very significant conclusion for the larger issues I have dealt with in this thesis. Namely, based on all existing research one cannot derive conclusive arguments in favour of any specific position that would also rule out potential alternatives. In fact, it is hard to properly rule out any specific positions at all. This in turn means that at it could be possible to also develop perspectives that explain and justify religious perspectives and positions based on the theory of evolution. This is something I intend to look into more thoroughly in the remainder of this chapter as I highlight the true variety of possibilities available to an evolutionarily oriented researcher.

4.2. Religion, evolutionary epistemology and the possibility of alternative perspectives

The analysis I have developed thus far hopefully has highlighted the peculiar position an evolutionarily oriented researcher finds oneself in epistemologically. As I brought out in the earlier chapters, emphasizing a strictly naturalistic perspective is central to the contemporary ideas of scientificity in evolutionarily oriented research programmes. All sorts of theoretical arguments are also presented to justify that orientation and the general insistence on methodological naturalism as the only proper position for scientific research. Yet, as a closer analysis of these arguments quickly reveals, none of them have convincingly shown why methodological naturalism should be the only justifiable option for the study of religion. Furthermore, as extensive discussions and disputes in evolutionary epistemology have shown, one cannot conclusively show that evolutionary theory would have any specific metaphysical or epistemological consequences. Quite the opposite in fact.

Here I intend to take a closer look at the outcomes this lack of specific conclusions will have in epistemological issues. Since overall I am dealing with issues immediately relevant for the study of religion, I intend to focus on the example of religiosity and the possibility of interpreting it from the perspective of evolutionary epistemology. Through such an example one can see even better how evolutionary theory is entirely open to options alternative to the currently dominating naturalistic perspective, yet these options also come with serious limitations with regards to practical research. For a thorough explication of this

situation I am initially going to give a short overview of the few existing treatments of religiosity developed by evolutionary epistemologists. This will be followed by drawing attention to a few additional philosophical perspectives that are going to be very useful for the development of this alternative view on religion and lastly I will show how an entirely non-naturalistic interpretation of the evolutionary theory is also possible with regards to religiosity.

4.2.1. Existing analyses of religion in the evolutionary epistemology

Religion or religiosity as issues to analyse and explain have not received much attention in the evolutionary epistemology. But there are a few cases that do deserve brief analysis.

Among evolutionary epistemologists, Franz Wuketits has perhaps given this topic most thought. In his only article dealing specifically with this topic (Wuketits 1987b) he argues that evolutionary epistemology has very important anthropological consequences (Wuketits 1987b: 217). Yet, in his subsequent discussion he concentrates on the supposedly unique human ability of self-consciousness and argues that the primary reason humans have developed religion and metaphysics is the human consciousness of one's own mortality (Wuketits 1987b: 217–218, 220–222). This explanation is noteworthy for its complete lack of evolutionary epistemology. He also invokes a rather similar explanation in his book-length analysis of evolutionary epistemology, suggesting that religion is merely a solution for human existential needs (Wuketits 1990: 198–200). However, he does subsequently bring up evolutionary epistemology in that earlier article, yet only to suggest that one can evolutionarily disprove human metaphysical conceptions and show how misled these are (Wuketits 1987b: 224–227).¹⁴⁶ For Wuketits evolutionary epistemology is mainly focusing on knowledge that we would describe as 'rational' and predictably for him everything concerned with religiosity is thus categorized as 'irrational' (Wuketits 1987b: 227). Curiously, he is also, in the same article, arguing that evolutionary epistemology cannot say anything about the truthfulness of specific beliefs, but only about the origin and development of the processes through which we have acquired such beliefs (Wuketits 1987b: 226). Such obvious contradictions and the generality of his discussion overall indicates that he did not spend much time analysing the topic at hand.

This kind of a lack of interest in treating religiosity from the perspective of evolutionary epistemology turns out to be a persistent theme in the field. For example, Campbell (1982, 1987, 1997: 21–22) also does not find the issues of religion and culture particularly interesting to consider and instead refers to the

¹⁴⁶ Of course, as I have highlighted in my extensive analysis of the topic, Wuketits is here being overly too optimistic about the prospects of evolutionary epistemology and at a closer look this research programme has not been nearly as successful as he is hoping in his earlier writings.

theories of Boyd and Richerson¹⁴⁷ as explanations of such matters. Similarly, in a more recent analysis of the issue, Stewart-Williams (2005) simply suggests that religion would be better explained through the cognitive theory of Guthrie (1995). Aside such instances, religion has received practically no attention in the evolutionary epistemology, quite similarly to culture in fact. Both are overwhelmingly regarded as too complex topics to really analyse from an evolutionary perspective (Wuketits 1990: 123–127; Plotkin 1997a: 179–227; Campbell 1987; etc.).¹⁴⁸ Despite that at least Plotkin (1997a) does tackle the issue of culture head-on in his generalized, four-level theory of learning. After all, socio-cultural learning occupies the fourth level of that theory, indicating the kind of learning that is at the same time fastest in its adaptation to the changing environment (compared to the genetic level), but also the least reliable level (compared to the genetic level) concerning the trustworthiness of the acquired knowledge.

This lack of interest in issues of religiosity (or culture for that matter) is quite disappointing. Obviously, knowledge is very much a matter of culture and religious knowledge as such is certainly just as much open to an evolutionary treatment as any other form of knowledge. Of course, if one were to adopt Plotkin's perspective, then cultural and religious knowledge would become only a part of the wider epistemological dimension, since his perspective would significantly widen the concept of knowledge as such. But, even then religiosity would not become a topic so insignificant as to not warrant any attention. In my subsequent analysis I am going to highlight one provocative avenue available for someone interested in the analysis of religion from the perspective of evolutionary epistemology.

4.2.2. Foundations for an evolutionary epistemologist perspective on religiosity

Given this disappointing lack of or superficiality of interest in looking at human religiosity from the perspective of evolutionary epistemology, what kind of options could be available for the one who wanted to seriously analyse religiosity from this perspective?

First of all, it is apparent that if such a perspective were to be developed, one should be primarily focusing on “religious knowledge” as such or on “religious worldview” more generally speaking. In other words, an evolutionary epistemology of religiosity should be directly addressing the issue of religious knowledge and its reliability from the perspective of the evolutionary theory. Furthermore, based on the earlier analysis of evolutionary epistemology, methodological

¹⁴⁷ For example, see Boyd and Richerson (1985).

¹⁴⁸ It should be noted, though, that there is at least one book-length treatment of the issue of evolutionary epistemology and religion (Lüke 1990), but this approaches the issue from a specifically theological perspective, therefore mostly analysing topics such as the interrelationship of theology and evolutionary epistemology, the consequences of evolutionary epistemology for theology (and vice versa) and so on.

naturalism and the limited support they offer, a deliberately alternative perspective on religiosity could also abandon the naturalistic premise that contemporary research generally relies on. This would not go in conflict with the evolutionary theory in any way. Strictly speaking, evolutionary theory does not tell us anything about the environment of the living organisms. Rather, it is focused on the effects the characteristics and changes of the living environment have on the living organisms and their abilities of reproduction and survivability (and also vice versa as living organisms are capable of changing their environment (to an extent)).¹⁴⁹ The naturalistic premise has been a common, practical tool for determining what kind of phenomena ‘actually exist’ or ‘do not exist’. But, naturalism is not inevitable to an evolutionary study and due to the philosophically ambiguous nature of the theory and its general lack of focus on the environment of the living organisms (aside for the fact that the existence of some kind of an environment is assumed) the evolutionary theory leaves it to the researcher to determine what the environment is actually like, what kind of causes, phenomena and characteristics play a role and what do not. If so, then it is possible for a researcher to argue that knowledge of “supernatural objects/phenomena”¹⁵⁰ is having some kind of an evolutionary effect on the behaviour of the living organism without going in conflict with the evolutionary theory.

To pursue further with this line of argument it becomes centrally important to develop a clear and conceptually well-developed perspective on religious knowledge. One can then base a proper analysis of the evolutionary significance of religious knowledge on that perspective. Of course, it is possible to rely on all the research done in the various subfields of the study of religion thus far. But more specifically, from an evolutionary perspective one can also look into the cognitive and behavioural analysis of religious worldviews and analyse this as study of religious knowledge. Additionally it is important to notice the significance of a few closely related trends in philosophical epistemology. Namely, I have in mind

¹⁴⁹ One need only look at the main topics Shanahan (2004) or Sober (2000) focus on in their historical evaluation of Darwinism (selection, adaptation, progress and so on for Shanahan; creationism, fitness, units of selection, adaptationism, systematics and so on for Sober) to notice how evolutionary theory is not presenting anything but the most vague views about the environment of the biological organisms. All of these topics obviously assume the existence of the living environment, but beyond that say little to nothing about its characteristics. One could perhaps say that it only assumes the existence of a variety of environments, a relative lack of static sameness (in other words: the natural environment varies and changes from place to place, as well as over time) and the basic rule which could be summarized as: should there be living organisms in environments, their survivability and reproductive success will be determined by evolutionary mechanisms.

¹⁵⁰ One should very much think of this usage of ‘religious objects/phenomena’ as merely an heuristic tool to convey the basic message of this discussion. It is meant merely as a conceptual signifier of anything that religious people understand themselves to be in contact with, or talking about or making sense of. Additionally one can also think of this as a signifier of anything the naturalistic presumption does not allow into evolutionary research perspective. (All of this does not mean that these two aspects are entirely the same, though they certainly do overlap to a significant extent.)

Reidian epistemology, common-sense philosophy and the extensions of both of these into the epistemological evaluation of the cognitive science of religion. Due to their significant similarities with the evolutionary epistemology, Reidian and common-sense perspectives make it possible to conceptualize religious knowledge as something directly addressable through evolutionary epistemology. To make this easier to understand, a short look into Reidian philosophy, common-sense perspective and related arguments is necessary.

The philosophical reflections of Thomas Reid are something that for long received very little attention and little research was done on Reid.¹⁵¹ This has greatly changed in the recent decades, as researchers, philosophers and theorists from all sorts of backgrounds have begun to take notice of Reid's philosophy (Kroeker 2015; Wolterstorff 2001: ix–x; Nichols, Callergard 2011; etc.). Of course, similarly to many other significant philosophers, Reid does not offer a complete, coherent and systematic theory either (Wolterstorff 2001: 1–3). Some of his ideas have received more attention than others, but here the most noteworthy Reidian developments are those related to his epistemology, specifically to his famous doctrine of common-sense. This idea of common-sense philosophy is probably the best-known part of his philosophy, yet as Wolterstorff notes, it is probably also the least clear and most contradictional part of his philosophy (Wolterstorff 2001: 216–231). In a sense for Reid common sense notions are the kind of things we all take for granted and know. Common-sense notions are self-evidently true for human beings. As human beings, we could not function if we did not already know these things, some basic knowledge is inescapably necessary to function in this world. Yet, as Wolterstorff shows, Reid's ideas of common-sense remained imprecise and it was never entirely clear what exactly qualifies as part of the common-sense and what does not. Thus, as he concludes his analysis, two quite different lines of thought were in conflict in his mind: “He thinks of the principles of Common Sense both as *shared first principles* and as *things we all take for granted*” (Wolterstorff 2001: 220; all italics are his). However, regardless of these problems this is the part of Reid's philosophy that has undoubtedly received most attention and further argumentative developments in subsequent discussions in relation to both the theory of evolution and religiosity.¹⁵²

In the context of the wider discussions and arguments of this thesis, the most intriguing subsequent development of Reidian ideas comes from Stephen Boulter (2007b). Boulter argues that philosophy ought to move away from the Cartesian starting point and should instead rely on a common-sense perspective and treat

¹⁵¹ In the subsequent treatment of Reid I am mostly going to rely on Wolterstorff (2001). Delving into the extensive writings of Thomas Reid himself is not necessary in this context as I am mainly interested in the later developments and interpretations of the Reidian, common-sense perspective and these are not necessarily all consistent with all the details of Reid's own ideas and arguments. Furthermore, a thorough study of Reid's philosophy would simply go beyond the limits of this thesis as ideas inspired by his writings comprise only a small part of the whole work here.

¹⁵² It should be noted that Reid himself never really found the question of religious knowledge interesting or noteworthy; it remains unclear, why (Nichols, Callergard 2011).

common sense beliefs as default positions for all kinds of subsequent discussions and arguments (Boulter 2007b: 18–25). Following Reid, Boulter argues that common sense beliefs are “those views regarding the nature of things which are *presupposed* by ordinary everyday beliefs and abilities” (Boulter 2007b: 27). In other words, these are the kind of views that underlie all our actions, understandings and conscious views. The intriguing aspect of Boulter’s argument – and also the part where he clearly differs from Reid as he makes use of contemporary developments in scientific research – is his application of evolutionary epistemology to justify the reliability and trustworthiness of these common sense beliefs (Boulter 2007b: 36–49).

His precise argument, as he presents it point by point, invokes most of the common arguments found in evolutionary epistemology: organisms need to be able to cope with their environment; this includes finding food, avoiding predators, finding mates and so on. For this, the organism needs to have both good bodily abilities as well as proper cognitive capabilities to guide one’s behaviour. Reliable cognitive capabilities are thus evolutionarily beneficial for organisms and the views and beliefs we have about the world influence (either positively or negatively) our ability to thrive in the world. Thus, overall it is evolutionarily preferable to have accurate beliefs about the world and natural selection will favour those who are more capable in their belief-forming processes. This leads Boulter to the conclusion that our common-sense beliefs are exactly those beliefs that evolutionary processes have forced us to adopt because these help us succeed in the world as they are true and reliable. (Boulter 2007b: 39–45)¹⁵³

As already highlighted in my earlier analysis of evolutionary epistemology, such an argumentation comes with many problems and evolutionary epistemology has not turned out to be anywhere near as successful a way to justify the reliability of any specific views about the world. But, despite that the similarity of arguments between Reid and evolutionary epistemologists is noteworthy and one can certainly make use of the evolutionary theory to justify the existence of some kind of basic premises.¹⁵⁴ The problem rather remains that both approaches have struggled with reaching specifics: evolutionary epistemology does support the conclusion that reliable knowledge about the world is something we have to have, but has failed to specify which beliefs are reliable and which are not; common sense philosophy on the other hand has struggled with specifying the exact list of these common sense beliefs. Still, this is not an insuperable obstacle in the context

¹⁵³ Boulter is not the only one to note the similarity between evolutionary epistemology and Reidian common sense philosophy. De Cruz and De Smedt (2013) also point this out, but contrarily to Boulter argue that evolutionary epistemology (and also reformed epistemology) rely on a Reidian interpretation of proper basicity whereas Boulter rather sees evolutionary epistemology as the premise that can justify a Reidian approach to epistemology. Furthermore, from the perspective of the history of philosophy, Daniel N. Robinson also argues that one can find ideas analogous to Darwin’s theory of evolution in Reid’s treatment of the common sense and thus in a sense Reid’s perspective is Darwinian (Robinson 2014)!

¹⁵⁴ One can here, again, think of Lorenz’s and Plotkin’s arguments about hooves as such being innate, genetic knowledge about the world the horse will find itself after being born.

of this discussion as I am not planning to present an argument in favour of the truthfulness of something specific, but rather merely planning to show the possibility of it.

Turning to the issue of religiosity and religious beliefs, Boulter strongly argues against including anything religious in that basic list of common sense beliefs. For one he points out the apparent lack of agreement between various religious communities to suggest that we are lacking universally assumed beliefs in religious matters and thus common sense says nothing about religious matters (Boulter 2007b: 28). However, considering his insistence on the fundamentality and unconscious reliance on these common sense beliefs, a culturally visible, conscious disagreement is not in itself enough to rule out religious beliefs in general. Because of that he does return to the topic of religious beliefs later on. There he argues that the issue of beliefs appears to be so complicated in the study of religion, lacking proper agreement or criteria for determining the basic religious beliefs that this simply does not make it possible to accept any religious beliefs as part of the common sense. Furthermore, he points out some of the research done in the cognitive science of religion to argue that there are no evolutionary justifications for including religious beliefs. (Boulter 2007b: 47–49)

Yet, there are good reasons to find such an argument unsatisfactory. First of all, one can think of all the existing research in the cognitive science of religion, in the behavioural ecology of religion and in other related evolutionary approaches to religiosity. These research programmes point out how religiosity has developed evolutionarily and how humans have a natural tendency to think in ways we have chosen to describe as religious. As McCauley (2011) bluntly put it: religion is natural and science is not. Elsewhere others have also pointed out that despite all the internal disagreements about smaller details, these fields of research have thoroughly highlighted just how inborn religiosity as such is and thus how naturally capable our cognitive faculties are for dealing with religious matters (Clark 2010a; Clark, Barrett 2011; Geertz, Markusson 2010; etc.).¹⁵⁵ This has motivated Clark and Barrett (2011) to argue that we can indeed present a Reidian interpretation of religious beliefs. They point out how contemporary research has highlighted the existence of ‘naïve physics’, ‘naïve biology’, ‘folk psychology’ and other widespread, prevalent and basically intuitive understandings we have about the world (Clark, Barrett 2011: 651).¹⁵⁶ These they see very much in a Reidian perspective as our intuitive common sense beliefs about the world, but from such a perspective on the Reidian common sense and what should be seen as part of it, religiosity in one way or another should definitely be part of it as well. As Clark and Barrett put it: “with respect to belief in the divine, it seems

¹⁵⁵ But, see also sections 1.1.1. to 1.1.4 where I also highlight most of the research that points towards this conclusion.

¹⁵⁶ It deserves to be noted that Nichols and Callergard (2011) in their evaluation of recent Reidian interpretations of religiosity also argue that they find the interpretation of Clark and Barrett most intriguing and also the one Reid himself most probably would take seriously, if he were alive today.

plausible to suppose that we do, indeed, have a natural, instinctive religious sense” (Clark, Barrett 2011: 652).¹⁵⁷

Clark and Barrett use this to show why many cognitive-science-based arguments about the supposed unreliability and untruthfulness of religious beliefs are inadequate and do not actually disprove anything. But, right now the most noteworthy part of their discussion is that this analysis of religiosity does not try to invoke any specific religious beliefs as such. Such an approach would probably run into the problems highlighted by Boulter indeed. Instead, they are talking about a natural, instinctive *religious sense*. I find this crucially important as it also makes it possible to avoid many of the problems evolutionary epistemology ran into as it tried to discern arguments in justification of specific ideas and positions.

This is the approach I am going to pursue as well – it is better to think of religiosity as something we have a strong, innate potential for and a tendency towards – it is this cognitive talent, predisposition that I would generally describe as the instinctive *religious sense*. Humans have a tendency to approach issues in specific ways and think about things they come across through similar frameworks. One can think of all the talk about HADD and ToM here as the most straightforward examples. Furthermore, humans have natural inclinations to focus on some issues (social relations, finding mates, finding food, etc.) more than others, but also, even more fundamentally, humans have well-developed cognitive capabilities to deal with various topics (literature, visual arts, politics, and so on). Thus, when we think of religiosity as a human universal and as something that we have a well-developed cognitive ability to deal with, this ability can be thought of as a potentiality for religious thought and behaviour that has developed evolutionarily and that we can thus analyse through the perspective of the evolutionary epistemology. From this perspective determining the relationship of religiosity and the Reidian common sense philosophy is no longer a matter of finding any specific universally (and unconsciously) present religious ideas, but rather focuses on the predispositions and natural talents humans have for one or another thing, religiosity among them. This will be the basis of the hypothetical alternative that I will present in the next section of this chapter.

4.2.3. A theoretical alternative to the current perspectives

The discussion thus far has already highlighted many of the central aspects to the alternative that is theoretically available to the prevalent naturalistic perspective. First of all, abandoning the premises of naturalism opens up the possibility of also including non-naturalistic entities, mechanisms and causes into the bigger, explanatory picture. From such a perspective these kinds of phenomena can play

¹⁵⁷ Elsewhere, in more theologically oriented research this kind of discussions have led many to point out how much of the research in the cognitive science of religion actually has strong similarities to the theological concept of ‘sensus divinitatis’ in their conclusions about human religiosity as such. See Leech, Visala 2012; Clark, Barrett 2010; Clark 2010b.

a part in the evolutionary development of the living organisms, should they or biological organisms' understandings of them and possible relations to them in any way improve or decrease the overall fitness of the organisms. Religious knowledge can be viewed and treated as any other knowledge – it is simply one of the ways human beings acquire knowledge about their living environment. It can theoretically be both beneficial or detriment for the human being, as any other knowledge humans acquire. As I have shown in the previous chapters as well as earlier in this chapter, the overwhelming majority of evolutionary researchers consider religiousness a natural, innate ability of the human being – a religious sense, as I named it previously. Furthermore, if it is such a universal ability, then it is justifiable to consider it part of the human common sense (that has developed evolutionarily over the course of history) – it is one of those things we have a natural inclination towards and based on evolutionary epistemology it cannot be completely misleading (but it could possibly be very limited). Additionally one could hypothesize that all of that which we like to classify “supernatural” is possibly in some sense discernible for humans. Now, if the discernibility of those supernatural or non-naturalistic phenomena had any positive evolutionary effect – in other words, if those capable of discerning those phenomena gained something from it – then it would start playing a part in the larger picture of evolutionary selection, fitness, reproduction and so on.

In such a case one could legitimately propose an evolutionary hypothesis according to which the ability to acquire and discern knowledge – about the part of the world that we these days like to categorize as supernatural – developed because it turned out to be an evolutionarily beneficial aspect of human sensory and cognitive abilities for those who were able to determine how knowledge about the supernatural improves one's fitness and thus such an ability gave these organisms an advantage over those that did not have it. Of course, this ability¹⁵⁸ would have to be cognitively quite limited because living organisms have much more urgent concerns (finding food, finding mates, avoiding dangers, etc.) to deal with. Furthermore, in the context of bodily limitations and the inevitable shortage of available time and energy it would be quite unlikely (but not impossible) for any organism to be very proficient or capable in this regard.¹⁵⁹ Because of the same reasons as presented previously regarding comparable matters, it is just as justifiable to argue here as well that at minimum human comprehension of the

¹⁵⁸ It should be noted that there is no reason to assume that this ability would require any separate cognitive organ or function to exist. Clark and Barrett's (2011) talk of an instinctive religious sense does not in any way necessitate the existence of a separate organ or function either. If one abandons the naturalistic premise, “this world” and “the supernatural world” would no longer be presented as radically separate and thus anything we categorise as supernatural would simply be part of the same “complete existence” as everything else and thus we would be using those very same cognitive functions – very few if any of which are devoted to just one or a few issues or functions – to perceive and process everything and anything we would describe as supernatural or such.

¹⁵⁹ However, this obviously would also not rule out very rare ‘anomalies’ – people with unusually potent abilities in these matters.

“supernatural” (in whatever form) should be at least in some sense or way truth-directed.¹⁶⁰

This hypothesis also makes it possible to present hypotheses that are more specific. To use a very simple example, what if it turned out that going to the church every Sunday, living a “good Christian life”, participating in other activities of the church and generally staying faithful to the Christian values of the community guarantees one blessedness and an eternal life in the Heaven? The amount of energy and time required to do that is insignificant compared to the potential reward one can gain from it. After all, that would indicate a huge increase in the human survivability and overall fitness and all of this thanks to the human ability to discern supernatural phenomena. Of course, in such a case people would obtain that “benefit” only after their death in “the other world”, but still the ability to know about this possibility and the benefit one would gain from it would begin to greatly affect human behaviour and decisions already in “this world” and therefore taking supernatural phenomena into account would begin to have an effect on humans’ evolutionary development already in their current lives as well.¹⁶¹ In any case, this is merely one of the many more specific hypotheses one could propose and thus this should be seen as a distinguishable extension of the more general argument for the relevance and possibility of the religious sense as described above and not as an essential part of it.

Of course, due to the likelihood that this ability would be quite limited as it does not help with the immediate concerns of evolutionary selection (survivability and reproduction), it could well be that even though humans are aware of “supernatural benefits” and thus change their behaviour because of that – which in turn begins to influence evolutionary development long-term – people also would have too limited of an understanding about what one actually has to do to acquire those benefits and thus there is no guarantee that any one is really “doing it right”. In this sense it could well be that acquiring religious knowledge is not immediately and clearly beneficial, but could possibly also be evolutionarily neutral or detrimental in some sense – we cannot really know, we would have to have “divine knowledge” to determine this. This limitation – the likelihood that no one is really “doing it right” –, however, could also be used as an explanation for the religious diversity as we see it in the world today, if someone wanted to pursue further with this kind of argumentation. This would not make any specific

¹⁶⁰ In the sense that humans could not be completely wrong, since explaining that would be a major evolutionary problem. Of course, naturalistic research have presented that problem as the very reason why religion deserves evolutionary attention, but there is a difference between simply assuming it and not taking it for granted as inevitable.

¹⁶¹ Because of that, one should not view this as a hypothesis where “the life after death” begins to affect one’s life here and now. Rather, it is the ability to perceive supernatural, learn something about it and thus behave differently because of that knowledge that would play a role in the evolutionary development. Therefore, “life after death” cannot directly affect the organism here and now indeed, but the potentiality of that and knowledge about it is what can have an effect.

hypothesis wrong, it would merely suggest that they are all incomplete or merely “looking in the right direction”.

The hypothesis itself is wholly consistent with the evolutionary theory, yet non-naturalistic.¹⁶² Naturalists have excluded this possibility beforehand, but they have not proven that it is not possible or that it is inconsistent. But even more interestingly, it is worth noting that this same argument could be modified into an argument identical to the non-naturalistic argument, just wholly naturalistic in its formulation. In such a formulation the cognitive ability to acquire “religious knowledge” would be beneficial (and therefore) adaptive regardless of whether this information is accurate or not. After all, as I highlighted earlier section 4.1.4., knowledge does not have to be true to be evolutionarily beneficial and adaptive. In certain circumstances it is entirely possible for some knowledge to be false and beneficial at the same time. Because of that one can also think of this modified version of the non-naturalistic hypothesis as the one in which solely naturalistic phenomena and living organisms are included to make the argument as such work, but the overall setup leaves the possibility for the existence (or non-existence) of the phenomena “religious knowledge” deals with open. Furthermore, this naturalistic alternative could be seen as adaptationist as well, since it would offer clear reasons why “acquiring religious knowledge” would be beneficial for the organism, even if the knowledge as acquired is epistemologically wrong. But knowledge does not have to be correct to be beneficial – as shown previously as well –, it merely has to serve an evolutionarily beneficial purpose. In any case, there is no inevitable necessity to be a naturalist in evolutionary research and there is no inevitable necessity to presume the falsity of “religious knowledge” in evolutionary research.

Yet, the non-naturalistic evolutionary hypothesis comes with the same problems that previously haunted concepts of hypothetical realism and various forms of pragmatism – this is just as uncontrollable as the previous hypothesis. One cannot prove the exclusivity or truth of any of these through evolutionary epistemology or/and empirical research. This is why my discussion is also consistently lacking argumentation in favour of any specific position – none of these has really managed to present stronger support than others. For that we would need to ascertain a specific criterion of evaluation¹⁶³ and find a way how to study these issues empirically. Unfortunately, both of these issues appear unsolvable right now. Without them we are left in a situation where multiple – and widely different – epistemological alternatives are available to the researcher and the theoretical conclusions researchers are hoping to derive from their empirical research projects will always remain constrained by their epistemological foundations.

¹⁶² That is, in the sense naturalists understand the naturalist/non-naturalist distinction. From the perspective of a “complete existence” view it would not be particularly useful to continue insisting on this distinction.

¹⁶³ As previously highlighted in 4.1.4.

4.2.4. Methodological and epistemological consequences – a few concluding thoughts

All of this leaves the evolutionary study of religion in an ambiguous situation. As I have shown, evolutionary theory does not offer any conclusive evidence in favour of any specific position. Multiple different hypotheses can be presented and each one of them can be justified evolutionarily, but only to a point. Quite significantly, these justifications do not make it possible to exclude alternatives. Furthermore – and this also applies to the study of religion – naturalistic premises cannot be conclusively justified from an evolutionary perspective and to complicate matters further, if one wants to, one can justify deliberately non-naturalistic premises just as successfully (which means, only to an extent).

All in all, the naturalistic study of religion finds itself epistemology on a shaky foundation. Arguments in favour of methodological naturalism have not turned out to be as strong as has been claimed and the evolutionary theory does not offer as much hope as one might expect either. Yet, it can still claim to have had lots of success in formulating empirical research designs, carrying out experimental research projects and developing theories to make sense of all that empirical research. At the same time the hypothetical alternative I formulated in this chapter brings up significant questions concerning the possibility of empirical research in such matters. Clearly, it is one thing to show the possibility of such alternatives, but if they cannot be studied and the commonly practiced approach is empirically practicable, then it comes with the clear advantage of actual applicability instead of just speculating about the potential of alternatives.

I find such a counter-argument rather likely, yet there is no reason to think that these arguments cannot be overcome. First of all, one can here point out that even if research into issues such as the relevance of supernatural causation or the post-mortem consequences of our current choices cannot be directly assessed through empirically available means, this does not entirely rule out empirical research. After all, naturalistic research projects are possible without finite and conclusive knowledge about the natural world. Thus, one could pursue empirical research designs in a similar manner to the currently prevalent naturalistically inclined research projects, yet not rely on the naturalistic premises these projects rely on. But this is only part of the bigger picture here. Secondly and more importantly, it is important to notice that all the existing evolutionary research of religion does not exclusively relate only to the naturalistic research programme. Rather, given the limited amount of empirical research and the level of proof existing evolutionary theories of religion would require for conclusive, final arguments, most, if not all, available empirical material actually lends itself to simultaneously possible alternative interpretations. I will highlight the methodological and theoretical consequences of this in the next chapter, as I highlight the relevance of the so-called Duhem-Quine thesis and the underdetermination debate in general for the issues raised and arguments presented here thus far.

5. The underdetermination of scientific research and the evolutionary study of religion

Thus far, in the two previous chapters of the second part I have concentrated on two major lines of discussion within the broader issue of evolution, epistemology and the study of religion. On the one hand, various arguments have been presented to either undermine the cognitive reliability of religious beliefs or to justify the naturalistic premises of the currently prevalent evolutionary research programmes. As I showed in the third chapter, none of the arguments put forth to criticise religious beliefs or to justify naturalism have been conclusively successful. Rather, there are strong reasons to argue that all of these arguments are epistemologically lacking and do not succeed in defending the claims they have set out to defend. To highlight this further I also showed in the fourth chapter how deducing epistemological positions and arguments in favour of those positions from the evolutionary theory has remained inconclusive (if not unsuccessful). Instead it appears that since one cannot conclusively deduce anything from the evolutionary theory in specific epistemological matters, it is entirely possible for one to argue in favour of an explicitly non-naturalistic, yet evolutionary perspective on religion as well. The goal of all of this has been the presentation and the evaluation of the methodological-epistemological problems with the cognitive-behavioural study of religion as currently constituted. I have focused on explicitly showing why certain arguments are not successful or reliable and how entirely different kind of arguments can be built on based on the very same foundations.

What I intend to do in this chapter will be more exploratory than argumentative. I will not be so much presenting finite arguments¹⁶⁴ as investigating a few potential paths one could take based on what I have shown thus far. After all, the issue of underdetermination is a huge topic in the philosophy of science, expanding in many directions and taking on many forms. For obvious reasons going into all of this is simply not feasible right now. Especially because, as far as I know, no one has yet seriously analysed the numerous theories and explanatory schemes concerning religion from the perspective of the underdetermination debate, thus it would require going into completely uncharted territory, so to say. Still, in a situation where arguments presented to argue for the sole justifiability of a naturalistic research perspective have been found inadequate and where one can easily show how theoretical alternatives can be derived from the evolutionary theory, the underdetermination debate does become a rather intriguing and promising option for analysing this complex situation. Therefore, I am going to give a short overview of the underdetermination debate as it appears in the philosophy of science and then discuss some of the most notable ways in which this could potentially help us make sense of the situation we are dealing with in the cognitive-behavioural study of religion.

¹⁶⁴ With the exception of section 5.3., one could say. I do venture into presenting a specific argument there. evolutionary

However, I will be dealing with underdetermination in a manner distinctively different from the previous two chapters as I will not be presenting detailed arguments in favour of one or another model of underdetermination. Rather, I will be relying on ideas concerning underdetermination as they have been argued and presented in the philosophy of science and should those arguments turn out inadequate in future discussions concerning the underdetermination of scientific research, thus would my proposals and suggestions likely as well.

5.1. Models and concepts of underdetermination in the philosophy of science

When dealing with the idea of underdetermination of scientific theories, one needs to always keep in mind that this is never just one issue or one line of argumentation. Rather, it encompasses many different arguments and ideas. On a general level one could say that at the core of the concept of underdetermination one finds the idea that evidence available to us can be insufficient to determine what we should think of it – there is not enough data to conclusively argue in favour of any specific theory. Or as Kyle Stanford has exemplified this: “if all I know is that you spent \$10 on apples and oranges and that apples cost \$1 while oranges cost \$2, then I know that you did not buy six oranges, but I do not know whether you bought one orange and eight apples, two oranges and six apples, and so on” (Stanford 2017). However, beyond this general notion, underdetermination quickly diverges in different directions and to complicate things further, there is no generally agreed upon ‘typology’ or ‘classification’ of underdetermination arguments. To see this in actual practice, it is enough to compare Stanford (2017) and Turnbull (2018) who are basically talking about the same things, yet categorizing them in clearly different ways. While there are also several other types of underdetermination in the philosophy of science, here I will concentrate on the two most interesting ones for the purposes of my larger discussion – Duhem’s thesis, i. e. holist underdetermination and the idea of empirical equivalence. However, these two are also the two most famous and most significant types of underdetermination as well. I will discuss Duhem’s thesis to show how extensively and obviously this discusses topics very much discussed and debated in the study of religion already. And I will discuss the idea of empirical equivalence, because I will argue that this type of underdetermination is indeed the one most immediately relevant for the arguments and discussion presented in the previous chapters. Particularly I am going to highlight the relevance of underdetermination debate for the issue I raised in the conclusion of the previous chapter – whether it is possible to make use of the same empirical data for radically different kind of conclusions or not. I will show how the perspective of empirical equivalence can support and accommodate the idea that there is just as much empirical support for the non-naturalistic alternative as there is for the naturalistic mainstream perspective.

5.1.1. Duhem's thesis i. e. holist underdetermination

Although often also described as the Duhem-Quine thesis it is important to notice that even this specification is inadequate as Duhem and Quine held noticeably different views in several aspects. Pierre Duhem is the one I am going to start with here. Although he is not the first one ever to raise these issues (see Stanford (2017) for notes about earlier occurrences of similar ideas), he was the first to present detailed arguments. Duhem was primarily interested in physics and issues that come up in experimental research in physics. He notes how theory and experiment are always closely related, since all research is inevitably reliant on a theoretical base that makes “measuring” possible (Duhem 1998: 257–260). Furthermore, because of that one cannot test a specific hypothesis in isolation from the whole system (Duhem 1998: 260–264) and since we can never rule out the possibility of additional, alternative hypotheses, it is impossible to arrange “decisive experiments” that conclusively show what we should think of the evidence available to us (Duhem 1998: 264–266). In the subsequent discussion Duhem also points out how there are important physical hypotheses that scientific research relies on, but which cannot be experimentally tested (Duhem 1998: 270–274). Most notably, he discusses the issue of mechanics with reference to Poincare (Duhem 1998: 274–277).¹⁶⁵ Based on all of this Duhem concludes that if one encounters a problem in scientific research, it is not possible to determine “the exact location” of the problem experimentally and it is also not possible to present strictly logical arguments to determine when one should give up a hypothesis or when one should look for ways how to overcome the problems one is facing (Duhem 1998: 277–279).

This kind of an argumentation has caused contemporary philosophers of science to call Duhem's thesis the idea of holist underdetermination, since at the centre of the argument is the idea that one cannot test and analyse specific hypothesis and claims detached from the wider context that they rely on (Stanford 2017, Turnbull 2018). This has been developed further by P. Kyle Stanford (2006) who delves deep into the 19th century biological sciences and among others brings up the example of Francis Galton's scientific activity and theorizing. As Stanford shows, Galton is an excellent example why the holist character of scientific research enables one to indefinitely avoid abandoning one's central hypothesis by constantly modifying and rethinking secondary hypotheses (Stanford 2006: 80–104). However, one should not forget that Duhem's analysis focused solely on issues one will encounter in physics and contrarily to later developments in philosophical discussions, Duhem himself did not explicitly argue in favour of a universal thesis (Ariew 1984: 318–320; Gillies 1998: 311–

¹⁶⁵ In more detail he argues that “taken in isolation these different hypotheses have no experimental meaning; there can be no question of either confirming or contradicting them by experiment. But these hypotheses enter as essential foundations into the construction of certain theories of rational mechanics, of chemical theory, of crystallography. The object of these theories is to represent experimental laws; they are schematisms intended essentially to be compared with facts” (Duhem 1998: 276).

315). At the same time, though, he does not exclude the possibility of analogous situations and problems in other sciences either (Ariew 1984: 323).

5.1.2. Empirical equivalence

Another way underdetermination argument has been often presented is that of empirical equivalence. The basic idea behind the empirical equivalence is that it is possible to develop alternative theories (which are not differently phrased variants of each other) that are addressing the available empirical data with equal success. Primarily this thesis has grown out of the provocative writings of Willard van Orman Quine (1975, 1998) who has strongly argued against the often-supposed epistemological superiority of natural sciences (e. g. Quine 1998: 296–299).¹⁶⁶ As he argues, all scientific research is inevitably empirically underdetermined and empirically just as successful, yet alternatively conceptualized, theories will always remain possible for any formulated scientific theory (Quine 1975: 322–328). Quine understands the empirical aspect of research as a set of observational sentences that are related to specific observations. Problems of scientific theorizing stem from two major limitations of scientific research: firstly, there is an infinite amount of everything observable,¹⁶⁷ yet we obviously cannot hope to observe them all, and secondly, some things fundamentally cannot be observed directly, thus we have to rely on hypotheses about them based on indirect data.¹⁶⁸ All of this results in Quine arguing in favour of a universal

¹⁶⁶ In one case also explicitly arguing that “for my part I do, qua lay physicist, believe in physical objects and not in Homer’s gods and I consider it a scientific error to believe otherwise. But in point of epistemological footing the physical objects and the gods differ only in degree and not in kind. Both sorts of entities enter our conception only as cultural posits. The myth of physical objects is epistemologically superior to most in that it has proved more efficacious than other myths as a device for working a manageable structure into the flux of experience” (Quine 1998: 298).

¹⁶⁷ Quine himself talks here about ‘observational conditionals’, but I have here attempted to communicate the crux of his argumentation without needing to explain too much of his technical vocabulary. It can be noted, though, that he defines ‘observational conditional’ in the following way: “Instead of saying that the theory and the boundary conditions together imply the further pegged observation sentence, we could as well say that the theory implies, outright, a conditional sentence whose antecedent comprises the boundary conditions and whose consequent is the further pegged observation sentence. Such a conditional sentence I shall call an *observation conditional*. Its antecedent is a conjunction of pegged observation sentences and its consequent is a pegged observation sentence” (Quine 1975: 317–318; italics in original).

¹⁶⁸ Or as Quine himself puts it: “Here, evidently, is the nature of under-determination. There is some infinite lot of observation conditionals that we want to capture in a finite formulation. Because of the complexity of the assortment, we cannot produce a finite formulation that would be equivalent merely to their infinite conjunction. Any finite formulation that will imply them is going to have to imply also some trumped-up matter, or stuffing, whose only service is to round out the formulation. There is some freedom of choice of stuffing, and such is the under-determination” (Quine 1975: 324). But see also Turnbull (2018) about the wider discussion concerning the second point.

underdetermination – all scientific theorizing is always bound to be underdetermined, in fact all human knowledge is always and inevitably underdetermined, since we cannot fully encompass everything required to conclusively argue in favour of any specific theory (Quine 1998). In comparison to Duhem, Quine's arguments are a lot stronger and more ambitious – Duhem did not regard his arguments universally applicable to all scientific knowledge (Gillies 1998: 311–315).

Still, the idea of empirical equivalence – when analysed in detail – becomes far more complex than what I have argued thus far and is far from being limited to the arguments presented by Quine (Bonk 2008; Turnbull 2018). To bring out just one important detail, Bonk notes how empirical equivalence in practice can mean many different things: do we have in mind same predictions, same observational consequences, or explanations of the same set of previously established empirical observations (Bonk 2008: 1–8)? The latter is especially relevant with regards to the issue of directly unobservable entities, since empirically equivalent theories can be sharing the same set of empirical consequences, yet positing fundamentally different unobservable entities as responsible for those observable consequences (Turnbull 2018). In any case, this kind of details always need to be specified whenever one is developing arguments based on empirical equivalence.

The ambitious claims of Quine have been discussed in detail and criticized from many directions. The best known criticisms have been put forth by Laudan (1998) and by Laudan and Leplin (1991) who have mostly focused on Quine's claims of universality and inevitability. They have found both claims lacking in justification, but since neither of the two issues is inescapably relevant for the subsequent discussions concerning theories of religion, I will not go into the details of such criticisms. It should be noted though, that even such defenders of Quine as Bonk (2008) have agreed that it is not really possible to argue that empirically equivalent theories inevitably exist for all existing and possible theories. However, there is a different type of criticism, put forth by Okasha (2002) that mainly focuses on how underdetermination arguments deal with the data-theory distinction and that criticism is indeed extremely relevant for any attempts to analyse the theories of religion from the perspective of underdetermination. I will return to this in a later section of this chapter.

5.2. Underdetermination of the evolutionary perspectives on religion?

One of the issues often brought up in philosophical discussions concerning underdetermination is the supposed lack of examples. This is a concern Laudan and Leplin (1991) bring up emphatically. Of course, this is something that can be debated. For one, Stanford who I just discussed, certainly does not think that there is any shortage of examples, but the argument as such rather has to do with the current scientific situation and not with things that happened 150 years ago. And in this critics indeed do have a point, but only to an extent. After all, if it is indeed so widespread, then why cannot the proponents of underdetermination just

highlight examples from any science? Still, as I noted, this criticism is correct only to an extent, since part of the underdetermination argument always has to do with “what we do not or cannot know yet” – alternatives do not have to be consciously present for us at the time. After all, Stanford’s argument is specifically suggesting that there are most probably alternatives that we are incapable of conceiving – such alternatives by definition cannot be brought up to strengthen arguments against critics!

Anyhow, what is notable about the discussions of underdetermination thus far is their persistent focus on natural sciences and furthermore, primarily on physics, with occasional treatments of chemistry or biology. This limitation is unfortunate and there is no reason why studies of underdetermination should limit themselves to a select few natural sciences. Plenty of potential material for analyses, discussions and hypotheses could be found in other sciences as well. Bonk (2008: 28–38) for example suggests that we could find lots of intriguing material for analyses of underdetermination from psychology. Here and now, however, I intend to discuss how one could also debate different types of underdetermination in relation to the study of religion.

5.2.1. Duhem’s thesis and the study of religion

Duhem’s thesis of underdetermination or holist underdetermination as it is typically called, could be developed further and applied in many ways in all of humanities and social sciences, despite the fact that this is not the case right now. Concentrating here on the study of religion, we can start from Duhem’s insistence that it is not possible to test specific hypotheses in isolation from the system as a whole. This is something scholars of religion clearly encounter in their research. Say one is studying contemporary religious developments in the West, with particular interest in a select few new religious movements. If one were interested in why people join such movements and faced with a proposal that aimed to explain that, one could in no way just determine the validity of the proposal detached from the wider religious studies research perspective one has based this specific research question on.

After all, already asking such a question relies heavily on ways contemporary researchers understand their topic of research and contemporary religiosity. For one, describing these as specifically *religious* movements invokes a whole series of basic distinctions and a complex toolbox of concepts and research questions. One cannot simply analyse the issue of joining new religious movements, detached from the background assumptions, theories and hypotheses that make this question as such possible. The conceptual toolbox scholars rely on in the study of religion is not just a set of descriptive designators that we have either used correctly or not (i. e. something is a new religious movement or not), but rather a complex theoretical and methodological foundation that offers distinctions, research questions and so on; in other words, structured ways how to make senses of the messiness of life in general.

Discussing (and criticising) the ways how the relationship of data and theory has often been seen in the study of religion in the past, Armin W. Geertz also argues along the same path as he notes that “theory understood in this manner is much more than propositional statements purportedly subjected to falsifiability or confirmation by the facts. Theory in the sense proposed here becomes the basic framework for even conceiving of the object of study” (Geertz 1997: 35) and thus “all definitions in fact have proven to be [...] compact versions of the theory or sets of theories informing the definition” (Geertz 1997: 35).¹⁶⁹ This I would think appears very similar to the research situation described as *holist underdetermination*. Similarly to Duhem’s claim about the impossibility of decisive experiments in physics, one cannot conduct decisive empirical studies (whether experimentally, through fieldwork or textual hermeneutics or in some other way) in religious studies either. Coming back to the example I used earlier: there is no specific empirical research set-up that could conclusively prove the validity of one hypothesis (concerning the issue of why people join new religious movements) over all other hypothesis. Furthermore, in the context of the humanities and how humanities formulate and postulate their research objects, there are reasons to believe that it could be hypothetically possible to view this whole thing in a completely different way as well, without ever invoking the concept of ‘religion’, ‘new religious movements’, ‘conversion’ or the explanatory and causal arguments related to any one of these arguments and so on.

Predictably, one can see similar issues come up in all the evolutionary research programmes (cognitive, behavioural or other). For one they are still very much relying on the same conceptual toolbox, thus they have adopted theoretical distinctions and positions implicit in those concepts as part of their research projects.¹⁷⁰ However, evolutionary research projects clearly have their own issues that can be analysed from a *holist* perspective. As they are very much focused on determining the causal factors of human evolution regarding religiosity, they have to put together a scheme or a complete picture of the whole human evolution and more specifically, of the period *hominids* have shown to have cultural and religious traits. However, evidence available about the culture and religion of the times before written documents are sparse at best. Much of the context has to be deduced from vaguely relevant details that we do know or from complex schemes that work towards determining how human mind worked long ago based on evolutionary logic and how it works right now. Therefore, the central problem of *holism* is certainly present in all of the evolutionary research programmes as well. Furthermore, as I noted, Duhem also argues that there are central physical hypotheses (from example in mechanics and in geometry) that physics relies on, but

¹⁶⁹ In addition to Geertz (1997), see also Geertz (1999) for analogous discussion concerning the same issues and Jensen (2011b) for a more recent elaboration of such issues.

¹⁷⁰ I have previously briefly analysed this dependence already in Peedu (2016: 127), pointing out how cognitive science of religions heavily relies on the earlier work of more philologically inclined scholars (in either hermeneutical, typological or historical forms). The most explicit example of this can be found in Bering and Johnson (2005: 121) who rely on Pettazzoni’s work in their conceptual formulations of religion.

which cannot be experimentally tested. Considering the extensive reliance on indirectly derived hypotheses concerning early human evolution in the evolutionary study of religion, one could probably easily apply the same analysis to these fields as well.¹⁷¹ For example, one can think of the famous, yet typical explanatory story presented to explain the emergence of HADD: supposedly it was always better to be safe than sorry in uncertain situations and thus humans became very eager to assume agency behind all sorts of stuff – otherwise they would have simply not survived when coming into contact with malicious agents (such as predators). Yet, this is merely a hypothetical story with no concrete empirical data to show that more or less this actually happened. And obviously one could also propose alternative hypotheses to explain the supposed phenomenon of HADD or perhaps conceptualize HADD itself in a completely different way.

In any case, it is clear that what I have highlighted here are merely the select few cases and a basic framework, but this should be enough to bring forth the central idea and the potential conclusions and inferences that one could derive from the underdetermination thesis. However, while certainly explicitly present, I do not find this the most intriguing form of underdetermination to look at in the context of the study of religion. Much of what I have discussed thus far is obvious for scholars of religion anyway and whether we use the conceptual toolbox of underdetermination to explicate these issues does not appear to make much of a difference. I find the issue of empirical equivalence far more intriguing.

5.2.2. Empirical equivalence and the study of religion

It could be that initially the ideas presented by this form of underdetermination also appear rather obvious for scholars of religion. As noted earlier, when dealing with the issue of empirical equivalence one always needs to specify how exactly one understands or determines this equivalence. Bonk (2008: 1–8) notes how this can mean same predictions, same observational consequences or attempts to explain the same set of previously established empirical observations. I would argue that in the study of religion only the last variant is applicable. The study of religion has never been able to predict future religious developments with any real accuracy,¹⁷² nor do any major theories of religion really focus on suggesting observable consequences. When we are dealing with theories about religion, these largely agree on what the relevant set of empirically observable phenomena are and what kind of empirical observations should be analysed or/and interpreted or/and explained by the theoretical perspective. Because of this, when we talk

¹⁷¹ Unless of course we do somehow develop research methods (time travel?) to determine what exactly and how happened 10 000 or 100 000 years ago, in which case this would be merely a case of transient underdetermination.

¹⁷² One can here think of the supposed and widely believed idea of secularization and disappearance of religiosity that by now has been mostly abandoned by sociologists of religion or has been fundamentally reconsidered and reconceptualised (for example see Stark 1999).

about empirical equivalence in the study of religion I find it most accurate to talk about the same set of previously established empirical observations as the central meaning of empirical equivalence.

Concerning the specifics of Quine's discussion, it is obvious that scholars of religion are also faced with far too many observable and researchable phenomena for researchers to ever fully cover all potentially available evidence. Furthermore, many of the things necessary for that theoretical ideal of a 'complete coverage' remain inaccessible for researchers. One can of course think of all the research concerning 'religious experience' here and the general lack of access to the experience itself. But in a similar fashion, questions about the mental states of people are (at least currently) unobservable in general. Therefore, this is not so much an issue of any specific experience as a general dilemma – any kind of belief as a mental state of mind cannot be directly observed either. However, the issues of experiential and mental states are just one of the many limiting factors. Oftentimes in the study of religion exact historical details also remain vague at best, since only a few select documents or material objects have survived to give us some indication about what happened at some time and place in the distant past and how people thought and behaved back then.

Theoretical generalizations – and these cannot be avoided in the study of religion no matter how 'strictly empirical' one tries to be – will have to somehow deal with all these limitations and postulate hypotheses about the phenomena that remain inaccessible yet inevitably unignorable for the scholar of religion. However, the issue of inaccessibility is not limited to technical limitations (for example, we cannot directly observe what is going on in conscious minds), to historical limitations (for example, only a selective set of evidence has survived) or to other comparable issues. The issue of inaccessibility for scholars of religion is also very much an epistemological topic and this is where various research approaches begin to clearly differ in hypotheses they make about epistemologically inaccessible issues. Epistemological issues are definitely not limited to this, but right now I have in mind of course the very same issue that I extensively analysed in my previous two epistemologically focused chapters – what kind of presumptions about 'supernatural' can a(n evolutionary) scholar justify or not justify. I would call these 'supernatural' phenomena as one of those 'inaccessible yet inevitably unignorable' objects that scholars have to take into account – that is, hold some kind of a position in one way or another about them – but which we currently cannot study in any empirical way. Naturalistically formulated evolutionary research programmes clearly do this in a different manner from those historical and anthropological research programmes that try to remain 'neutral' or 'agnostic' about these 'supernatural' phenomena. Christian theology on the other hand takes a rather different approach, occasionally also declaring supernatural inaccessible, but oftentimes not entirely so – depending on which specific theological school of thought one is dealing with. Still, limiting oneself here to the research programmes and theories proposed in the study of religion, one can certainly argue that all theories concerning religion are inevitably under-determined empirically in the sense that all of them have to rely on numerous

hypotheses about unobservable phenomena – as causes to observable phenomena or otherwise – that they have no direct empirical evidence about.

The idea of empirical equivalence, however, also suggests that competing theories are not only underdetermined due to abovementioned limitations, but because we also cannot conclusively prefer one theory over another, since they are empirically equivalent and they merely differ in ways they make sense of the available empirical material. The decisive point here has to do with data – can we argue that the competing research programmes are really dealing with the same data or not? This question becomes a serious problem for the scholar of religion. Already in my earlier discussion of method I noted how analysing the methodological options available to scholars of religion cannot be built up on a distinction between the object and the interpretation of the object or in other words on the data/theory distinction.¹⁷³ I also touched on this in my analysis of the holist underdetermination that fundamentally relies on the very notion that specific examples of ‘data’ cannot be analysed, tested or verified independently from the wider theoretical background. Samir Okasha’s criticism of underdetermination (Okasha 2002: 316–319) points out the same problem: insistence that we can clearly distinguish between sets of data and contrasting theories that aim to make sense of that data relies on the very same kind of data/theory dichotomy that contemporary philosophy of science has abandoned. In his criticism he points out how this becomes an insurmountable problem for global theories¹⁷⁴ of the world as such.¹⁷⁵ Simply put, if data and theory are not independent from each other, then in the case of global theories one cannot argue that they are both ‘dealing with the same data’. Rather, if the theoretical aspects of their approaches are clearly different, then there are good reasons to argue that their conceptualization and specification of data is also different.

However, Okasha does not completely dismiss underdetermination due to this data/theory problem. His criticism is focused on global theories. In case of narrower (or in other words – less ambitious) theories, he agrees that arguments of underdetermination can still be presented without running into an inevitable problem. For this one needs to show how in specified research contexts it is possible to formulate data and theory in such a way as to make it possible to distinguish them in those research contexts (Okasha 2002: 316). Of course, this also means that one cannot present universal arguments of underdetermination that apply to all situations – every research topic and situation has to be dealt with individually. Nevertheless, this does make it possible to present underdetermination arguments.

¹⁷³ See section 2.2. about this earlier analysis.

¹⁷⁴ For Okasha a global theory „is a maximally inclusive theory of the world, which predicts correctly all true empirically testable statements that there are, and which thus contains all other (true) theories as subtheories“ (Okasha 2012: 312). In other words, it is a theory which cannot be viewed as part of any larger or more-inclusive theory or as a theory which does not offer any lines of argumentation about some part, type or aspect of data.

¹⁷⁵ He finds Quine a particularly obvious example of this, relying on distinctions and presumptions similar to the positivists (Okasha 2002: 318).

I would suggest that this is how we can talk about empirical equivalence in the study of religion as well. Theories of religion are also focusing on one specific phenomenon and not on the world as a whole. Therefore, in the context of studying this one phenomenon we can formulate what we understand as empirical evidence (i. e. ‘data’) and what we understand as an attempt to make sense of it on a more generalizing level. Even Jonathan Z. Smith notes alongside his insistence that there is no data for religion, that “there is a staggering amount of data, of phenomena, of human experiences and expressions that might be characterized in one culture or another, by one criterion or another” (Smith 1982: xi), thus accepting that there is a whole lot of stuff out there that we might study, but none of it comes with any inevitable insistence to conceptualize it in one specific way and only in that one specific way.¹⁷⁶ That is a choice scholars have to make. But, after we have made those choices, in specific research context our formulations of religion can begin to be similar enough to largely agree on what they regard as empirical evidence in need of generalization and analysis. If so, viewing this as a case underdetermination in the form of empirical equivalence becomes a viable path for those who want to make sense of competing hypotheses that are noticeably similar in many aspects, yet radically conflicting in some other crucial aspects.

Coming back to the question I asked – are different research programmes really dealing with the same data or not? – one can say that in the context of the study of religion they are, if their basic understandings, delimitations and conceptualizations concerning the evidence in need of analysis, explanation and generalization is similar in most central aspects. This is of course something, which needs to be evaluated on a case-by-case basis and cannot be presumed a priori about any research programmes. Still, considering how study of religion for the past 150 years or so has largely retained a similar understanding and conceptualization of religion as a phenomenon in need of study, analysis and explanation, I would hypothesize that theories presented in the study of religion during the past century or so mostly can be comparatively analysed through the underdetermination prism. Although, it could well be that this does not apply to the full extent to all theories and approaches that exist within the study of religion. After all, even in their most basic conceptualizations and approaches experimental perspectives on the cognitive foundations of religiosity can be very different from, say, the philological study of Sumerian religion, thus making such comparisons practically impossible. Still, except for such extreme cases I think comparisons remain possible. However, whether the same can be extended to understandings of religion in, let us say, Catholic theology or Hindu theology in

¹⁷⁶ Or to highlight another example, from around the same time, but in this case rather from the perspective of the sociology of religion, Robert Wuthnow also points out different ways how one can approach relevant empirical data in multiple different ways, reaching different results. Thus concluding that: “As a result, it is not necessary to search far in order to find examples of strikingly discrepant conclusions being drawn from the same data or from similar sets of empirical observations” (Wuthnow 1981: 17).

comparison to the prevalent theories of religion in the study of religion is far from clear and would require a completely separate analysis. I find it likely, though, that in such cases finding that similarity to establish the basic shared foundation necessary to conceptualize a similar or analogous understanding of theory and data will be far less likely.

Overall, I do think one can analyse the situation in the study of religion from the perspective of empirical equivalence as well, even if it requires a very close analysis of the ‘theories’ and ‘data’ one is dealing with. I also think we can apply this perspective to the previously¹⁷⁷ highlighted possibility of theoretical alternatives to the naturalistically formulated evolutionary theories of religion.

5.3. Evolutionary theories of religion and the theoretical alternative as empirically equivalent theories of religion?

Earlier in the fourth chapter I delved into the specifics of evolutionary epistemology, its ambitions and basic foundations, but also into its limitations and inconclusive results. Most significantly, however, I showed how naturalism is in no way epistemologically inevitable in an evolutionary research setting. Rather, it is merely a choice some scholars have made to delimit and define their research material and its epistemology. Additionally I showed how one can build an alternative to the contemporary mainstream evolutionary theories of religion based on evolutionary epistemology, Reidian common-sense philosophy and related lines of thought.

As I noted, this alternative would abandon the premises naturalism relies on and thus would open up the possibility of including non-naturalistic entities, mechanisms and causes into the explanatory scheme. In such a case, one can propose a theoretical alternative to the current evolutionary theories of religion that is in accordance with the evolutionary theory, but which at the same time presents a very different theoretical scheme of the whole issue. I will not repeat the argument from 4.2.3. in detail, but let it be noted that it argued for a hypothetical scenario where the capability of being religious developed evolutionarily because acquiring sensory and cognitive knowledge about entities, processes and causes we regard as “objects of religious belief” were actually beneficial for humans and thus improved the fitness of humans. From such a perspective religiosity as a human trait developed and spread into a universal characteristic, because it enabled people to better reckon with some aspects of the world than otherwise possible (mostly that means things we are likely to categorise as “supernatural” these days). Now, as I also noted, such evolutionary perspectives come with the same limitation as all other epistemological positions derived from evolutionary epistemology – it cannot be empirically confirmed or controlled.

However, it is important to keep in mind that much of the current evolutionary research on religion relies on naturalistic premises that cannot be confirmed or

¹⁷⁷ See section 4.2.3.

controlled any better either. Concentrating strictly on the available empirical material in need in explanation, naturalistic perspectives and the non-naturalistic alternative do not really differ in any significant way. Various evolutionary research programmes do of course differ in what kind of empirical data they consider significant (or how significant they consider it), but none of them radically rejects data acquired by proponents of the other research programmes. In fact, as highlighted previously, most of the time new research programmes even very much rely on the worldwide comparative data gathered, organized, classified and analysed by representatives of other, earlier research programmes. Research programmes differ in what kind of explanatory, conceptual and processual links they find most important. However, most of the theoretical, conceptual and methodological foundations are still the same or at least similar enough so as to agree on what is understood as data in need of explanation and what is understood as the theoretical explanation of that data. This also makes it possible to maintain the same kind of data/theory distinctions throughout the whole discussion and therefore (as noted in 5.1.2.) avoid the pitfalls highlighted and criticised by Okasha (2002). Basically, one can say that most of the available empirical materials lend themselves to simultaneously possible alternative interpretations. Furthermore, a non-naturalistic alternative that treats ‘supernatural’ entities, mechanisms and causes as relevant (and thus does not consider them *a priori* dismissible) is also trying to make sense of that very same empirical material. It does not differ from naturalistic research programmes in invoking a different set of evidence, rather it proposes different types of unobservable phenomena to make sense of the inevitably limited empirical material. But nothing in this empirical material itself inevitably necessitates a strictly naturalistic interpretation of it, even if gathered by practising and deliberate naturalists.

And I would argue that in this sense naturalistic evolutionary theories of religion and the hypothetical alternative described earlier are empirically equivalent theories of religion. They differ not in how they understand their research data, they merely make sense of the available data in a different way, but our empirical and epistemological limitations prohibit us from finding out which one of the epistemological alternatives is correct and which one is not. And in this sense naturalistic theories of religion remain dependent on their initial premises – without those their whole theoretical structure falls apart. But this means that naturalistic and evolutionary theories will always remain incomplete – they cannot hope to achieve a ‘complete explanation of religion’ without running into the problem that even their best confirmed explanatory proposals rely on accepting specific epistemological postulates.

Still, one potential issue could be raised. Namely, one could argue that naturalistic theories of religion and the non-naturalistic alternative are rather global theories, not contextually detailed specific theories. After all, they are all dealing with empirically inaccessible entities in one way or another and these entities supposedly could have a major effect on our global world picture as such. But, if so, one cannot apply empirical equivalence to the theories of religion since these are global theories and thus one cannot establish analogous data/theory distinctions

within all of them. This argument certainly does make a good point, if the non-naturalistic alternative were developed in full detail in any specific theological form. In such a case it would certainly acquire the ambitions of a global theory and thus its comparison to other theories would become a problem. However, such a development is not something that is inevitably necessary. Rather, that is merely an option one can pursue, but does not have to pursue. As long as one maintains the non-naturalistic alternative only as an explanation why humans have the cognitive capabilities to be religious, but does not attempt to present a specific set of conceptualizations and practices as the detailed form of that alternative, it is simply a theory about the development of one universal human characteristic and nothing more. Of course, it does include universal premises and invocations of directly inaccessible entities, but all scientific theories do that. To be a global theory one needs to present a global picture about the world as such, not merely include a few select globally relevant aspects in an otherwise rather specific and focused theoretical elaboration of just one phenomenon. Thus, I think we can avoid the problems of global theories in arguments of underdetermination and it is justifiable to view naturalistic evolutionary theories of religion and the theoretical alternative as empirically equivalent theories of religion, neither one of which can claim to be more strongly confirmed empirically than the other.

5.4. Conclusion

In the context of currently influential epistemological discussions it is definitely worthwhile to draw attention to the underdetermination of the competing theories and most significantly to the possibility of viewing comparable theories as empirically equivalent. Arguments presented to justify naturalism in the context of religious studies (or for evolutionary study of religion specifically) have not proven to be epistemologically as successful as naturalists would like to hope. Rather, these arguments have merely turned out to be convenient premises to build a research programme on, so that one can ask clear research questions (“why religiosity, if things are so and so?”) and propose hypothetical answers to these questions based on limited empirical research and the evolutionary framework. However, if naturalism is neither conclusively justified nor inevitable, then this leaves the (ecological or cognitive) scholar of religion at a rather shaky position. This necessitates returning to the questions of methodology, positioning and scientificity as discussed in the first and second chapter, to better analyse the methodological and epistemological position of the scholar in light of the epistemological conclusions of the last three chapters. That is what I intend to focus on in the third part of this thesis.

PART III – POSITIONING THE SCHOLAR – EPISTEMOLOGICAL AND METHODOLOGICAL LIMITATIONS AND POSSIBILITIES IN THE STUDY OF RELIGION

Having come this far, it is time to return to the beginning, so to say. In the first two chapters I analysed the situation in contemporary scholarship, particularly in relation to the behavioural-cognitive study of religion with specific interest in ways scientificity and methodology has been understood (especially in relation to the epistemological dimensions of both). I was specifically interested in methodological naturalism as it has been presented by many cognitive and behavioural researchers. In the subsequent three chapters I focused on the justification of (methodological) naturalism and closely evaluated all the arguments in favour of it – going deeper and deeper into narrower and more specific details chapter by chapter. This has been necessary for a complete evaluation of all the arguments and possibilities presented by the advocates of methodological naturalism (as well as some possibilities they potentially could turn to). All in all, I would hope that this in-depth analysis has conclusively shown why there is no reason to consider methodological naturalism epistemologically-methodologically superior to alternatives. Yet, this is not just about methodological naturalism, there is a larger issue at play here – how should a scholar of religion position oneself? This conclusion concerning epistemological arguments in relation to one position among many does not directly answer that question. To address the question I will now return to the ‘grand scale’ previously dealt with in the first two chapters and analyse some issues directly related to the problem of positioning, followed by a comparative evaluation of the four of the most notable positioning choices in the study of religion right now.

6. The study of religion and the search for epistemological and methodological unity

Oftentimes discussions of methodology, scientificity and positioning forget or ignore the actual diversity of the field. Discussions of scientificity or positioning thus focus on the discipline in general – they focus on the right or wrong choices for all the subdisciplines, research approaches and programmes in general. Conceptual, epistemological and empirical differences are seen as insignificant or at least nothing insurmountable. Yet, it is not necessarily obvious that we can just presume the insignificance of the differences unproblematically. However, if there are major differences, then perhaps there is no reason to talk about the position of the scholar of religion in general or about the scientificity of research in general.

Indeed, the academic study of religion has diverged or branched in many different disciplinary, methodological and theoretical directions. Philological, anthropological, experimental and other researchers are all pursuing their own research practices with the aim of understanding religion as a phenomenon. The so-called ‘new sciences of religion’ – in their behavioural and cognitive forms – are perhaps the most noticeable new developments in the wider field of studies, most significantly because they are clearly advocating a rather specific way of doing research. Some have, I would say accurately, argued that in this sense these new sciences wish to act as a reform movement for the study of religion in general (Visala 2008: 127–129).¹⁷⁸ This of course has brought about visible conflicts between practitioners of different research programmes and methodologies. Whether this situation results in a deepening rift between existing research approaches or not will have long-lasting consequences for the academic study of religion in general.

Therefore, in this chapter I am going to analyse this (depending on one’s preference) possibility, presumption or ideal of unity. I will comparatively analyse a couple noteworthy proposals that try to establishing such a shared foundation for the discipline in general. To do this I will have to return to the issue of scientificity, but while I mostly limited myself to a detailed depiction of the existing alternatives in the first chapter, I will here analyse them critically and evaluate their strengths and weaknesses. This will be followed by an analysis of the reciprocal translatability and integration of different research perspectives, since the ability to translate – and therefore apply – the results of different approaches across the discipline is vital for the existence of an actual, practical unity and also an inevitable necessity for the integration of different approaches as desired by some. This is necessary for the concluding discussion of methodological-epistemological positions and their justifiability that I will turn to in the last chapter.

¹⁷⁸ Of course, in their talk about the need to ‘science up’ the study of religion (Barrett 2011b: 229; Xygalatas 2010; Bulbulia 2013a; McCorkle 2008) they are themselves quite explicitly saying that as well, as I have previously highlighted in my discussion of the concepts of scientificity.

6.1. Establishing a foundation or witnessing an inevitable fragmentation?

It is important to analyse how the shared foundation of the discipline is actually understood and whether that is merely an ideal or something which could be (or is) actually practised. This is vital for the subsequent discussion of positioning, since the viability and justifiability of positions also depends on how the discipline itself and its many subdisciplines and research programmes are understood to relate to each other. This brings us to the many attempts to explain how such a loosely related collection of various approaches can actually function and understand itself as one coherent discipline. Elsewhere Gavin Flood has also talked about this in the form of a ‘metatheory’ that is supposed to be the foundation of the shared discourse (Flood 1999: 4–8), but here I prefer to talk of a foundation as that should metaphorically give a better picture of these attempts to formulate the basis that the discipline is supposedly about.

As I showed in the second chapter, most typically this takes the form of emphasizing methodology. Proper scientific research is the kind of research that follows a systematic and reproducible methodology. Yet, this method-centred approach to the foundations of the discipline has always been plagued by the large variety of ways method(ology) has been understood by scholars themselves. It can mean a specific discipline in general (as in ‘*Religionswissenschaftliche method*’ or ‘anthropological method’ or etc.), it can mean a certain way of doing research (as in ‘phenomenological method’) and it can mean a limited set of specific procedural practices. Perhaps if conceptualizations of method(ology) had limited itself to such variants, arguments insisting on methodology as the foundation of a discipline would be more convincing and more successful, but right now that argument will always run into the problem of the ambiguity. After all, understandings of methodology have never really managed to limit themselves to procedural specifications and discipline-centred formulations. Rather, these discussions have always looked further – Lincoln’s theses (Lincoln 1996) for one say practically nothing about any actual procedural practices and only a little about actual disciplinary preferences (and the same goes for all the talk about methodological agnosticism, naturalism and so on). I suspect this is also a reason for why appeals to a reciprocal and systematic methodology as the foundation of the discipline have never really had much concrete success – people of course agree, but at a closer look it becomes immediately obvious that they understand ‘reciprocal and systematic methodology’ in very different ways. Additionally, this appeal to a clearly formulated methodology is further undermined by the immediately obvious problem that there is no methodological practice that is generally more important to the study of religion than all others. For example, anthropology emphasizes fieldwork, most of the natural sciences explicitly rely on experiment and archaeology is inevitably reliant on its excavation practices. Study of religion is among those disciplines that do not have method of its own or even any specific method that is more important for the discipline than all other methods.

Perhaps partly because of this methodological variety and impreciseness, attempts to explicate the foundation of the discipline have oftentimes also first looked for a good example and then built their argument on that example. In the *Religionswissenschaft*-centred tradition, I would argue, this example is an idea(I), rather than an actually existing discipline. As I showed in my earlier analysis,¹⁷⁹ the empirical nature of the scholarship is here understood as the unifying foundation of all research. Far-reaching theoretical and philosophical discussions are frowned upon or should be simply avoided and most certainly one should avoid taking a position about the veracity of religious beliefs. In a sense this is an attempt to establish the foundation by formulating the general foundation of all scientific research, the kind of foundation which should ideally encompass all scientific disciplines, but which would not be fully embodied or practiced in any of them. Typically, proponents of the *Religionswissenschaft*-centred approach also defend the positional application of methodological agnosticism (e. g. Sharpe 1983: ix; Hanegraaff 1995). The avoidance of taking a side is very much central to this approach, as it finds it essential to differentiate itself from theology and other deliberately evaluative perspectives.¹⁸⁰

While certainly influential, this approach does come with its problems as well. For one, its persistent emphasis on avoiding philosophical discussion has largely been unsuccessful and in actual practice has always included a set of theoretical premises, implicit rules of action and goals.¹⁸¹ For some time these implicit theoretical premises were explicitly phenomenological in actual research – something many of the critics of the phenomenological tradition have highlighted very well (e.g. Flood 1999).¹⁸² Besides, any kind of academic research is always and inevitably theoretical, no matter how ‘purely empirical’ one tries to be (Flood 1999: 4–8; Schilbrack 2014; Jensen 2011b; Stausberg, Engler 2011b). Therefore, avoidance of philosophical discussion would merely result in the kind of research practice that needs all its practitioners to sign off on a specific kind of implicit theoretical basis that should not be analysed or discussed. Moreover, as the criticisms raised by the cognitivist scholars highlight (and as I pointed out in sections 1.2.1. and 1.2.2.), the problem with this kind of an insistence on avoiding theory is that it is thus also either insisting on no generalization at all or is again

¹⁷⁹ See section 1.2.2.

¹⁸⁰ This is something I analysed in detail in section 1.2.3.

¹⁸¹ Although himself also occasionally a critic of the *Religionswissenschaft*-centred tradition (see Grottanelli, Lincoln 1998), Bruce Lincoln serves as a good example of the widespread scepticism towards any kind of ‘philosophical’ discussion in the study of religions as he pretty much completely dismisses Schilbrack’s analysis of ‘his philosophy’ (Schilbrack 2005) in his response to a symposium on his work (Lincoln 2005: 65–67).

¹⁸² For the wider discussion concerning these criticisms, see also Gilhus (1984), Ryba (2009) and Allen (2005).

relying on a set of implicit premises to make indirectly generalizing claims about the world.¹⁸³

The most noteworthy critics of this approach come from the ranks of cognitivist researchers of religion. As I showed in section 1.2.1, for them the ideal form of science is not some generalization over all sciences as it is for the proponents of *Religionwissenschaft*, rather experimental natural sciences basically embody the scientific ideal all other sciences should strive towards. And from this perspective historical, philological, anthropological or even sociological and psychological study of religion is indeed scientific only if everything done from those perspectives is congruent – or as they say, vertically integrated – with everything already known by the ‘higher’ natural sciences (Slingerland 2008, 2014; Pyysiäinen 2004: 2–27; Xygalatas 2010). In more detailed arguments proponents of this model also insist that all scientific research must be done through presentation of hypotheses and their subsequent empirical testing – without that scientific progress is supposedly impossible (and also practically non-existent in the study of religion thus far) (Slingerland, Bulbulia 2011: 308–312; Wiebe 2012: 181–189). Contrarily to the previous perspective’s general preference of methodological agnosticism, proponents of this foundation argue in favour of the methodological naturalism, suggesting that this is absolutely necessary to fully embrace true scientificity (Bulbulia, Slingerland 2012: 602; Slingerland, Bulbulia 2011; Martin, Wiebe 2013: 482; Bulbulia 2013b: 224–225; McCorkle, Xygalatas 2014; Bulbulia 2007: 621–623). Yet, as I showed in detail, their arguments in favour of methodological naturalism are not nearly as strong as they appear to assume.¹⁸⁴

However, aside the adequacy of methodological naturalism – something I will assess in my comparative evaluation of the positioning choices in the next chapter – there are also a couple of other major problems this kind of a formulation evokes. First of all, insisting that the only true foundation of scientificity is that of the natural sciences in practice creates a model where humanities can be scientific only insofar as they are able to maintain a direct connection to those sciences. Strictly historical or strictly philological scholarship can never be scientific in itself, no matter how well it is done. Yet, all cognitive, ecological or otherwise experimental science inevitably relies on conceptual tools developed by the hermeneutically oriented scholars who establish the initial contact with object of interest, whether through philological studies, anthropological fieldwork or quantitative sociology. One needs to know quite a lot about one’s object of study before one can even begin to propose hypotheses and test them. And in case of humans, this preliminary knowledge is primarily derived hermeneutically. No experiment (cognitive or otherwise), quantitative observation (as for example astronomy in natural sciences) or other such method(ology) could tell us that one

¹⁸³ For example by insisting that religion is a human universal or by concentrating on ‘world religions’ or by claiming that religion is a distinctively separate and independent aspect of the world – all claims made by many scholars of religion during the past century.

¹⁸⁴ See sections 3.3.1.–3.3.5, but chapters 4 and 5 also act as significant extensions and specifications of the arguments presented in those sections.

or another human activity or conceptual framework is a case of religiosity. For that one relies on preliminary knowledge that is derived from disciplines and fields of research that advocates of this foundational proposition claim to be scientifically inadequate. Categorisations and definitions are theoretical tools we use and as things stand right now, these tools are not derived from the natural sciences.

However, in such a case they are building their own ‘scientific foundation’ on something they have themselves declared unscientific. Of course, they could argue that they only accept reproducible hermeneutical work. At least one advocate of this kind of a scientificity has in fact argued something like that. Donald Wiebe notes: “the academic/scientific study of religion must aim only at understanding religion where “understanding” is mediated through an intersubjectively testable set of statements about religious phenomena and religious traditions” (Wiebe 2000: 265). Yet it remains unclear what kind of intersubjective tests of statements are acceptable. Furthermore, even if that was clarified, this kind of an argument would still not escape the problem that for this to work it would require a fully inductivist philosophy where all the ‘facts’ are directly derived from empirical data and theories are then developed based on those ‘facts’. Yet, scientific research does not work like that, theories are not given to us by facts (Jensen 2011b: 44; Jensen 1993: 114–116). Thus, even if we accede that only a more limited set¹⁸⁵ of hermeneutically gathered data is scientifically acceptable, we would still face the problem that the structure of such a scientific research perspective is not that of a hierarchy where everything has to first grow out of the experimental natural sciences and then other knowledge can be built upon that. Rather, we would be dealing with the kind of a model where an initial set of hermeneutical knowledge and theoretical premises are still the basis of all subsequent research, just with the clause that the kind of knowledge more easily adaptable to experimental and quantitative research is considered preferable and is more likely to be relied on subsequently.

However, in such a case we are not really dealing with a kind of “vertical integration” that still does not take hermeneutical research seriously on its own, but only insofar as it fits with the presumed theoretical premises of a clearly quantitative and experimental research approach. If so, then such scientific study of religion does not exist – all current cognitive, behavioural and other evolutionary research on religion is extensively relying on the hermeneutical research done by the philological, anthropological and other scholars who are ‘unscientific’ according to the advocates of this new scientificity and whose research cannot be smoothly reformulated into quantifiable definitions. Here one can think of the presumption that religion is a human universal or that we can speak of religion as

¹⁸⁵ That is, more limited than what is accepted in the *Religionswissenschaft*-centred perspective, not more limited to any kind of hermeneutical work in general. For example, I suspect much of what is described by anthropologists in their writings about their fieldwork does not really qualify as ‘intersubjectively testable’, since one cannot exactly recreate human life events to test them.

an easily distinguishable aspect of human life and thus study it as a separate phenomenon in need of explanation. Or we can look into the way cognitive scientists of religion are primarily interested in beliefs and ask where does this come from – finding the answer in the earlier tendencies in the study of religion as earlier philological and anthropological scholars were indeed primarily interested in beliefs (myths, tales, doctrines and so on). To conclude: proponents of this vertical integration and the ‘new scientificity’ in general rely on a significant amount of earlier research that they at the same time wish to dismiss as inadequate. Such a contradiction is clearly a major problem for this proposal as a whole and makes one ask whether this kind of a conceptualization is usable in actual research practices at all.

Although, it should be noted that from a more general perspective there is very little new in the basic forms, structures and the rhetoric of their arguments. It has been quite common for some time now that those who want to ‘make study of religion into a better/proper/real scientific discipline’ will to argue that this can be accomplished by cooperating more with some other discipline, by integrating oneself more fully into other disciplines, by adapting major (new) developments of other disciplines or by paying more attention to some kind of new theoretical and/or methodological developments. Advocates of the new scientificity (who largely overlap with the practitioners of the cognitive science of religion¹⁸⁶) are simply emphasizing the centrality of natural sciences, whereas others use this very same form of argument in very different ways. For example among others Morny Joy (2000b, 2001) has strongly emphasized the need to pay more attention to postcolonial, gendered and feminist perspectives so that scholars of religion can better comprehend their own position in the field and the limitations and possibilities of the discipline as a whole. Gavin Flood (1999) also presents a rather similarly structured argument as he finds the prevalent phenomenological character of the study of religion highly problematic and wants to reform the study of religion through the wider application of Bakhtin’s philosophy and other dialogical (and semiotic) approaches. Although paths taken by Joy and Flood are radically different from that of the ‘new scientificity’, they also wish to reform the discipline through the adoption of methodological and theoretical aspects of other disciplines. Whenever such an argument is presented, it is some other discipline that is somehow more sound, more reliable and more successful. Adopting more of it is supposed to in one way or another solve the problems study of religion is facing. But depending on one’s research interests and philosophical preferences, the exact disciplinary, methodological or/and theoretical direction varies.

¹⁸⁶ As noted earlier though, with at least one noteworthy exception: Harvey Whitehouse definitely does not support this kind of ideas about “scientifying the study of religion”. See Whitehouse (2004b: 332–334). One could suspect, however, that many of the practitioners of cognitive research projects who avoid participating in this kind of debates, also do not necessarily agree with everything the proponents of the ‘new scientificity’ are advocating.

There are perhaps alternative paths the study of religion could also take, but which they have not pursued yet. Here I am merely going to point out one of them and the likely problem with it. I am in mind the view of science as proposed by Paul Hoyningen-Huene (2013). At the centre of his argument is the idea of systematicity. This for him is the key ingredient that helps to differentiate scientific knowledge from other kinds of knowledge – especially from everyday knowledge – simply by being more systematic (Hoyningen-Huene 2013: 14), although by this he does not mean that it is more systematic in some general sense, but rather that science relies on a higher level of systematicity (Hoyningen-Huene 2013: 21). In his subsequent discussion he analyses nine different dimensions of the scientific endeavour (description, explanation, prediction, defence of knowledge claims, critical discourse, epistemic connectedness, ideal of completeness, generation of new knowledge and representation of knowledge), highlighting the high level of systematicity in all them. And while many in the study of religion would certainly find this kind of an approach attractive – after all, it would make it possible to show the scientific quality in the study of religion without the need to appeal to any external discipline, theory or methodology to justify the scientificity of the discipline – it does come with a certain problem that scholars of religion will likely find equally problematic.

That is to say, it does not help the scholar of religion in the need to differentiate oneself from the theologians. As far as systematicity is concerned, I see little to no reason why or how one could claim that academic theology is inherently and inevitably less systematic (or ‘exhibiting a lower level of systematicity’) than other academic disciplines. Yet that is one of the central concerns in much (if not most) of the discussions of scientificity and positioning in the study of religion – how to differentiate oneself from theological approaches to religion. Whether we look at the attempts to build that foundation from methodology or by relying on an understanding of the foundations of science in general (whether in a general form as in the *Religionswissenschaft*-centred tradition, or in a more hierarchical form as argued by the advocates of the new scientificity), all of these approaches wish to differentiate the study of religion from theology and concurrently also guarantee that the study of religion remains (or becomes) alike all other scientific disciplines (however that is understood). This is also why discussions over the position of the scholar are regularly at centre-stage in the study of religion (whether directly or through such topics as the insider-outsider problem, postcolonialist problematics or debates about indigenous methodologies). However, since it is possible to differentiate the positioning debate from the foundation of scientificity debate, I am going to do just that and return to that later.

Another interesting thing all these attempts to conceptualize and establish a foundation for the discipline have in common is that all of them are trying to account for and accommodate all the existing sub-disciplines and perspectives that are focusing on religion, but are avoiding theological scholarship at the same time. Even those who argue that setting up hypotheses and subsequently testing them empirically is the essence of science, do not (with only very few exceptions) go so far as to claim that philological-interpretative study of texts is inevitably

and fundamentally unscientific. They find most of the existing scholarship suspect and problematic, but not hopelessly so. Similarly in the other end of the spectrum. For example, Flood is rather critical of all reductionist and naturalist research perspectives (Flood 1999: 65–90) and similarly criticises the cognitive science of religion (Flood 1999: 57–63), yet neither is he interested in wholly dismissing such fields of research. He would rather just ‘reform’ them in a different way (Flood 1999: 77–79, 89–90, 146–150).

Overall, at this point one can certainly argue that despite numerous attempts to establish a foundation for the discipline as a whole (or in fact, through the establishment of a foundation, turn a branching field of studies into a coherent discipline) it remains rather questionable whether any of these theoretical models can actually get this done or whether they could even theoretically account for all the existing research approaches. To do that one would require practical guidelines how to ‘convey’ or ‘transfer’ or ‘translate’ knowledge acquired through one approach to a (very or radically) different approach. This is something I am going to discuss next.

6.2. Possibilities and problems of reciprocal translatability and integration

As one has probably noticed, all these conceptualizations of scientificity are facing problems of integration and translatability. Some have tried to solve this by declaring one of kind of research superior to all other kinds of research, others have attempted to look for a generalized notion of ideal research and interpret different research programmes as merely alternative paths towards the same goal. As shown, one cannot quite consider any of the proposed solutions successful, yet the problem itself is essential. If different research approaches are not congruent, commensurable, integrable or at least translatable, then study of religion will always remain fragmented and a generalized picture or theory that takes all the different levels and perspectives of research (evolutionary, psychological, cultural, social, philosophical, etc.) into account becomes an impossibility. In one way or another all the attempts to establish a generally shared understanding of scientificity are doing just that – they are trying to envision a way how we at least theoretically could visualise the final ideal state of complete knowledge about religion. While it is true that they are not so much dealing with the supposed contents of that completeness, but rather with envisioning the way(s) we should get there and what could perhaps be called the ‘structure’ of that completeness, establishing a vision of true scientificity also implicitly does try to tell what the sought for ideal should accomplish.

Now, granted, this is a huge topic. Something one could easily devote a whole separate volume on.¹⁸⁷ Here I am going to limit myself to highlighting a few of the more fundamental problems and then discussing one specific example in more detail. But before that, just to be clear, I should note what I mean by ‘translatability’ and ‘integration’. In short, when talking about translatability I have in mind the issue whether results, data or basic frameworks of one research approach (be it, hermeneutical philology, quantified sociology or cognitive science) can be reformulated in such a way that they can be utilized and practically applied in another research approach without losing the key contents or aspects of the original approach one derived them from. As with all issues of translation, this is not ‘measurable’ in detail and the successfulness of a translation cannot be evaluated in any quantifiable way, but the lack of fundamental quantifiability does not mean that one cannot evaluate the successfulness of a translation at all. Furthermore, obviously no translation is ever the identical twin of the original, so to a certain, ideally limited extent translating also changes the results, data or basic frameworks that one is trying to translate. Which aspects, parts, data or theory should be translated depends heavily on one’s conception of scientificity and the overall picture one is trying to reach.

At the same time, by integration I mean the kind of research situation where one can adopt the results of another research approach into one’s own research approach. Integration in practice can take a variety of forms. On the one hand it could merely mean the application of ‘translated’ materials from another research approach (and in this sense translation and integration are certainly not in conflict). However, on the other hand and more commonly, integration means the application (and oftentimes modification) of the relevant materials and conceptions of one approach to another in a way that depends on the conception of the ideal form of science that one is supposed to reach. Therefore, while translation with minimal losses is at the one end of the integrative spectrum, complete consilience and subjecting all other disciplines to the methodological and conceptual ideals of natural science lies at the other end of the integrative spectrum.¹⁸⁸

That may be the general picture of theoretically possible options, but the real question rather is how much of it is actually possible or useful. ‘Possible’ in the sense whether all research approaches really are inter-translatable or not and ‘useful’ in the sense whether – if possible – the result of that integration actually accomplishes something notable on the grand scale – either as finding out something fundamental, new, significant or otherwise about one’s research focus. This is something many have expressed grave doubts about. For one, the ambitious

¹⁸⁷ And indeed, I would hope that someone does that! As far as I know, no one has yet thoroughly and systematically tackled this issue (at least as far as study of religion is concerned).

¹⁸⁸ Consilience is an idea most famously defended by Edward O. Wilson (1998) of course. Beyond that and more specifically concerning humanities, this has been promoted by Slingerland (2008b) and in Slingerland and Collard (eds.) (2012). Specifically concerning study of religion this has been advocated by Slingerland (2014).

project of vertical integration and consilience as, for example, advocated by Slingerland (2014) suffers from many problems of integrability and its usefulness. As noted by Massimo Pigliucci (2016), when we talk of knowledge in academic research, we can mean very different things. There are things we can know about the moons of Jupiter through observation, yet there are also things we know based on the Pythagorean Theorem. Furthermore, in the study of music one can also come across knowledge claims such as ‘Beethoven’s music is of higher quality than that of Britney Spears’. How should one reduce all of these (and other) kinds of knowledge to that of biology, chemistry or preferably even to the ‘bottom level of reality’ (be it, quarks or strings or something else)?

More specifically, in the study of religion this issue of integrability has been addressed by Anna-Konstanze Schröder (2014) and by Sebastian Schüler (2014b). Schröder (2014: 53–64) notes how many of the research approaches (for example the cognitive science of religion or psychology of religion more generally) rely on a ‘nomothetic-deductive’ research perspective that is built on a ‘model – operationalizing – data gathering – data analysis – data interpretation – theory’ (and back to the start) process and thus it is very hard to find ways how to make constructively oriented hermeneutical research compatible, integrable or even properly translatable into the conceptual language of such a nomothetic-deductive research perspective.¹⁸⁹ In hermeneutically oriented research (whether philological, anthropological or otherwise methodologically) there is no need to operationalize concepts in strict and experimentally applicable ways. Instead, concepts are useful and applicable only insofar as they enable communication, comprehension and understanding. Success in research is evaluated based on the ability to convincingly communicate meanings and intentions and motivations as these are present in the research material. This is very different from the experimentally oriented research perspectives that evaluate success based on the ability to conceptualize research objects in such way that they would be testable in a quantifiable way. Schüler (2014b: 24–28) has suggested that some of these

¹⁸⁹ It should be noted that similar concerns about the division of approaches in the study of religion have been raised much earlier as well, although back then ‘the line’ was drawn somewhat differently. I have in mind Wuthnow (1981) and his discussions about the “two traditions” in the study of religion. In some respects similarly, but mostly from a rather different perspective he argues that the study of religion has been divided by competing intellectual presuppositions which have given rise to distinctively different research traditions. The first, he argues, builds on a Cartesian foundation, which assumes the radical separation of the subject and the world around him/her – the primary goal thus is the reunification of the subject and the object and thus the interest between the individual and the society. He sees Marx, Weber and Durkheim as the noteworthy followers of this tradition. The second he understands as a more wholistic approach where religion becomes one of the ways how humans in their search for meaning try to make sense of the world – thus also the interest in phenomenology, hermeneutics and symbols. Here Bellah, Berger and Geertz serve as central figures for him. Obviously one can categorize and systematize existing approaches in the study of religion in many different ways and Wuthnow’s approach has its virtues, but I do think that in the current situation, almost forty years after he wrote that paper, Schröder’s distinction is more accurate and describes the current problems better.

research perspectives may be more compatible than others. He notes how contrarily to the prevalent computational models of the cognitive science, dialogue and cooperation with cultural and hermeneutical research perspectives may be more easily attainable in case of the approaches that focus on embodied cognition and social cognition. This may be, but existing research thus far certainly does highlight how difficult it is to maintain compatibility and dialogue between research approaches that emphasize the constructionist nature of religion as we conceptualize, visualize and portray it in social and cultural life on the one side and experimentally-quantifiably oriented research on the other side.

One of the best ways to highlight this difficulty is to look at the controversies surrounding the concept of 'religion'. For constructively oriented anthropological, sociological and philological scholars there is no such independent, universal or distinct thing, object, sphere of existence or *sui generis* phenomenon as 'religion'. Religion and other such generalizing concepts are at best heuristic tools we can use to make sense of the diversity of human ideas and behaviours we encounter in the world, but it is not something you can quantifiably measure or observe as 'a distinct entity/phenomenon/thing in the world' (Bell 2000, 2006; Engler 2004; Schilbrack 2010, etc.).

However, in the more quantifiably and experimentally oriented cognitive and behavioural approaches research hypothesis need to have clearly defined and measurable research objects for any kind of proper research to be possible at all. This has caused researchers of these approaches to look for specific ways how to conceptualize religion. Oftentimes this takes the form of identifying a few key characteristics and building the concept of religion as a whole based on that. For example, Pascal Boyer in a very straightforward manner focuses on 'religious ideas, beliefs and concepts' and develops his whole theory of religion based on such a delimiting focus (Boyer 2001: 4, but see also 62). In a similar fashion Bering and Johnson in their article about supernatural punishment (Bering, Johnson 2005) focus on beliefs about supernatural agents and subsequently propose a theory of religion. Alternatively, one can look at Bering (2011) who tries to explain religious beliefs, but in practice claims to be dealing with religion in general. Similar treatments, where belief in supernatural agents is the key element of religiosity and thus the 'quantifiable hook' we can use to look into the phenomenon as a whole, can be found in many other studies as well.¹⁹⁰ In a sense, this approach works as a kind of an inverted pyramid, where religion in general is understood as a complex and wide-reaching phenomenon, but its large variety of aspects and dimensions can be explained through the most fundamental aspect(s), which is/are presumed to be the centre of religiosity as such. In the behaviourally oriented studies (such as the costly signalling theory of religion), research is instead focusing on ritualized behaviours and trustworthy communication, thus religion becomes 'a way of packaging information' (Finkel, Swartwout, Sosis 2010: 305). In such a case all kinds of communicative, hard to fake signals

¹⁹⁰ For example, this is just as much present even in the cognitive studies of religious ritual, where the key element is still belief in supernatural agents (Lawson, McCauley 1990, 2002).

(behaviours, badges, bans) become the key elements, the ‘quantifiable hooks’ for the researcher. Therefore, the approach promoted by behavioural ecologists is significantly less focused on identifying one or two fundamental key elements, but it is still clearly different from the approach of the social and cultural constructionists, since ecologists are trying to make sense of religion as a system consisting of a recurrent set of core elements (belief in supernatural agents, ritual, music, emotionally charged symbols, etc.) and the coalescence of these elements is the focus of their adaptationist analysis (Sosis 2009: 320–321).¹⁹¹

Quite predictably this kind of attempts to define religion in a quantifiable way have brought about various criticisms from those who are well-aware of the historically and culturally contingent character of ‘religion’ and other terms regularly used in the study of religion. Less so with the more complex and sophisticated approach of the behavioural ecology, but certainly the approach cognitive researchers have pursued has been extensively criticised. Some, for example, Saler (2004: 228–230) have criticised cognitivists’ tendency to concentrate way too much on supernatural agents, pointing out the problems with such an approach¹⁹² and instead advocating a more Wittgensteinian approach to ‘religion’, portraying it as a family resemblance rather than as a concrete phenomenon with a specific set of key characteristics (Saler 2004: 230–231). Armin W. Geertz in his review of Norenzayan (2013) also offers a similar criticism, pointing out how Norenzayan continues to apply the belief-centric conceptualization of religion that is so common in the cognitive science of religion, but which is also not acceptable for most historians and anthropologists of religion (instead preferring a more ritual-centred approach) (Geertz 2014b: 611).¹⁹³

Elsewhere others have gone even farther, pointing out how the cognitive approach through its depiction of religion as a distinct, clearly delimited entity with specific fundamental characteristics is basically a return to the *sui generis* approach to religion that so many in the social and historical perspectives have begun to move away from (Day 2010: 6–7; Hughes 2010: 301–302). In light of

¹⁹¹ Furthermore, specifically in response to constructionist critics, Sosis argues: “Even if religion is simply a Western construct, it *is* a collection of cognitive processes and behaviors that form an appropriate unit of evolutionary analysis. Specifically, it is an adaptive system, similar to – but no less complex than – the respiratory, circulatory, or immune systems, all of which are also Western constructs and probably lacking in the lexicon of traditional populations, yet no less interpretable through an evolutionary lens. Rather than debate whether “religion” is a natural category and wallow in its murky definitional waters, we should recognize the religious system, consisting of a recurrent set of core elements, as the appropriate unit of evolutionary analysis (Sosis 2009: 320–321; emphasis in original).

¹⁹² Basically, Saler argues that we could find ‘supernatural agents’ outside phenomena we commonly label ‘religious’ as well (Saler 2004: 228–230). It should be noted that Saler is not alone in this. Gothoni (1996) has also argued that ‘religion’ ought to be viewed as a family resemblance kind of concept and phenomenon. For the criticism of such arguments, see Geertz (1997).

¹⁹³ It is worth noting that Geertz was far from the only one who found Norenzayan’s conceptualization and usage of ‘religion’ problematic. This has been a recurring theme among the critics of Norenzayan. For an overview of these criticisms see Skjoldli (2015: 651–652).

the extensive constructionist criticisms, Day argues that we can at best use the category of religion as a heuristic tool that “should be treated a something akin to a “center of gravity” or an “equator”: an abstract tool that allows us to navigate the world a bit more efficiently. However, *a science of religion* makes as little sense as *a science of equators* for the simple reason that neither enterprise would have anything to explain” (Day 2010: 6–7, emphases in original). Such a heuristic approach regarding the concept of religion is of course widely accepted these days.¹⁹⁴ Quite significantly, it also allows for rather straightforward comparisons of Eliaden phenomenology and cognitive science (Day 2010: 7), since both are conceptualizing ‘religion’ in noticeably similar ways, even if they are using it for very different purposes. I do believe that such criticisms are very much justified. ‘Religion’ as most commonly used in the new evolutionary approaches is indeed portrayed as a distinct, coherent phenomenon with a specific set of characteristics and not as a practically useful scholarly device. The need to clearly define one’s object of research and conceptualize it in such a way that you can study it experimentally in a ‘piecemeal fashion’¹⁹⁵ has probably brought about this kind of conceptualizations of religion as grand theories of the complex phenomenon in general are still the goal, even it is vitally necessary to narrow it down to small, quantifiable units for specific case studies.

Thus far this ‘narrowing’ process in combination with the search for grand theories has come at the cost of conceptual credibility, as defenders of the cognitivist approach have simply seen hermeneutical and postmodernist research as stuck in a “methodological confusion and malaise” (Slingerland 2014: 122), instead themselves cherishing a “Victorian spirit of unified inquiry” (Slingerland 2014: 122). Elsewhere, justification of the use of ‘religion’ has taken the form of emphasizing the need for general categories so that cross-cultural research would be possible at all (Slingerland, Bulbulia 2011: 314–316), but still conceptualizing religion itself in a remarkably essentializing way: “‘religion’ is probably best seen as a radial or prototype category, anchored by a central feature or cluster of central features” (Slingerland, Bulbulia 2011: 314).¹⁹⁶ Rather interestingly Slingerland has at the same time agreed with a few critics that ‘religion’ most certainly should be characterized as a practically useful heuristic category, but not a direct designation of any concrete phenomenon (Slingerland 2008a: 450). Although, without a direct elaboration one can only wonder why he has not applied this agreement to actual research projects. And while one can certainly sympathize with the

¹⁹⁴ Elsewhere Bell (2000, 2006), Schilbrack (2013: 293), King (2013), etc. also support a heuristic approach to the concept of ‘religion’.

¹⁹⁵ Just to be clear, this is a phrase researchers in the cognitive science of religion very much like to use themselves. For example, see Sørensen (2005: 467–470) and Barrett (2007a: 768–769; 2011b: 231–232) as examples of emphasizing the so-called ‘piecemeal’ approach.

¹⁹⁶ It should be noted that an argumentatively very similar approach is also used to justify the central use of the concept of ‘belief’ by Lanman (2008). There as well the use of the concept is justified through the long history of usage, through the need for generalizing research and by emphasizing a strict definition as if the long history of usage and a very clearly formulated definition can solve the problems highlighted by constructionist critics.

problem cognitive and behavioural researchers are facing as they need to specify their object of study (for experimental research to be possible at all), existing applications (and especially in cognitivist approaches) have not been successful in reconciling this need for specific definitions with the conceptual problematics that haunt such central conceptual tools of research.

But this kind of a failure to take cultural and social analyses of religion (and ‘religion’!) seriously is not just an example of the difficulties of interdisciplinary research. This also highlights the genuine difficulties of translating the basic frameworks as well as the results of cultural and historical research to experimentally inclined evolutionary research projects. There does not appear to be reason to argue that this is merely a case of defining the same concepts somewhat differently or a case of requiring a different kind of conceptual toolbox, where emphasis is on one specific way of conceptualization. Rather, this appears to be a far more fundamental problem, where even the basic premises of research are distinctively different. Therefore, the situation is rather characterized by selective adoption and recontextualization of interesting elements from other research approaches. In this case ‘one’s own’ approach is always (whether implicitly or explicitly) seen as superior to all other approaches. But in this sense each approach is indeed integrating the elements they like, rather than actually attempting to translate them and retain the key elements as they were understood in that other approach. Alternatively, if the comparisons of the use of ‘religion’ in phenomenology of religion and cognitive science of religion – as highlighted before – are justified, one could also argue that cognitivist researchers have indeed translated a certain approach to religion into their own. However, instead of trying to develop a dialogue with current developments in the historical and social studies of religion they have returned to the approaches largely abandoned in contemporary research.

Either way, current research practices and conceptual developments do not offer much enthusiasm in this regard and instead highlight some of the major difficulties any attempt to building a complete vision on cross-disciplinarily translated knowledge faces. Here I definitely do agree with Schröder (2014: 53–64) in her suggestion that the issue of associating or combining or at least connecting the nomothetic-deductive perspectives with the hermeneutical perspectives appears to be one of the major future challenges in the study of religion. Furthermore, at least one notable anthropologist thinks that this problem cannot be solved (Lambek 2014: 146–148), since hermeneutically inclined philological and anthropological research approaches are just too different from the experimentalists (such as psychologists).¹⁹⁷ Although, despite this pessimism and the

¹⁹⁷ Specifically he argues that „Rigorous experimentalists discard their own past as soon as a better experiment or experimental result comes along. They also take an objectivist position or produce one by means of their methods; such a position is designed to put them in a different kind of relationship with their subjects, an explicitly external and possibly superior epistemological position rather than an equivalent one. In effect, it places them in a position of competition over matters of truth and certainty, hence the disputes between religion and science, the very disputes that the other approaches struggle to avoid or understand. As they

current lack of success in cross-disciplinary translation, the existence of continuous dialogue between such very different research approaches is significant in itself as well as noted by Hyman (2004).¹⁹⁸

Returning to the larger question of unity or fragmentation, the current state of affairs would seem to be one where actual practices very much fall short of the ideals of scientific unity and completeness that guide how researchers think of and justify those very same research practices. Nevertheless, even if disciplinary foundations have not been established through a unified understanding of scientificity, neither has current research given much hope for cross-disciplinary translation, one could potentially still argue in favour of specific formulations if it were possible to show that there exists some kind of a fundamental hierarchy of knowledge or an inevitably interdependency of different research perspectives which in turn makes it necessary to rely on one kind of a perspective rather than another. In the last section of this chapter I am going to briefly look at some of the potential arguments in such matters. Only after that is it possible to turn to the evaluation of the positioning options available for the scholar of religion.

6.3. Formulating the big picture: hierarchies, interdependencies and visions of completeness

Thus far in this chapter I have looked at how researchers have tried to formulate the foundation of the discipline by specifying the norms and requirements of properly scientific research. I also pointed out the shortcomings and problems each one of these has faced thus far. This in turn led me to the issue of translatability – to what extent can one translate the basic frameworks, conceptual tools or eventual results of one approach to another? – and to a relatively pessimistic evaluation of the current situation (at least regarding the issue of translating conceptual tools from humanities to ecological and cognitive research programmes). I now intend to highlight three recurring aspects of all these discussions and topics. In different ways these as well function as attempts to formulate the (ideal) unity of the discipline as they try to make sense of the ‘structure’ this unity should have. First, there is the issue of disciplinary interdependency – do different (sub)disciplines depend on each other and if so, in what way? Secondly, is research founded on, or inevitably reliant on a clear hierarchy of knowledge? Thirdly, what should the final picture of complete knowledge (that the field of study strives towards) look like and include? Obviously these are immense topics,

naturalize religion, the kind of knowledge the purely objectivist disciplines produce is not fully commensurable with the knowledge produced by the hermeneutic disciplines” (Lambek 2014: 147).

¹⁹⁸ To be specific, Gavin Hyman argues: „In the absence of a unitary theoretical account it may well be that “religious studies” (both the discipline and the institutional departments) will instead serve the practical purpose of being a “placeholder” within which dialogue may occur” (Hyman 2004: 216).

thus I am here going to limit myself solely to those aspects that directly relate to the conceptions and arguments I have dealt with thus far.

To begin with the issue of disciplinary interdependency. This is something most researchers in the new evolutionary perspectives have made strong claims about.¹⁹⁹ As discussed, evolutionary researchers insist that it is not possible to comprehend and analyse religiosity as a phenomenon without taking the ecological and/or cognitive aspects of human development and biological make up into account. Historical, anthropological and sociological studies of religion are insufficient in themselves, religiosity can reliably be analysed, understood and explained only if we build those theories on cognitive and biological foundations, they claim. In addition these arguments are closely accompanied by claims that humanities are not truly scientific or only insofar as they are compatible with natural sciences.²⁰⁰ Yet, as I noted earlier in this chapter, despite such ambitious claims this conceptualization of scientificity comes with the glaring problem that they themselves are hugely reliant on earlier hermeneutically inclined philological and anthropological scholarship. This in turn leads us back to the argument various scholars from different backgrounds and perspectives have persistently argued: hermeneutics is the inevitable foundation of all research on religion (Wach 1967: 12–15; Long 1978; Kippenberg 1984; Joy 2000a; Seiwert 2012: 32, etc.).

Still, I think the problem here is that in a way both sides of this debate are correct, but not to the extent they themselves would like to believe. Both sides begin with different questions and then try to generalize these answers to the study of religion overall. Those emphasizing hermeneutical ‘understanding the other’ as the inevitable foundation of all research are focusing on the question how study of religion is possible at all and what one needs to do to begin with such research. And indeed, in this sense all research begins with a hermeneutical search for understanding other people. Of course all researchers individually do not begin there, but for other kinds of research to be possible at all, someone needs to have done some (or preferably a lot of) hermeneutical research to begin with. How else would we know ‘what’s out there?’. On the other hand, those emphasizing the cognitive, neurological and biological dimensions, insisting that these dimensions are inevitably necessary for any attempt to make sense of religiosity, are obviously also correct. Human beings are biological creatures who inevitably incorporate their neurological, cognitive and other functional capabilities to all their activities, thoughts and so on. Thus, for a complete picture of religiosity as such, these sciences and what they can help us study do indeed offer us a chance to look at the foundation(s) of religiosity as such.

The problem here is that neither of the two perspectives can really ‘overtake’ the other. Hermeneutics may lie at the very beginning of any kind of research concerning humans, but that does not mean that the hermeneutical search for

¹⁹⁹ As I highlighted in the first chapter, but also discussed from a specifically epistemological point of view in the third chapter.

²⁰⁰ See sections 1.2.1. and 1.2.2. concerning this.

understanding is superior to other research approaches in all matters and questions concerning religiosity. Similarly, humans are obviously biological beings with cognitive functions and the human capability for religiosity inevitably depends on them (or grows out of them), but one cannot hope to derive the superiority or higher importance of cognitive and biological sciences from this obvious fact. After all, we can only start doing this kind of research once we have done quite a lot of basic hermeneutical, philological, anthropological and historical research to begin with. Without those we would simply not know what to study as we would lack even the basic conceptual framework that the study of religion relies on these days (and what the cognitive and ecological scholars have largely adopted for their own needs in forms convenient for them).

This leads us straight into the second issue – that of hierarchy. And while advocates of the so-called new scientificity insist on a straightforward, linear understanding of hierarchy, what I have just highlighted with regards to the issue of interdependency also points to the need to rethink the hierarchy of disciplines in the context of the study of religion. After all, if psychology, ecology, biology and other relevant disciplines in some key aspects depend on philological, hermeneutical and other related approaches in their research on religion, they cannot be more fundamental than the approaches they rely on. Therefore, I do not think there is any way to justify any linear, ‘ladder-type’ form of hierarchy. Rather, in the context of the study of religion it makes more sense to think of the interrelation of scientific disciplines in the form of a loop or a circle where none of them can be called somehow fundamentally primary. Even if one or another appears to be more fundamental in the context of some specific research perspective, this cannot be extended to the academic study of religion in general, regardless of the specific perspective. In this sense all the proposed ideal forms of scientificity function only as elaborations or explanations of the specific research practices of one or another approach or research group, but all of them lack the argumentative and practical strength to justify themselves beyond that.

This of course will make one ask whether we can speak of any unified concept of complete knowledge – the ideal final state of the academic study – in the context of the study of religion at all? Perhaps one might argue that the understanding of the complete picture would differ, since the questions various researchers ask or the aspects they focus on also differ? This theoretically could turn out to be a possibility, but as things stand right now in the study of religion, I do not think this is the case, despite significant differences in ideas of scientificity, approach and positioning. As I noted in the end of section 6.1., all approaches to this issue of complete picture are emphasizing the need to accommodate all the sub-disciplines, research programmes and approaches. No one is dismissing any research approaches in general while discussing their vision. I would argue that this also very much unites them in their conceptions of the idealized final state of complete knowledge. Andrew Abbott has also analysed this issue from a more general perspective, arguing:

“Each major academic discipline has an axis of cohesion. /.../ Consider the disciplines interested in culture. The heart of anthropology is its method, ethnography. The heart of cultural studies is the conception of text, which derives from its parent disciplines in literary studies. The political scientists writing about culture are shaped by their discipline's central allegiance to the phenomenon of power” (Abbott 2002: 217–218).

Something very similar is taking place in the study of religion, where the concept of religion lies at the centre of all the various sub-disciplines and approaches that the proponents of the different try to accommodate and adopt to their overall generalization. As Jonathan Z. Smith famously noted, “‘Religion’ /.../ plays the same role in establishing a disciplinary horizon that a concept such as ‘language’ plays in linguistics or ‘culture’ plays in anthropology. There can be no disciplined study of religion without such a horizon” (Smith 1998: 281–282).

I would argue this also functions as the basis of a remarkably unified idea concerning the final end point study of religion would ideally reach. Obviously, approaches in existence right now address this ‘axis of cohesion’ or ‘horizon’ in quite different ways and thus highlight one or another aspect of religion, but still, religion in general is something understood rather similarly. It is still beliefs, rituals, communities, organizations, texts, doctrines, institutions and myths in one combination or another, from one perspective or another. Even those arguing in favour of abandoning the concept of religion are mostly just focusing on how to conceptualize and approach the phenomena we see in the world better, but they are not really arguing that such phenomena do not exist at all (Fitzgerald 1997 is an excellent example here). And in this sense ‘religion’ continues to very much define and delimit the idealized whole scholars of religion are focusing on. This whole typically consists of all the aforementioned aspects, from the very beginning of religiosity as a human trait and capability, including all the forms and ways it has ever existed up until today and potentially to the future, as long as religiosity continues to exist. In this sense, it is of course the kind of completion that in all likelihood we will never achieve, but as an ideal it will continue to influence and guide our research practices regardless of its achievability.²⁰¹

Of course the exact ‘structure’ of this complete knowledge will vary depending on how one understands the theoretical end goals of research. It can be structured as a theory of causal joints and functions, or it can be structured as a complete descriptive and interpretive whole that covers every detail as well as every generality. In any case, these two definitely do not exhaust all the possibilities (and they do not necessarily contradict each other either), but the point here is that the ‘things in need of the complete coverage’ are understood in remarkably similar ways. One could even speculate that if it were not so, the numerous (and sometimes radically) different research approaches would not have any need to justify their own conceptions of scientificity or position as preferable compared

²⁰¹ I have discussed these issues concerning the contemporary era and the Western society from a more general perspective more thoroughly elsewhere. See Peedu (2014).

to others. Only if one sees the other as potentially attempting to occupy or already occupying “the same turf” does one feel the need to justify one’s own perspective.

6.4. Conclusion & looking ahead

Therefore, overall what we see in the study of religion is a multiplicity of attempts to conceptualize the demands of a properly scientific study. None of these are without their problems, some more severe than others, but most significantly, they do want to clarify the same (kind of) issues. Yet, problems of translatability cast grave doubts on the question whether different research approaches can really be integrated as smoothly as many would like to see (or claim necessary). It could be said that in this situation a scholar finds itself faced with a (meta)theoretical foundation of the discipline that is at the same time very fragmented as well as noticeably unified, all depending on which aspect one wishes to emphasize or focus on. Nevertheless, there is certainly enough unity here that one can discuss the possibility of justifying one specific positioning choice for all the research approaches in general, even if finding such a shared position is likely to be very difficult. After all, such a position should make it possible to avoid biases and mistakes unacceptable for a scholar of religion, yet should also be applicable in the practical context of many different research approaches and situations (i. e. it should be more than simply a theoretical elaboration, but an actual guideline for research activities). As I earlier argued we should think of it as the act of self-positioning, inevitable for all researchers, though as I noted, it is often depicted as a methodological issue. In the last chapter, I am going to look into the possibilities of self-positioning currently available for scholars of religion and evaluate their feasibility, desirability and applicability. While I have analysed methodological naturalism in depth already in earlier chapters, simply criticising one position would remain shallow, if one did not look at the actual alternatives and how applicable or justifiable those could be.

7. The study of religion and the position(s) of the scholar

Earlier in the second chapter I looked into the discussions concerning method(ology) in the study of religion, highlighting numerous different paths this discussion has taken and arguing in favour of a adopting threefold categorization to make sense of ways method(ology) has been discussed and understood in the study of religion. In the following chapters I have discussed a number of different issues and problems, all in one way or another related to the debates concerning epistemology, evolutionary study of religion, naturalism and scientificity. In other words, I have been dealing with the specific topics that are directly relevant for the issues I categorized as the third dimension of methodology – that of positioning.

All those discussions have been necessary for a proper evaluation of the positioning options proposed in the study of religion. I have mostly focused on issues relevant for the justifiability of methodological naturalism, but that has been necessary, since the question I have been most interested in is whether the new evolutionary approaches to religiosity are indeed inevitably linked to any specific position or whether they inevitably necessitate one or another specific position. Some of these discussions are of course relevant with regards to other positioning options as well, but primarily I have indeed been interested in the justifiability of the epistemological arguments as presented in the evolutionary study of religion. To a degree this is obviously also a practical necessity – assessing all the issues and topics relevant for all the positioning options is simply too much to handle for any one study. Still, as long as the focus remains above all on the evolutionary study of religion and positioning, this has been a useful restriction.

Based on these analyses I am now going to look into the dilemma of positioning a scholar as such. I will first highlight practical problem of our inherent limitedness in our search for reliable knowledge. This will serve as the basis for the subsequent comparative assessment of methodological naturalism and a select list of other positioning options that various scholars have proposed.

7.1. The study of religion and the limits of access

Before turning to the point-by-point assessment of methodological naturalism and its potential alternatives as self-positioning options for the researchers, I want to turn to the issue of limitations as they are inevitable or become inevitable for all human research. Of course I have already in one way or another discussed this extensively²⁰² but when we look at this from a more generalized perspective we could simply say that researchers as humans are faced with their own human limitations. In the simplest sense this of course manifests itself as our cognitive

²⁰² Whether in the context of the epistemological or/and evolutionary justifiability of (methodological) naturalism or in the context of the ideal scientificity debate.

limitations, or as limitations of time and energy or as limitations of practical accessibility (most of historical data is forever lost to us), but all of this of course in such a general sense is quite trivially obvious. Our cognitive limitations are common knowledge in the cognitive science of religion (Barrett 1998: 608–611; Barrett 1999: 325–327; etc.). Elsewhere, similarly, limitations of time and energy are the very reason we specialize into different (sub)disciplines. Problems of accessibility and the selectiveness of available data are centrally covered in most books concerning the history of religions (for example see Eliade 1958: 4–10; Rudolph 1987: 9–52; Biezais 1978, etc.) and concerns about hermeneutics and the limits of understanding have a long history in the study of religion (Wach 1988; Cannon 1993; Flood 1999; etc.)²⁰³ Another noteworthy limitation we always face in the study of humans and all things related to humans is that of ‘ethical’ concerns in the most general sense – we are not willing to do laboratory (or otherwise) experiments with humans in the way we are willing to do that with mice and other test animals. This sets significant limitations as to what kind of knowledge we can acquire or what kind of experiments we can perform. Often-times much of our research and discussion is relying on very indirect or speculative data exactly because we have no intention to do the kind of tests needed for more reliable data on humans. Obviously I do not find this as something we should reconsider, but one should keep this in mind when judging the strength and extent of the empirical data available in the study of humans (and thus also in the study of religion).

Still, I find this significant and indeed the reason why we are faced with a positioning debate in the study of religion. After all, if the objective view of the pure mind from a distance was truly possible, we would have no practical need for any debates about the ‘position’ of a scholar – his/her position would be immediately obvious. It is that “archimedic point outside religion” as Werblowsky (1975: 152) once neatly argued. But one can also think of limitations from a more general perspective and this is where issues of epistemological presumptions’ justifiability take centre stage. In this sense positioning is a matter of deciding what we can and cannot know, what kind of knowledge we can acquire and what we cannot acquire, or what we can make claims about and what we cannot make claims about. Our limitedness in these matters is inescapable and cannot be overcome (Weckman 1994: 217–219). This can become immediately apparent in debates and discussions about the ‘truth’ of religious beliefs or worldviews – how does one deal with situations where one cannot determine their validity? It can also become relevant as an issue of preliminary presumptions – who am I in the

²⁰³ For example, Wach (1988: 107–114) finds research inevitably limited, since we can only understand other people and events to an extent, furthermore – we only have a chance to develop a closer contact with select few people. Similarly Cannon (1993: 171–175) finds the hermeneutical task always limited, since other human minds will always remain (to an extent) inaccessible for us, in a way transcendently inaccessible even. Or as Flood (1999: 150–154) points out, study of other living people and their religiosity remains always incomplete, as the “non-closure of any biography inevitably has consequences for understanding others and, indeed, for the construction of any human science” (Flood 1999: 153).

wider picture and how do I relate to the supposed object of research. This has probably been most acutely discussed in anthropology as the complicated position of the researcher has become a central issue in the wider debate about status of the discipline and the reflexivity of the researcher. Ideally, a scholar of religion approaches one's research with as few unconscious presumptions and norms as possible. This of course does not mean having no presumptions or no significant presumptions at all – that is a practical impossibility for a scholar of religion – but it does mean that one should at least be fully conscious of the way one is approaching one's supposed object of study. And here becoming aware of one's starting point and the (inevitable) consequences of that starting point functions as a way how a scholar also accepts one or another set of limitations for one's research activity.

At the same time, we also have to maintain compatibility with scientific goals generally valued and accepted in one's research approach and discipline. Here concepts of scientificity also function as limitations, requiring the scholar to work in specific research contexts and thus making it necessary to adopt a position that is also 'scientifically acceptable'. Not just any kind of knowledge is desired, but the kind of knowledge that is compatible with the scientific pursuit of knowledge. Of course, typically this debate tends to circle around the idea of 'empirically acquired knowledge' and what really counts as empirical – a debate that has a long history going back to the phenomenology of religion and beyond.²⁰⁴ Yet, what counts as empirical knowledge and what does not is very much dependant on one's concept of scientificity and thus acts as a further limitation a scholar also has to manage and cope with.

In general, justifying one or another position and pursuing research from one or another position is a kind of a balancing act. Initially, one has to face the inevitable limitations set about by our inevitable humanness and ask what kind of knowledge can we acquire at all. But also one needs to balance the kind of knowledge we seem to be able to acquire with the more specific requirements put in place through our goals of scientificity. Adding to this the impossibility of research without at least some kind of preliminary premises and conceptual foundations, the issue of positioning oneself to a significant degree functions as a matter of deciding what kind of presumptions are justifiable and what kind of

²⁰⁴ Examples: Biezais (1978: 161–162) discusses the phenomenologies of Söderblom and Heiler and emphasizes the primacy of empirical research, thus anything that is not directly accessible empirically should not be speculated on. Hanegraaff (1995: 100–108) at the same time criticizes 'religionists' as well as 'reductionists', suggesting that they are not valuing empirical research itself highly enough and instead are setting certain philosophical assumptions (whether positive or negative) about the truth of the religious ideas above any kind of empirical data (or the lack thereof). And by 'reductionists' he has in mind researchers in the social scientific study of religion. And of course – as highlighted in sections 1.2.1 and 1.2.2 – all the cognitive and behavioural scholars also emphasize the need for empirically reliant knowledge above all, but for them the criteria for 'empirical knowledge' is yet again quite different.

presumptions are not justifiable. The ideal would thus be the kind of presumptions that manage the inevitable conflict between possibilities and ideals in the most acceptable manner, enabling the most reliable kind of knowledge that at the same time is also scientifically justifiable. Methodological naturalism as well as other positioning options have entered this debate as ‘candidates’ researchers can ‘choose’ from.

7.2. Methodological naturalism and its alternatives

In the subsequent analysis, I am going to focus on some of the most noteworthy positioning options that have been put forth in the context of the study of religion. Although I have described and evaluated methodological naturalism and some of the arguments in favour of it from a couple of different perspectives already, I am going to summarize them here to place methodological naturalism into a wider perspective and evaluate its virtues and weaknesses in comparison to the alternative options some scholars have often argued in favour. Thus I am going to also look at methodological agnosticism, neutrality and the so-called dialogical position as potential alternatives to or ‘competitors’ for methodological naturalism. This selection is not intended to be all-inclusive, it is not the goal of this study or this chapter to cover all the existing options. After all, in my overview of the positioning dimensions of the larger methodological debate also included discussions about attitude, ethos and so on. However, since none of those have been developed further in much detail it would be hard to discuss them on equal footing with the abovementioned options and thus I am going to leave them out for now here.²⁰⁵ Rather, I have chosen perhaps the most influential option aside methodological naturalism (that of methodological agnosticism) and then a couple more that I find comparatively intriguing and quite revealing with regards to the bigger picture. Because of this I have also decided to not include ‘methodological atheism’ as it has been advocated in the study of religion (though mostly just in the context of the sociology of religion) as I find this option so noticeably similar to methodological naturalism that little if anything could be comparatively learned from going into that option.²⁰⁶

To begin I am going to briefly summarize the basis of the each position, though since I have already described the first two quite extensively earlier, I am

²⁰⁵ The only potential exception could be Lincoln and his theses on method (Lincoln 1996) which has been subsequently discussed as well, but for now I find the four I have chosen comparatively more interesting. I suspect that adding Lincoln to this list would widen the comparative scope too much to maintain a clearly defined focus, thus I will not be dealing with him here. However, I certainly do agree that one definitely could just as well discuss Lincoln’s theses as a conceptualization of a positioning option as well, instead or aside any of the four that I will be focusing on.

²⁰⁶ One can look into how Porpora (2006) and Cantrell (2016) have analysed methodological atheism to see how remarkably similar that position indeed is to methodological naturalism, especially epistemologically.

going to be especially brief with regards to them. In my subsequent analysis I will be focusing on some of the key issues necessary for the evaluation of any positioning option. First, of course there is the question of justification – how is such a position justified and why it should be preferred? – but also, what kind of presumptions are considered either inevitable or necessary in the context of this positioning option? Secondly, I will look at how the position under analysis understands the relationship between the researcher and the ‘religious insiders’ or religiosity in general. As noted before, we cannot somehow stand outside or above the world as researchers. All positions always function as a conceptualization of the relationship between the researcher and the researched. Thirdly, I will be returning to the issue of scientificity and evaluate how suitable the position options are for acquiring knowledge compatible with the scientific ideals. But also, just as significantly – what kind of scientific ideals are entailed by one or another positioning option. Fourthly, I will be looking at the relevant criticisms of the position and its justifiability. And lastly, I am going to evaluate how widely each one of the positioning options could be applicable in the study of religion. As I have occasionally noted as well, all the positioning options tend to grow out of specific research approaches and their specific problems. This does raise the question, do they function solely as solutions to their specific problems or could they be adaptable for the discipline overall? Of course, as often happens in such cases, advocates of all the positioning options are indeed themselves arguing that their option indeed can be and should be adopted by the discipline overall. Thus, this last point also serves as an evaluation of their claims. The analysis of the positioning options will be followed by a comparative evaluation.

7.2.1. Methodological naturalism

Since I have already described methodological naturalism as well as extensively discussed issues related to it, I am going to be brief here with regards to everything that I have already touched on. I will mostly rather focus on the aspects and questions I have not yet delved into previously.

At the centre of methodological naturalism lies the idea that religion ought to be studied, understood and explained solely in naturalistic terms. Any and all non-naturalistic explanation, causal connections or interpretive elaborations should be steadfastly avoided. Methodological naturalism is supposed to function as a practical rule of thumb in epistemological matters. It is not directly atheistic as it does not rule out the possibility of something beyond the natural world, but that should not be included in scientific research. Once these rules of action are in place, no further specifications and basic propositions are necessary (or at least not inevitably necessary). With regards to the issue of human limitedness, methodological naturalism appears to take the stance that we should focus on things we can easily study from an empirical point of view and we should assume that everything we have arguable, questionable, limited or problematic access to is irrelevant. Or in a less ambitious form it can mean that easily accessible

material can be reasonably well studied and explained even when problematically accessible phenomena are pretty much ignored or assumed to be irrelevant.

As far as positioning in relation to the 'religious insiders' is concerned, methodological naturalism appears to see the researcher as one viewing religious people or religiosity in general as something in need of an additional explanation. Researchers are not thought of as occupying the same social and cultural sphere as the people they study.²⁰⁷ Therefore, it is possible to determine the foundations of religiosity and acquire knowledge about religious people through scientific practices. Religious insiders are basically just objects of research, just as plants are for botanists and animals for zoology. How religious people themselves understand matters is only relevant as 'data' for the subsequent research analysis and the possibility that those insiders might themselves actually be right about the way the world works is ruled out beforehand. Furthermore, as noted previously, justifications of methodological naturalism are closely accompanied by justifications of a specific concept of scientificity, derived from an idealized depiction of experimental natural sciences. One could speculate that methodological naturalism is not really inevitably attached to such a concept of scientificity and to an extent would also leave room for combinations with other concepts of scientificity,²⁰⁸ but this would remain strictly speculative, since in the context of the study of religion methodological naturalism has (with very few exceptions) come in concert with this kind of ideals.

Discussions concerning the justifiability of methodological naturalism were thoroughly analysed in the third chapter, but with regards to the ideas of scientificity also elsewhere. There I noted how one cannot derive any notable epistemological inferences from the cognitive science of religion, but more importantly, how arguments in favour of methodological naturalism as *the* method for all study of religion are not nearly as convincing as they are claimed to be. The universal acceptance argument suggests that naturalism is the basis of all proper scientific research, yet this does not offer any epistemological justification and more problematically – a comparative look at actual research quickly shows that scientific practice is far more diverse than advocates of this one position claim. The successfulness argument suggests that we ought to adopt methodological naturalism, since it is the basis of all successful and progressive disciplines, yet this relies on an unjustifiably narrow understanding of success and thus ignores the successfulness of all interpretatively oriented research approaches.

The argument of no ontology claims that this position does not enforce any specific ontological-metaphysical positions, these are merely preliminary rules of

²⁰⁷ This is explicitly visible in one article by Jeppe Sinding Jensen where he discusses the rationale of the study of religion and then explicitly claims: "In terms of normative epistemology, scientific knowledge simply must be considered cognitively superior to religious thought if the study of religion is to make any sense" (Jensen 1997: 11).

²⁰⁸ The fact that 'methodological atheism' has been applied quite extensively in sociology – a discipline many advocates of the new scientific approaches find problematic – serves as proof here that such positions are not inevitably related to one specific concept, though this does not mean that it could be fit with any of the scientificity-ideals in existence.

action. Yet, at a closer look there is no real difference between methodological naturalism and metaphysical naturalism, as far as practical research situations are concerned. Lastly, the argument of inevitable necessity suggests that evolutionary research and methodological naturalism are fundamentally linked. But this argument as well comes with its problems, since ‘natural entities’ appears to be an ever-changing concept. Furthermore, even those evolutionary sciences rely on many things that definitely are not strictly naturalistic in any sense (mathematics!). But as I also showed in the fourth chapter, any kind of claims about the inevitable connection of evolutionary research and naturalism also face the problem that it is not possible to justify naturalism as an epistemological or/and metaphysical position evolutionarily. One cannot conclusively derive epistemological arguments in favour of any specific general position from the theory of evolution or from any evolutionary discipline. But just as well: one could justify any general position just as successfully.²⁰⁹ Overall, epistemological (or in general theoretical and philosophical) arguments in favour of methodological naturalism have remained rather weak as far as its universal and preferable application is concerned. They have not managed to show that it is the inevitable, only successful way of doing research, nor have they shown that it is more successful than any of its alternatives.

Similarly, naturalists’ ideas of scientificity face major problems in actual research practice. They emphasize adherence to a strict ideal of scientificity and exclude significant proportions of notable (sub)disciplines (philology, cultural anthropology, history), yet in their own practice rely on those disciplines for the ‘data’ they focus on. And yet, despite its shortcomings naturalistic research perspective without doubt has had quite a bit of success in developing empirical research programmes in numerous scientific fields. I would argue that it is very much this practical success that makes methodological naturalism an attractive candidate, despite its numerous methodological and theoretical problems and contradictions – at least it enables focused research with clearly definable results. Indeed, this is where advocates of the methodological naturalism are very much right – in the end it is the actual applicability and success that determines the viability of a position, not its theoretical justifiability. Theoretical virtues need to be applicable in research situations. Even if these same research projects and the data acquired through them is also open to alternative interpretations and adoptions by advocates of other positions, since nothing in the research design and results in itself rules out the possibility of also seeing data acquired naturalistically to be interpreted otherwise.

²⁰⁹ That said, this does not rule out the possibility of epistemic consequences for *specific* religious beliefs about some specific objects, historical events, developmental processes – think of some of the more specific historical claims of the creationists – and other such *specific and concrete* matters. In such cases deriving epistemological arguments from the evolutionary theory may be possible. But when it comes to more matters of positioning and generalizing stances such as ‘methodological naturalism’, ‘methodological agnosticism’, etc., then we are not dealing with any specific beliefs.

Yet, this easy applicability into concrete research projects is certainly one of the reasons why ‘methodological supernaturalism’²¹⁰ has never really been convincing. Not because it is not theoretically justifiable – it is definitely justifiable theoretically.²¹¹ After all, I spent a decent proportion of the fourth chapter just to show how a view radically different from naturalism could be derived from the theory of evolution just as successfully as that of naturalism or scientific realism.²¹² It is true that my theoretical argument had to do with a view slightly different from that of ‘methodological supernaturalism’, but still, it does serve as a significant enough of an example to highlight the impossibility of justifying naturalism theoretically any more convincingly than supernaturalism. But the problem still remains – both my theoretical alternative or ‘methodological supernaturalism’ at best serve as alternative interpretations of existing empirical data, but they do not offer good ways how to put their basic premises into research practice.²¹³ This is what methodological naturalism does offer – applicability. Alternatively, if in actual research practice there is no notable difference between that theoretical alternative, supernaturalism and naturalism, one can again ask “why include such additional presumptions?”. Thus, it would appear that the metaphysical and epistemological premises methodological naturalism applies are strict enough that they do help with developing research programmes.

Yet, this applicability is at the same time still relatively unsatisfactory. First, there are strong reasons to believe that this applicability really only extends to those fields which are primarily experimental. Anthropologists doing research need to be open to the chance that the people they are going to be studying and spending a lot of time with are likely to see the world in a (very) different way. Simply put: to make notes reliably and accurately about such different lives, beliefs and practices – to do one’s best to understand those people – one cannot

²¹⁰ I have in mind all approaches which wish to include talk about God or gods (or anything supernatural otherwise) into the scientific practice and want to allow “this happened, because God did this and that” kind of arguments.

²¹¹ In fact, even Wiebe, who is otherwise well-known for his support of naturalism, notes in one of his earlier writings that “religious explanation” can never be dismissed a priori and therefore Christian theology or Buddhist teachings are justifiable approaches which “must be considered on its own merits” (Wiebe 1981: 80) and thus have to be taken seriously (Wiebe 1981: 72–81). Although he does not specify how this “considering” should actually take place and he does earlier in the same book (Wiebe 1981: 33–39) suggest that if “religious knowledge” is knowledge about the world at all and thus comparable to scientific knowledge, then it should be possible to evaluate its justifiability the same way as we evaluate it other sciences, thus from a scientific perspective after all. Because of this one could of course argue that either he is not being entirely consistent (evaluate “as on other scientific disciplines” or “on its own merits”?) or he is not taking theology as seriously as he claims after all. Still, I find it significant that this proponent of naturalism is willing to admit even this much justifiability to any kind of religious-theological perspective.

²¹² See in particular sections 4.2.2. and 4.2.3.

²¹³ Forrest (2000: 9–13) also argues in the similar direction, pointing out applicability as the major different between methodological naturalism and methodological supernaturalism, even if the latter is logically just as possible and as justifiable as the former.

just start with the presumption that “actually they are wrong anyway”. Similarly with historical and philological work – assuming that religious people are wrong is likely to become an obstacle in understanding their writings.²¹⁴ Additionally, reducing people one studies to objects of research, maintaining a distance with them and evaluating them from a scientific perspective is not really possible in a fieldwork environment where the researcher inevitably becomes part of the cultural and social situation and therefore becomes one person among many and no longer clearly detached from one’s supposed research object. Such concerns indicate that even though it is practically possible to follow methodological naturalism in hermeneutically inclined research approaches, there is little reason to believe that it would have significant success and there certainly does not seem to be any reason to believe that it could be more successful than agnostic or dialogical positions in such situations (but more on those two shortly). Therefore, as applicable and as practical methodological naturalism may be in experimental research approaches, it appears to face serious problems and difficulties elsewhere and its applicability in all the subdisciplines of the study of religions remains at best questionable, at worst gravely misleading.

Secondly, this applicability – even if we stick to experimental sciences – is still rather unsatisfactory because of its limitations as far as major generalizations are concerned. As one easily notices, new evolutionary sciences of religion are very much interested in working out big theories of religion that aim to explain its origins, historical development, role in contemporary world as well as basic functionality. Thus in addition to a specific ideal of scientificity, methodological naturalism is also closely accompanied by big theoretical ambitions, i. e. by a wish to return to the ideals of the early scholars of religion. Yet, by basing one’s research and theoretical argumentation on a strictly naturalistic basis and excluding alternative possibilities, these explanatory theories of religion ‘inherit’ the presumptions that lie at the foundations of the theories they rely on.²¹⁵ In this sense all theories of religion that build on the naturalistic foundations are theories of religion with “if unprovable assumptions X, Y and Z are true” kind of clauses. If one were to abandon any or all of their basic premises, one could come up with significantly different theories. This would not be a problem for the naturalistic theories, of course, if they were able to convincingly show that their theories are more reliable or at least that alternatives are not as reliable, but due to reasons extensively discussed in chapters four and five, this as well is not the case and alternatives remain very much possible for all naturalistic theories.

²¹⁴ One could here even go so far as comparing such an approach to the Christian theological projects from earlier centuries that also focused on other religions, but undoubtedly also presumed that they are wrong anyway and thus their existence and nature needs to be explained in light of Christian theology and their inherent erroneousness. In fact, as I already once noted in passing, at least on one occasion advocates of the ‘new scientificity’ have been explicitly compared to religious cult due this kind of concerns. See Stuckrad (2012: 55).

²¹⁵ For example, in sections 3.2.1. to 3.2.4. I thoroughly analysed the problems as well as the logical conclusions that grow out of the presumption of (epistemological) costliness as it is currently utilized in the evolutionary study of religion.

Consequently, methodological naturalism finds itself in a rather complicated situation. On the one hand its justifiability is limited and its ideals of scientificity are in conflict with actual research practices; on the other hand it is definitely applicable in practical research settings a lot more easily than any deliberately non-naturalistic position. And yet, it is unclear how much or what we learned about religion or religiosity as our supposed object of study from this kind of research practices and theories. After all, they depend on the acceptance of rather specific clauses which one needs to accept as correct or at least as coherent with their empirical basis. However, the proper evaluation of this position cannot take place on its own, it has to be based on comparisons with other notable positions as those have been described and practiced in the study of religion. Thus, I will now ask the same questions about a couple of potential alternatives.

7.2.2. Methodological agnosticism

Since I discussed methodological agnosticism at some length already in the second chapter, I will keep it short here. Therefore, to summarize it succinctly here, one can say that the central idea behind methodological agnosticism is that scholars have to avoid making claims about things they have no access to. In other words, scholars should not be presuming anything about the “meta-empirical reality”²¹⁶ that religious insiders talk about in their work. Typically, this is talked about as the act of ‘bracketing’ one’s own presumptions, preferences and beliefs. Ideally, someone following the agnostic position should manage to avoid positioning oneself as a representative of any specific group or standpoint, either theological or atheistic. This position is comparatively similar to methodological naturalism in the sense that here as well the primary focus is on laying out a set of epistemological rules that tell you what you should or should not do. Though, since the avoidance of unnecessary judgment is central, mostly these rules are about what one should not do, whereas methodological naturalism also lays out guidelines about what one should do (seek natural(istic) explanations!).

With regards to the issue of human limitedness it can be said that methodological agnosticism takes this seriously and tries to take it into account by avoiding presumptions, claims or judgments about matters we likely cannot and will not ever have clear knowledge about. In this sense methodological agnosticism is definitely more self-limiting than methodological naturalism, since it does not try to overcome the problem of our limitations by simply choosing one epistemological option (the best one, they would argue, obviously) as the basis of research. Instead methodological agnosticism appears to suggest that we can indeed go only as far as our intersubjectively available empirical material takes us and no further and we should not try to develop theories or claims that would necessitate some kind of epistemological presumptions to make their causal or interpretive

²¹⁶ This is Hanegraaff’s concept (1995: 101); I do find it a very useful way of talking about these matters.

(or other) arguments work. Concerning the relationship of the researcher and the ‘religious insider’ methodological agnosticism is still – similarly to methodological naturalism – trying to keep the researcher at a distance from the religious people themselves. After all, one is supposed to study religiosity without relying on any specific doctrine, ideology or tradition. At the same time the researcher and his/her scientific perspective and knowledge is definitely not considered superior to the religious insiders in any way. The researcher is very much a human being with a cultural, historical, social (and potentially religious) background as well, but during research activities the researcher is supposed to strictly follow methodological agnosticism and thus avoid pitfalls of simply reading one’s own presumptions into the research material. Any kind of descriptions should grow out of the position of the insiders and then elaborate how things appear to the insiders. In other words, methodological agnosticism is seen as a hermeneutically useful tool that enables a positive environment for the proper understanding of the religious tradition or group or text or practice in focus. Typically methodological agnosticism is also accompanied by one specific conception of scientificity. This considers empiricity the most important aspect of any properly scientific research. One should not go beyond empirically available materials and one should always try to ‘grow’ generalizations directly out of the empirical material itself. Any kind of more extensive theoretical discussion is frowned upon.²¹⁷ Also, similarly to methodological naturalism here as well one can justifiably speculate that this combination of positioning and scientificity is probably not inevitable and one could understand the ideals and goals of scientific research in a rather different way, while still maintaining a methodologically agnostic position.

Criticisms of methodological agnosticism can be described as falling into two main lines of argumentation – first there are methodological-epistemological criticisms and then there are also concerns with limits to its practical application. On the epistemological side the central problem with methodological agnosticism can be basically described as one of “is this even possible?”. Numerous scholars (Cantrell 2016; Northcote 2004; Cox 2003; Wiebe 1981: 153–163) have noted how methodological agnosticism could appear in theory indeed as a very desirable option and one that we should definitely value. However, the critics note that it also appears to be humanly impossible – we are always part of the world and we always have to pursue research from some specific perspective and therefore we cannot claim to be agnostic about every philosophical issue. We have to rely on some basic preliminary starting points for research to be possible and in such a case it would be inaccurate to describe this as agnostic. For these critics methodological agnosticism is merely a convenient label to hide or downplay the presumptions one relies on. And even if we were able to avoid the kind of presumptions that would make a difference in the study of one religious

²¹⁷ I will not delve into this any further right now, since I have already thoroughly described and analysed this idea of scientificity in section 1.2.2. as well as analysed and criticised in the sixth chapter.

phenomenon or another, we could not do this consistently. We simply would not get very far with our research without running into the need to make actual choices with regards to specific methodological, theoretical and philosophical preferences.

This is why Morton Smith (1968: 12–16) already fifty years ago noted that historical research as commonly practiced academically, is inherently atheistic – even if religious insiders themselves understand one or another event as “god’s or gods’ intervention/action in the world”, such an explanatory option is a priori excluded in historical research. Of course there is always a chance that perhaps supernatural beings at one point or another intervened and caused historical events to go one way and not the other, but since historians cannot confirm this, they simply have to pursue the kind of descriptions and explanations which do not include any such possibility. This is indeed a major problem for those who wish to practice methodological agnosticism. After all, historical, philological and anthropological fields of research are the main research approaches in which methodological agnosticism is being justified as the preferably position. But if methodological agnosticism is (because of our epistemological limitations) not really consistently applicable in historical research, then this would appear to be a major weakness for the position overall. This also directly relates to the second problem methodological agnosticism faces – that of practical limitations. Even if we leave such epistemological criticisms aside and presume that principally – at least as far as understanding, describing (and to an extent, interpreting) is concerned – methodologically agnostic research is possible, then we are still faced with the problem that this does not take us very far. Scientific research is not just about understanding and describing, those practices are supposed to lead to discovering comparative similarities (or differences) and eventually to some kind of generalization. Yet, because generalizing always requires that one relies on some kind of assumptions, it is definitely no longer a purely agnostic practice. This becomes especially apparent in all matters concerning evolutionary theories of religion – I would say that none of the ones I described in the first chapter are possible without numerous (empirically unverifiable) assumptions about the world and everything in it. Thus, the problem of actual practical applicability by researchers in actual research situations serves as the major concern and criticism (either empirically or practically) regarding methodological agnosticism.

In defence of methodological agnosticism one could here argue that methodological agnosticism never claimed to lack all preliminary presumptions, it is merely focused on avoiding epistemological presumptions regarding matters of truth. Although such a defence would still not solve the problem that any kind of generalizing explanatory theories of religion do appear to take some kind of a position in the matters of truth as well. Conjointly one can defend methodological agnosticism by suggesting that even if complete and thorough agnosticism in all matters is not possible, we should at least try to remain as agnostic as possible. Or in a more generalized form: presumption-free research might be impossible, but at least we should employ as few presumptions as possible. Thus, methodo-

logical agnosticism would behave more like an ideal than as something consistently attainable in all aspects of research.²¹⁸ If one were to adopt such a defence, then from this perspective advocates of methodological naturalism have simply waved the white flag and have chosen to pursue research comparable to the various theological schools of thought. The simple difference being that their research builds upon a naturalistic ideology; those still pursuing methodological agnosticism, however, are at least trying to overcome the general social tendency to fragment into competing, apologetic schools of thought.

Nevertheless, returning to the issue of applicability in general, we can say that we are dealing with a somewhat unclear situation. Even if we agree that research is possible with some minimal basic presumptions, but deliberate presumptions concerning the existence or non-existence of the ‘meta-empirical reality’ should be avoided, then it is still somewhat unclear how far this actually takes us. On the one hand methodological agnosticism does not appear to face any serious problems with any specific research approach, not like methodological naturalism faces with all hermeneutically-inclined fields of research anyway. One can pursue philological, anthropological as well as neurological or cognitive research while maintaining an agnostic outlook regarding all epistemological matters of ‘religious truth’. At the same time it is uncertain how well it actually fits any specific field – how well it can claim to be preferable to all other alternatives for specific subdisciplines. I will come back to this comparative problem in the subsequent analysis, but for now it should be noted that at least methodological agnosticism does not seem to cause major methodological problems in matters of applicability. Yet, this conclusion does rely on the assumption that it is at least in some basic form epistemologically applicable – something many have disputed.

7.2.3. *Neutrality*

Although not discussed and debated as much as methodological naturalism and methodological agnosticism, ideas of about the neutrality of the scholar have steadily been in the background in many debates. As I noted in the very beginning, even the most casual conference reports can exemplify this very well as apparently everybody can be in agreement that “the study of religion must be neutral, unbiased, non-confessional, and peaceful” (Geertz 1992: 226), yet quite typically not much is said about how to actually get this done. Similarly Don Wiebe – a critic of methodological agnosticism and an advocate of naturalism – can still be found arguing that “the student of religion must, ideally speaking, bracket all questions of commitment and advocacy on entering the profession and therefore is, as an academic student of religion, neither a believer (devotee) nor a nonbeliever (sceptic)” (Wiebe 1994: 119). Wiebe’s way of phrasing the ideal,

²¹⁸ This kind of arguments are also the reason why Cantrell (2016) in the comparative perspective still considers methodological agnosticism the preferable and most justifiable position, despite its many shortcomings.

however, gives us a hint at what it would mean to think of neutrality as a form of scholarly self-positioning. His central concern, after all, has to do with avoiding certain ‘poles’ of self-positioning which he finds unacceptable for the student of religion.

Actual conceptualizations of neutrality as a position have indeed approached it in such a way – neutrality means a deliberate choice to position oneself in relation to the relevant parties, but not as a representative of any specific party. Perhaps the most significant treatment of this position comes from Peter Donovan (1990). Here I will concentrate on his perspective as an example of conceptualizing neutrality. He defines it in the following way: “To be neutral is to stand in relation to two or more parties which are themselves in tension, in such a way that the respective interests of those parties are not thereby materially affected” (1990: 103). Thus, for Donovan neutrality is a relational matter that always necessitates some kind of a specific context, but there are different ways one can think of neutrality. He distinguishes ‘observer-neutrality’, ‘participant-neutrality’ and ‘role-neutrality’ (Donovan 1990: 104–111). The first, observer-neutrality, means the position of a detached, non-involved on-looker. Yet, as Donovan is also quick to note, due to the inherent limitations of humans such a position is unattainable, since all of us inevitably approach things from our own specific point of view. The second, participant-neutrality accepts the inevitable situatedness of all humans, researchers included, but tries to limit one’s participation to such an extent that one is not affecting the outcome of the situation in any significant way and does not favour one side over the other. Yet, here as well Donovan finds the actual applicability of this position rather problematic or at least extremely hard to achieve. As he notes, oftentimes there is simply no such option, no available course of action out there that would allow one to maintain participant-neutrality.

This is why Donovan himself finds the third option, role-neutrality the most defensible out of them all (Donovan 1990: 106–111). What he has in mind here is the kind of neutrality judges, arbitrators, referees, mediators and ombudsmen impersonate – it is still participation, but participation with specific rules and procedures to follow. In this sense neutrality indeed becomes a very context-specific matter. One always needs to first determine all the relevant parties and participants and then one can decide what kind of a neutral position is possible in one or another situation. He considers this achievable for scholars of religion and argues that the use of non-prejudiced language (e. g. avoiding problematic concepts), the suspension of belief and disbelief and the avoidance of personal bias in professional situations should accomplish this. Thus, in short, neutrality as a position is always very context-dependent, relying on the specific situation one faces. It can never be presented as a universal, generalized position with universalized rules that all neutral scholars should follow. But if applied in specified contexts and situations it does enable the scholar to avoid taking sides, avoid undesired (epistemological) presumptions and judgments and study religiosity without explicitly or implicitly favouring any specific side of the situation.

It could be said that positional neutrality tries to solve the issue of human limitedness by giving up the attempt to draw up some kind of a generic position that would fit the ideals of the study of religion in general (and these, in turn, would of course depend on one's conception of scientificity). Instead, Donovan appears to argue that the best we can do is at least choose the more preferable kind of position in the wider social sphere. Judges, arbitrators and mediators are all clearly positioned members of the society in general, but in matters of 'competing claims' they adopt certain kind of positions with detailed rules of action. This also very clearly indicates what kind of a relationship scholars of religion ought to have with 'religious insiders'. None of the many religious groups (or individuals with different understandings and backgrounds) should be favoured over others, each should receive a fair treatment – whereas fairness comes from following specific rules of the position.

Anything about the matter of scientificity and role-neutrality would have to be somewhat of a speculation, since Donovan does not explicitly elaborate on how he understands the criteria of scientificity in religious studies. However, looking at his final discussion concerning the importance of being neutral (Donovan 1990: 114–115), it would appear that his primary concern is indeed social and anthropological and specifically even hermeneutical. For example, he is worried about avoiding “factional concerns and pressures” (Donovan 1990: 114), he emphasizes the need to include “widest possible range of relevant data” (Donovan 1990: 114) and thus he sees the ideal scholar of religion “as an ‘honest broker’”, who “can play a valuable role in fostering scholarly collaboration and research” (Donovan 1990: 114). In this sense one could say that his idea of a scholar is definitely closer to that of the *Religionswissenschaft*-centred perspective than that of the ‘new scientificity’, but at the same time also he sees academic practice far more as a ‘hands on’ applied activity than most of the people typically in that tradition.²¹⁹ Still, it puts such significant emphasis on understanding and producing reliable descriptions and interpretations that it is definitely accepting philological, anthropological and historical disciplines in humanities as scientific on their own virtues rather than through some kind of ‘additional justifications’.

However, this kind of a positioning comes with some obvious shortcomings. By focusing on the social dimension and the interrelationship of specific groups and situations, it does not tell us how to deal with more complex or generalized cases. To be more specific, what I have in mind is that this kind of positioning works very well as long as we are thinking of situations where we have an

²¹⁹ This is quite well exemplified by reaction Mircea Eliade received when he criticised history of religions for its lack of cultural relevance for the Western world in general and emphasized the need for a hermeneutically more relevant approach to the typical research topics of the historians of religion (Eliade 1965). Of course, Eliade went further than Donovan and also argued for a restructuring of the discipline overall to better fit the ‘desired applications’ of the study, but the critics – for example, see Rudolph (1989) – still found the whole ‘cultural application’ and ‘influencing culture’ talk entirely unacceptable or at least unsuitable for a proper history of religions.

anthropologist focusing on a religious community/individual. Similarly, it helps to deal with comparative situations as one focuses on historical sources and competing worldviews. But, academic study as such and religious studies more specifically is not limited to such cases. In many cases the problem cannot be reduced to competing groups, but rather to competing and mutually incompatible methodological and theoretical presumptions. Of course, as with everything human, one could technically also trace the historical background of these presumptions and determine the ‘communities or individuals’ that these descend from, but this would not in any way solve actual problems. As with religious beliefs, so with academic theories and concepts – their reliability and usefulness cannot be determined simply by studying their historical development. Cognitive science of religion, neurological study of religion or even any kind more ambitious comparative projects do not really work in such a way that one could reduce them to socially competing groups, then position oneself as a mediator, arbitrator or as a referee somehow in between them and thus maintain role-neutrality. The core of the problems scholars face in these matters are primarily theoretical and methodological. This is where role-neutrality falls short – it can be helpful in the study of contemporary religiosity from sociological, anthropological and other such perspectives, but as soon as one looks for more generalizing approaches, which are oftentimes not focused on the specificities of concrete groups or/and individuals (psychology of religion in general and certainly all evolutionary approaches), role-neutrality does not really help us in any notable way.

7.2.4. Dialogical position

The fourth noteworthy positioning option I would tentatively name the ‘dialogical position’, but one could just as well describe this as the ‘dialogical perspective’. I will also describe this in a bit more detail, since I have not previously dealt with it. This has been most extensively discussed by Gavin Flood (1999), but as I will show, several other scholars have also advocated rather similar ideas. This position can be called ‘dialogical’, because it places central attention to the communicative and conversational aspect of all knowledge-acquiring processes concerning human life. As Flood notes, any researcher is always in a dialogical relationship with his/her research ‘object’ (whether that is texts, behaviours, or other) and thus always part of the larger system of life as such (Flood 1999: 33–41, 50–57, 137–150). Because of that all attempts to establish a ‘view from nowhere’ type of a position for the scholar of religion are doomed to fail. The dialogical position instead promotes a ‘view from somewhere’ approach to the study of religion (Flood 1999: 40). The subject of research thus must be always defined in relation to other subjects, it cannot be thought of as a “detached, epistemic subject penetrating the alien world of the other” (Flood 1999: 143). Consequently, this means moving away from the “idea of a detached objectivity; a neutral place from which to examine the ‘world religions’ towards the idea that

all knowledge is generated from a perspective and that the study of world religions is the intersubjective engagement of one mode of socially sanctioned discourse with another” (Flood 1999: 57). Because of that the dialogical position, contrarily to perspectives that try to position the researcher outside the life world of the people under focus, leaves room for the ‘object’ of inquiry to respond and establish a dialogue (Flood 1999: 77). However, in such a case all knowledge is inevitably situated, coming from ‘a specific place’ (Flood 1999: 144–145) and thus emic accounts cannot be treated merely as ‘data’, but instead have an equal, competitive claim on validity (Flood 1999: 148). Still, this does not mean that ‘anything goes’ in research, merely that we inevitably find ourselves in a situation of competing narrative accounts which might be totally incompatible and built on drastically different presuppositions (Flood 1999: 148). At the same time, dialogical position very much comes with a deliberate pursuit of self-reflexivity and criticism, since it is vitally important to be aware of one’s own situatedness and one’s own presumptions as well as it is important to avoid a naïve adoption of the position of one’s dialogue (Flood 1999: 33–41, 147–150). In this sense the student of religion should still maintain a clear distinction between oneself as a researcher and one’s ‘research objects’ (Flood 1999: 215–219).

It is worth noting that although much of Flood’s book is centred on criticising earlier phenomenological approaches and presenting the dialogical position as the alternative (that very much relies on the philosophy of Bakhtin), it is possible to find remarkably similar lines of discussion in some phenomenologically inclined discussions as well.²²⁰ In one of his articles Charles H. Long (1978) has argued that emphasizing objectivity, distancing and the superiority of rational, scientific research has brought about major hermeneutical failures when studying distant, foreign peoples. Therefore, to overcome such misleading conceptions of superiority, “centered rational notions of epistemology must be seen as heuristic devices and not as somehow ontologically given. Or to put it in another way, all dimensions of human consciousness are ontological and all human groups and persons are ontologically real. There are no privileged positions” (Long 1978: 410). For Long it is the absence of a privileged centre that makes it possible for “religious expressions and manifestations ... to reveal their own specific modalities” (Long 1978: 411). And in this sense, at least hermeneutically, some representatives or aspects of the phenomenological perspective can also appear noticeably dialogical.²²¹

Elsewhere Northcote (2004) has argued in favour of a remarkably similar position, also emphasizing the inevitably dialogical practice of gathering ‘data’ (through informants, discussions, etc.), the necessity of presenting emic and etic views and the need to allow different positions to ‘speak’ in the final account

²²⁰ At least based on the arguments Charles H. Long has presented in an earlier article (Long 1967) I would definitely see him as part of the phenomenological approach.

²²¹ However, the position of ‘bracketing’ and ‘methodological agnosticism’ is of course the position most directly related to the phenomenological tradition rather than any kind of attempts to position the scholar dialogically.

(Northcote 2004: 93–94). As noted earlier, Northcote’s views largely grow out of his criticism of methodological agnosticism, which he finds impossible to maintain and practice consistently in research situations. This is not an uncommon path towards more dialogical positioning options, as Knibbe and Droogers (2011) also begin by criticising methodological atheism as well as methodological agnosticism and propose their own ‘ludist’ approach as a preferable alternative (Knibbe, Droogers 2011: 290–297).²²²

However, in this they also want to take the dialogical element of the research further. Whereas Flood advocated for a position-conscious approach that relies on the dialogue of the research and the insider, but maintains the distinction between the two, the ludic position (as proposed by Knibbe and Droogers) agrees with Flood in most other aspects, but argues that for a genuine understanding of the religious person, action, practice or belief one needs to participate in the studied practices as thoroughly as all insiders do, to the effect of “not only learning how to think like the people [one] was doing research with, but also learning how to react in the same ways to the healing services and the various ways in which ‘proof’ was offered” (Knibbe, Droogers 2011: 291). This is necessary for a genuine understanding of the religious situation under study and with the help of such a participation the researcher is “able to intersubjectively participate in the world that Jomanda²²³ and her visitors constructed” and thus is “able to create a field of intersubjectivity that [is] centred on the experience and priorities of the participants of Jomanda’s healings rather than on a pre-set academic agenda” (Knibbe, Droogers 2011: 292). Discussions about the extent to which one really needs to participate in something to understand it and acquire knowledge about it are of course enduring and ever-present in all of humanities (if not also in many social sciences),²²⁴ but in the context of the dialogical position the difference between Flood and Knibbe and Droogers indeed comes down to how far one needs to take the dialogue or what the dialogical situation actually entails in practice. However, when it comes to basic foundations and starting points in matters of positioning I would say Flood and Knibbe and Droogers are largely in agreement.

Concerning the issue of human limitations, the dialogical perspective – similarly to the idea of role-neutrality – also concedes that any kind of properly detached positioning is simply not possible and the researcher is always and

²²² It should be noted, though, that contrarily to these scholars Flood does not view methodological agnosticism that critically. For Flood methodological agnosticism is a perfectly legitimate position, but “it becomes another competing narrative alongside other outsider discourses, and alongside the *equally legitimate* insider discourse” (Flood 1999: 103).

²²³ Jomanda is the religious leader under focus in the study of Knibbe and Droogers.

²²⁴ For example, very similarly to Knibbe and Droogers, Gothoni (2000: 122–130) also notes how his study of pilgrimage and the monks of Mount Athos brought about a situation where for a limited period of time he himself felt as a pilgrim in search of God (Gothoni 2000: 124–127) and thus all anthropological fieldwork requires a close balancing of intimate participation and deliberate distancing (Gothoni 2000: 127–130).

inevitably a member of a community and thus his/her perspectives and presumptions depend on his/her community. At best, one can become conscious of one's limitations, but one cannot overcome them by choosing one or another way to position oneself. Contrarily to the role-specific option advocated by Donovan, the dialogical position is not so much interested in finding some kind of a 'suitable social location' for the student of religion as it is interested in viewing scholars of religion and the discipline in general in relation to other movements that also rely on traditions, narratives, community and so on. In this sense, from the perspective of this position, study of religion is simply one narrative among many and we cannot overcome this. As Flood argues, "from a narrativist perspective, because of the differential nature of the sign, there are truly no 'outsider' views but only competing 'insider' ones" (1999: 104) and thus he concludes later in the book that "the only epistemological superiority [dialogism] can claim is outsideness or transgression – a view from elsewhere rather than the view from nowhere" (1999: 223).

As one surely notices, this also answers how the dialogical perspective envisions the relationship of the researcher and the religious insider – these are competing narrative accounts constantly in dialogue. Contrarily to any kind of attempts to establish a universally applicable position, this perspective views the world as one of many narrative traditions that cannot be made congruent or unified into a more general or higher perspective. Flood is similarly pessimistic about the possibility of any kind of general scientificity. He does object to the idea that 'anything goes', emphasizing the necessity of standards concerning evidence, rigor and coherence, but at the same time he still argues that all explanations are inevitably situated, limited and competing accounts that might turn out to be completely incompatible (due to reliance on different presuppositions) (Flood 1999: 149).

Looking at such arguments, I would say that the dialogical position is clearly the most pessimistic out of the four. From this perspective our human limitations are a rather hopeless burden for anyone who tries to acquire knowledge any more reliable than simply 'just another proposal out there'. Furthermore, although still emphasizing the need for strict standards of assessment in the context of the study of religion, it remains unclear why one would really want to follow such a path if there does not appear to be anything of significance to be gained from it and one might just as well 'go native' and it does not make much of a difference (other than simply choosing a different perspective on things). Flood's analysis of the study of religion – which is easily generalizable to all academic research – definitely does make one ask 'why bother?' as far as the justifiability of such academic approaches is concerned. This is not to say that Jensen's aforementioned argument – scientific knowledge must be superior to religious knowledge for the study of religion to be worth our time – is justifiable. I certainly do not think it is, but Flood appears to go very far in the other direction where study of religion cannot even claim to be successful in some aspects whereas theological approaches are more successful in other aspects. Thus, one of the clear problems with the dialogical position is that it comes with such bleak views about the

justifiability and reliability of scientific knowledge that it remains unclear why one should pursue such research (other than for simply wanting to pursue things from the perspective of this one narrative account and not any other).²²⁵ As depicted by Flood, study of religion would appear to be simply another competing narrative among theological and other ideas about religiosity and the world as such. Overall, the problem with justifying Flood's position is not even that much about the strength of the presented arguments, as it raises the general concern – what is there left to defend or dispute in such a case, why should one pursue a study of religions perspective at all?²²⁶

But even if we leave this rather bleak picture aside and suppose that study of religion can still justify itself as a perspective that at least in some respects is capable of acquiring knowledge that is more reliable than its alternatives even while pursuing deliberately dialogical research practices, this positioning option faces problems rather similar those I highlighted with regards to the idea of role-neutrality. Namely, even though pursuing deliberately dialogical research can certainly work as long as one is focusing on fieldwork or hermeneutically oriented research in general, one is again left with the problem that as soon as we are not asking questions that are related specifically to one or another religious community, text or practice and are instead dealing with issues more 'abstract' or 'unconscious' or 'generalized', it is not at all clear how the dialogical position can help us. In fact, by arguing that all explanations are inevitably situated and dependent on their specific (cultural, social or other) background, it would appear that the dialogical perspective is also dismissing the very possibility of any proper research in such more 'abstract' issues that cannot be thought of as a matter of competing communities and traditions.²²⁷ Furthermore, it is vital to notice that his arguments clearly go against the scholarly ideal of one, unified study of religion. Since Flood puts so much emphasis on the situatedness of the scholar and the

²²⁵ Furthermore, if we accept Flood's arguments about study of religion simply being one narrative tradition among others with nothing noteworthy or particularly preferable about it, then it becomes unclear why he is at the same time so persistently arguing that the study of religion "must position itself outside its object" (Flood 1999: 215) even as he is emphasizing the dialogical character of the discipline. Why not just try to overcome this separation and pursue some kind of a transformation of both or either tradition?

²²⁶ For an analogous criticism of Flood, see Hedges (2000) who also in his conclusion notes the same problem: „Here I think we see the failure of Flood's not dealing adequately with the grounds of knowledge between his dialogical approach and postmodernism as he does not guard against an all-theories-are-as-good-as-any-other approach“ (Hedges 2000: 297).

²²⁷ Flood does at least once indirectly address this problem as he argues that regardless of which approach one is pursuing, "the primary data of investigation are either written and oral texts or behavioural text-analogues" (Flood 1999: 78), subsequently arguing that "only that which is represented can be explained. If something is not represented as knowledge within human sign-systems, it is beyond explanation at that time; quarks are only given meaning within scientific models. That which cannot be represented is unknowable" (Flood 1999: 78). And this could certainly work as a way how to think of academic study in general, if it were not for the claims Flood is also making about the inevitable situatedness (in practice: subjectivity) of all explanatory arguments.

narrative contextuality of specific scholars research perspectives, it becomes very unclear how one could still establish a shared common ground for all of this or what purpose this would serve. However, why then should we look for that shared metatheory, which Flood considers vital for the future development of the discipline (as emphasized in Flood 1999: 4–8)? Taking his arguments to their logical end would mean that Indians could just as justifiably develop ‘an Indian study of religions’, Japanese could have ‘a Japanese study of religions’, Peruvians could have their own and so on, all of these in the end amounting to competing and incongruent narrative accounts which cannot be unified to any shared foundation.

While one cannot of course conclusively dismiss such a harsh criticism of the possibility of acquiring reliable knowledge – it is certainly possible to justify Flood’s arguments – one can also just as well point out the impossibility of conclusively proving Flood’s pessimistic views as well. In such a situation I think one could at least try to look for ways how to overcome at least some of our limitations or some aspects of our limitations. Perhaps even the very fact that Flood himself has continued to pursue concrete, specific research projects²²⁸ even after publishing this critical book indicates that he himself does not give into the most pessimistic conclusions of his analysis either and still believes that there are ways how to do research that give us more than ‘simply another perspective among many’.

7.3. Comparative evaluation

Having gone through this point-by-point, one-by-one analysis of the four notable options, it is time to move to a more comparative analysis. Here I intend to highlight their most notable similarities (and differences) as well as address the question whether there is, should be or even can be a clearly preferable position. On the one hand this is undoubtedly an epistemological issue, but due to the inter-relationship of epistemology and methodology, this is inevitably also a method(olog)ical matter and since the acceptability, justifiability or preferability of one or another method(ology) is very much related to one’s understanding of scientificity, one cannot completely ignore this aspect either. Still, the focus here continues to be on the matter of positioning. However, aside this epistemological-methodological aspect, there is also the matter of social positioning. Academic research and self-positioning does not take place in an ‘epistemological vacuum’, it is a matter human beings as biological, cognitive, cultural and social beings face in their lives and research. Because of that positions I have dealt with also deserve to be comparatively evaluated from the social perspective – how do they understand one or another position as something researchers as humans have to

²²⁸ Most noteworthy among them are probably his noteworthy monographs (Flood 2004, 2006, 2013).

take in a society? Finally, I will look for a way to comparatively justify one specific position over others.

7.3.1. Objectivity and its (distant) relatives?

As I have repeatedly noted, much of this discussion about scientificity and positioning has to do with the desire to acquire as reliable knowledge as possible. Yet, there are many good reasons why it is not possible to acquire objective knowledge as such. Objectivity as an ideal is simply unattainable for humans in matters of intersubjectively attainable empirical knowledge. However, at the same time here lies the most interesting similarity of all these positioning options as well – they are all trying to come to grips with the impossibility of objectivity and the inevitable human limitations. All of them are searching for the most reliable methods and for the most reliable methodological perspectives. All of them would like to be fully aware of the presumptions, biases and foundations we rely on in our research practices. All of them would ideally structure their research so that it is scientifically sound (however that is understood), interdisciplinarily translatable and congruent. In other words, all of them would still prefer to do research ‘objectively’ if that were possible, since the ideal of solid knowledge all research approaches and perspectives are aiming for is still very much that of the objectively reliable knowledge or at least something as close to that as possible.

For the methodological naturalist true objectivity is unattainable, yet we can supposedly overcome this problem by relying on a specific set of presumptions when dealing with phenomena we are unable to acquire intersubjectively testable knowledge about (but which ought to be knowable in an ideal, objective situation). The methodological agnostic resorts to simply avoiding judgment about matters we cannot make any properly reliable judgments about and focuses on matters in which case we (hopefully) can acquire reliable knowledge. Role-neutrality, instead, argues that there can be no universalized solution to the matter and we can at best acquire knowledge that is advocating the views of any specific party. The dialogical approach in a sense takes this even further and portrays the scholar as inevitably a member of one party.

Still, concerns they all express and try to overcome are very similar – how can we acquire knowledge that is as reliable as humanly possible? Of course, at the same time, what is humanly possible and what is not, is very much disputed between them. What is not argued about is the goal – we should do reliable and solid research and determine the state of the matters as convincingly as possible. The kind of knowledge we would like to acquire is still that of as-objective-as-possible kind of knowledge, we are simply very much aware of how difficult or impossible that may be. Depending on one’s approach, this is a problem general to all knowledge or a problem more acute in some aspects than others and something we can perhaps overcome in specific settings. However, regardless of how one sees this or which position one prefers to justify, this debate would not

exist without the unattainable goal of objectivity. The debate of human limitations of course is also never-ending, since definitive answers to the questions of how reliability – how reliable knowledge can we really acquire or whether we are more able in some aspects than others? – could only be given from a truly objective position. In this sense, one could possibly say that there can never be a definitive solution to this issue and we are inevitably dealing with options we cannot be entirely sure about. Still, that does not stop one from conceptualizing ideals one would like to attain.

In any case, overall it can be said that all the positioning options I have dealt with are in one way or another attempts to establish a relationship between that ideal and the practical situation we find ourselves in and thus the title of this section. Metaphorically speaking we are conceptualizing ourselves and our research practices as ‘relatives’ of objectivity.

7.3.2. Distance and nearness – the researcher and the society

But there is obviously more to this positioning debate than simply the attempt to situate one as adequately and justifiably as possible from an epistemological perspective and as close to the ideal as possible. One rather significant factor here is the social dimension in general. By this I mean how scientific research in general and researchers as people more specifically are viewed as part of the wider social and cultural context where their research takes place and what they themselves focus on.

From this perspective, the first two positioning options basically view the researcher as one who ought to keep a detached, distanced position as long as one is doing research (and regardless of one’s personal views as a person). Therefore, it could be said that the researcher is viewed as someone who acquires knowledge that is academically and scientifically as reliable as possible and subsequently communicates that to the society in general. Socially the position of the scholar is here very clearly distanced from the communities themselves. Research as such is not seen in any way as ‘applied research’ and ideally it is not done to answer any ‘hot topics’ in current politics or society. Of course, the end result is still seen as one of great value, but primarily in the sense of ‘knowledge is valuable in itself’. This does not rule out applicability entirely of course, since determining the naturalistic causes of, say, religiously motivated terrorism and thus enabling more successful action strategies against that can have very significant applications in politics and society as well. However, this has to do with the matter of subsequent applications of research, during the research period itself the researcher should maintain clear distance from the social matters and should ideally not be a participating agent in any way.

Even though not challenging the ideal of scientifically sound knowledge and the need to do research that avoids favouring any specific worldview or community, the idea of role-neutrality does envision the scholar as someone far more socially active than the first two positions do. By visualized the researcher as

someone whose position in relation to the religious communities can be compared to that of the arbitrators, mediators and other similar occupations, one is clearly conceptualizing the scholar as someone who is not so much trying to keep a distance. Instead, the scholar is understood to be very much part of the social dimension of life and while one is still supposed to maintain distance, this is only selective and even in its selectivity is not ruling out dialogical communication with these communities that one is supposed to maintain a distance from. After all, how else, but through dialogue and communication could one even occupy a position comparable to that of mediators, arbitrators, referees and so on?

Lastly, there is the dialogical perspective on positioning. Even though the idea of role-neutrality also looks at the scholar as an inevitable part of the society, the dialogical perspective takes this even further. Here the discipline as a whole is seen as one community-based narrative tradition among others, in many ways comparable to the religious communities it studies as well. Therefore, researcher and his/her research practices are just as much part of the society as a whole as are all other communities and traditions. But this does not mean that the researcher should just blend in with everything else. No, the dialogical position as portrayed by its advocates still finds it essential to keep the researcher and the researched clearly differentiated. In this sense one can say that even the dialogical position with all its criticisms of the earlier ideas of objectivity, phenomenology of religion and pure scientificity and its admittance that researchers and the discipline are inevitably contextualized and situated, it still emphasizes the importance to maintaining a clear line of differentiation between the researcher and the people (s)he researches.²²⁹ Overall, one can say that for all of these positions the researcher is on the one hand always supposed to be part of the society and yet remain apart from the society. All of them have visualized and conceptualized this concurrent practice of separation and nearness in different ways and have portrayed the difficulties of our situation differently. Yet, they do all agree that in one way or another that researchers specifically and the discipline in general needs to maintain an approach that does clearly clarify how the researcher is distinctively different from the one being researched.

7.3.3. Positioning, generalizing and underdetermination

In addition to these two major comparative aspects of the positioning debate, a few further details also deserve some attention. First, there is the issue of generalizing – to what extent do each of these positioning options actually allow us to seek generalizing understandings or explanations or conceptualizations of descriptions of religion as a phenomenon or as an ‘object’ of research? Secondly,

²²⁹ As Flood argues: „The study of religion must position itself outside of its object, yet remain in dialogical relationship with it; the religionist or anthropologist must position herself outside of the religious stranger yet remain in dialogue, reflexively recognizing the context of the encounter and embarking on ‘power sensitive conversation’“ (Flood 1999: 218–219).

this also directly relates to the potential alternatives – something I already discussed in relation to naturalism in general and methodological naturalism specifically. But this also deserves some attention in relation to the positioning discussion in general.

When looking at the potential for generalization, the situation appears to be quite complex. First of all it is of course obvious that methodological naturalism offers wide-reaching and ambitious possibilities for anyone interested in developing all-including, general theories of religion. This is something I discussed in the first chapter and subsequently analysed and criticized in the three chapters of the second part, particularly concentrating on the issue of underdetermination and naturalistic theories in the fifth chapter.²³⁰ In short, it became apparent that as capable as methodological naturalism may be in enabling ambitious generalizations, it is equally incapable of convincingly ruling out alternatives.

In comparison, one can say that methodological agnosticism is far more limiting when it comes to the issue of generalization. By placing the avoidance of judgment about certain issues at its centre it is also making it nearly impossible to develop more far-reaching (explanatory, descriptive, interpretive or other) theories of religion, since those can rarely if ever do without relying on some kind of presumptions about the very things methodological agnosticism deliberately avoids. Morton Smith's aforementioned criticism of the implicit atheism of historical research serves as an excellent example here – in developing extensive explanations of historical developments (why this and not that?, and so on), researchers have to first decide which factors to include and which to avoid. Of course, this does not mean that generalization as such is fundamentally impossible for the methodological agnostic, but this would indicate that at best one can develop only more focused theories of specific (comparable) cases and phenomena and far-reaching interpretations and explanations are not available for the methodological agnostic. Consequently, issues of underdetermination also seem to not play that big of a role when it comes to methodological agnosticism. Still, I do not think it is quite that simple. Methodological agnosticism is regularly practiced among historians and anthropologists, both of whom are very much dealing with scattered, limited or randomly accessible data as well as with the inevitability of epistemological choices. However, contrarily to the problems of underdetermination methodological naturalism faces, here we are mainly dealing with specific cases and situations and rarely with theories of religion in general. After all, the very premises of methodological agnosticism do not enable pursuing grand theories like that.

The idea of role-neutrality comes with a rather ambiguous perspective on generalizing. On the one hand it is possible to highlight its insistence of the context-specific nature of any positioning and conclude that role-neutrality does not allow for major generalizations, since those would no longer enable the scholar to specify one's position contextually. On the other hand, role-neutrality emphasizes the deliberate need to 'avoid taking sides' with the implication that

²³⁰ See especially sections 5.2.2. and 5.3.

this enables research to be more reliable in general. Yet, rules scholars are supposed to follow in their “role” are still very much those of the contemporary Western academy – they are simply supposed to apply them in a way analogous to that of the mediators, arbitrators, referees and so on. Because of this it is hard to say anything conclusive about the possibility of generalization from the perspective of role-neutrality and subsequently also about underdetermination in relation to it. Depending on which of the two variants of the role-neutrality one chooses to emphasize, one can end up in significantly different situations. By emphasizing the context-dependency of positioning one would clearly restrain the possibilities of generalization to a rather significant extent and thus make issues of underdetermination rather secondary. Alternatively, if one were to instead emphasize the role of the academic researcher one could still go as far as one’s specific research approaches would allow. Here one could even say that role-neutrality, naturalism and agnosticism are not entirely incompatible – after all, if one were to focus on the role of the academic research, then what exactly are those rules? Here the answer could either one of those two. And thus, issues of underdetermination would come up in ways similar to methodological naturalism and methodological agnosticism. This is largely why I find role-neutrality rather ambiguous and open to multiple different interpretations and applications. It has not been analysed and practiced and detailed to such an extent that one could easily point to its likely consequences with regards to any and all aspects of research.

Lastly, there is the dialogical perspective. What I find rather remarkable about this and clearly different from the previous two is its deliberate emphasis on the existence of alternatives and on the inability to rule out alternatives. Of course, none of the previously discussed positions are really claiming that we can conclusively rule out all theological, spiritual and other alternatives, but they are at least hoping to be able to rule out other academically-scientifically based alternatives.²³¹ Although this does not apply to all the advocates of the dialogical perspective (or at least not explicitly), Flood emphasizes repeatedly that study of religion can at best be a different view on these matters, but it cannot hope to achieve superiority. In this sense underdetermination and the possibility of alternatives is practically written into the very foundation of the dialogical approach. Turning to the issue of generalization, it remains relatively unclear how much of it does the dialogical approach actually allow. Does the deliberate and persistent process of dialogue between the researcher and the ‘insider’ limit possibilities of generalization or not? Or do issues related to its questionable applicability outside hermeneutically oriented research limit the possibilities of generalization from the dialogical perspective? In a way similar to role-neutrality, I would argue that here as well it comes down to the exact interpretation of the dialogical position and it is hard to pinpoint any specific inevitabilities.

²³¹ With the exception of role-neutrality, perhaps, due to its ambiguity and openness to different kinds of interpretations.

Overall, one can say that although underdetermination as such is clearly most problematic for all naturalistically directed approaches, other positions are not entirely free from such problems either. Furthermore, while the possibilities for generalization are rather clear and straightforward from the perspective of methodological naturalism, it remains relatively debatable how much generalization is indeed possible in case of the other three positional options. This in turn leads me directly into the issue of application, since any conceptualization of a position always has to be applicable by researchers in actual research situations for it to be a valuable option for scholars.

7.3.4. Possibilities and limitations of applicability

Although I have here mostly concentrated on the interrelated issues of methodology and epistemology, applicability is definitely one of the issues one cannot avoid. It is possible to conceptualize many epistemological positions that cannot be put to practice, even though they are more convincing than others. But academic disciplines are always practical endeavours of knowledge and not just philosophical or spiritual pursuits of self-reflection.

Because of that, I paid some attention to issues of applicability in the previous sections as well, pointing out likely problems and possibilities of each position. In short, it became apparent that methodological naturalism is practically very applicable, yet only as long as one is dealing with research approaches that are not centrally hermeneutical. Methodological agnosticism on the other hand sets stricter limitations on research and thus it becomes questionable how far one can actually take such a position. It certainly does enable research focused on understanding and description very well, but problems arise as soon as more extensive explanatory schemes come into play, since those cannot completely do without presumptions that methodological agnosticism would ideally avoid. Yet, it appears that methodological agnosticism does not face any fundamental problems of applicability. On the one hand, it does not come with the kind of presumptions that would complicate matters of mutual understanding and communication in anthropological, historical and philological research. On the other hand, it does try to establish a foundation that is generalizable and not heavily context-specific.²³² This is something that role-neutrality and the dialogical perspective struggle with. Of course, it is not possible to disprove issues of human limitedness the way they depict them, but their solutions are way too heavily focused on context-specific research that is done primarily from the perspective of history, anthropology, philology (and sometimes also sociology). Arguments in favour of

²³² It is of course still somewhat context-specific, since the presumptions one should avoid depend on the research topic as such and cannot be formulated independently from it. But in this sense methodological naturalism is of course just as context-specific, as its basic principles (those ‘procedural rules’) are also formulated in response to the issues one encounters in the context of research situations.

role-neutrality or dialogism do not offer satisfactory explanations how a neurologist of religion or an ecologist of religion should really deal with matters of self-positioning. Yet, it is certainly true that when we are solely focused on hermeneutically inclined research, these two offer a far more accurate and productive description (and prescription) of the position scholar inevitably has to take, but also ought to take.

As a result it would appear that out of the four options dealt with here there is no obviously superior solution in matters of applicability. Each has grown out of problems encountered in one or another research approach with the subsequent attempt to generalize the solution to the discipline overall. All of these attempts have then faced problems of justification and actual applicability, but none of them can be entirely dismissed either. It is this relatively inconclusive outcome that lead us to the issue whether there is or even should be a generally preferable position for all scholars of religion?

7.3.5. Is there a preferable position?

Indeed, for much of the previous discussion I have looked for the possibility of finding a generally applicable position for all scholars of religion, regardless of their specific research approaches. This has been a good way for approaching this issue because advocates of the many positioning options also clearly think that we should establish a shared positional foundation for the discipline as a whole and indeed also because ideally this would seem be the preferred solution for the study of religion as a discipline. Of course, as noted in my earlier discussion of the possibility of a unified foundation and also highlighted in the analysis in this chapter, it is up for debate whether it is at all possible for all the subdisciplines and research approaches in the study of religion to have a unified foundation in an actual, practical form and not just as a theoretical ideal. And thus we should not just take it for granted, we should critically ask, whether this is indeed necessary or what this is necessary for.

When turning to the issue of necessity a couple of things should be noted. First off, if one were to insist on establishing a universally shared way of positioning oneself, then this would need to come with benefits more significant than the mere fact of understanding the position of the scholar in a similar way and practicing it in the similar way and thus envisioning the discipline in general as a more unified whole. Disciplinary unity in itself is not valuable enough. However, there is also no such thing as “disciplinary unity in itself”. A shared foundation enables far better communication between different approaches, subdisciplines and methods. It is thus a preliminary necessity for the possibility of maintaining a situation of mutual translatability of the empirical results and conceptualizations. Furthermore, it is necessary to establish that ‘complete picture’ scholars of religion ideally would like to attain. Otherwise we would be stuck with, ‘a psychological theory of religion’, ‘an anthropological theory of religion’, ‘a sociological theory of religion’ and so on. All these aspects are interrelated – for

communication to be possible, one needs to be able to translate between different approaches and subdisciplines. In addition, to establish a general theory about religion both of these are necessary. All the same the other way around too – translatability (or the search for it) already necessitates the existence of some kind of a potential general perspective and it certainly looks for successful paths of communication. Of course, if all those different approaches were to diverge so completely as to make it appear that they are indeed dealing with different (even if loosely connected) phenomena,²³³ this would in such a case no longer appear like a problem, but as things stand right now it looks very unlikely for that to happen. For one, this would require abandoning much of the current academic vocabulary – something different approaches largely share these days, even if their conceptualizations and utilizations of the specific terms vary in many ways.

Therefore, one can certainly argue that finding a generally shared way of positioning would definitely benefit the discipline as a whole, but it is likely not something we absolutely have to have. This in turn means that it is entirely possible to argue in favour of accepting a ‘limited diversity’ of positions, each of which is mainly used in the context of the specific approach where it is found most useful. Hermeneutically inclined fields could then continue to pursue their more dialogical and context-sensitive approaches whereas fields which look for more general or more fundamental aspects (for example: the neurology of religion), can stick to the methodological options they find more useful. Still, there are good reasons to believe that the issue of translatability will become a problem in such a case.²³⁴

However, this also brings about an even more intriguing question – to what extent might it be possible to apply these positions in combination? Are they mutually exclusive? It is certainly obvious from their very ‘formulations’ that methodological naturalism and methodological agnosticism are mutually exclusive. Also, the dialogical approach is probably not compatible with methodological naturalism – after all, how is one supposed to find compatibility between an idea centred on deliberate distancing and observation from a predefined position with the idea of building and maintaining a steady dialogue with the ‘religious insider’? But beyond that things get more complicated. For one, role-neutrality could be compatible with all the other positions, depending on how one is supposed to understand context-specific application of roles. If one is to think of the rules of a role as those of academic practice, then many could argue that these are indeed the ‘procedural requirements’ of methodological naturalism or methodological agnosticism. But if one is going to emphasize the context-

²³³ By ‘different phenomena’ I have in mind the situation where the ‘objects of study’ are conceptualized and operationalized in ways so drastically different that they do not appear to be even studying the same thing, thus their explanations, theories, perspectives, etc. would no longer appear to be competing with each other. For example, one can here think of all the disciplines focused on ‘culture’ and attempting to develop ‘theories of culture’. Oftentimes these are seen as interesting discussion partners for scholars of religion and theories of religion, but rarely if ever have they been seen as competitors to the theories specifically about ‘religion’.

²³⁴ For discussion and examples, see section 6.2.

dependency of the role of the scholar, then it is hard to see anything but the dialogical perspective having any real compatibility with role-neutrality.

But similarly one can turn to the issue of the dialogical perspective in relation to naturalism and agnosticism. On the one hand it is here possible to look at Flood's own arguments, since he has addressed both of these positions, but also one can address this from a wider perspective, since the dialogical perspective is not limited to Flood. Therefore, from Flood's perspective it becomes apparent that he is far more critical of methodological naturalism than of methodological agnosticism. This becomes apparent in his treatment of naturalism, which he finds problematic, because it does not allow the 'object' of inquiry to have a voice and is thus still looking to find a kind of a modified 'way from nowhere' (Flood 1999: 66–80). He is slightly critical of methodological agnosticism as well, finding it still slightly on the side of the sceptic, but at the same time he accepts methodological agnosticism as a legitimate position – that is, as long as it is understood as one competing narrative alongside other outsider discourses (Flood 1999: 99–104). Yet, when we look beyond Flood, the compatibility of dialogism and agnosticism becomes more complicated. For one, many other advocates of a dialogically directed perspective find methodological agnosticism problematic or practically impossible (Northcote 2004; Knibbe, Droogers 2011). As I noted earlier in section 7.2.4., some portrayals of dialogism emphasize the need to temporarily forgo one's outsider-position and look at the studied phenomenon from the perspective of the insider (Knibbe, Droogers 2011). This is kind of a (for the lack of a better word) 'dialectical' approach is problematic from the perspective of the agnostic, since it specifically gives up one's detached agnosticism in favour of a specific religious worldview, even if only temporarily. But this is also specific to the position advocated by Knibbe and Droogers. As noted previously, Flood does try to keep the researcher and the ones being researched distinct from each other. In general one can say that all in all the compatibility of these two comes down to the specific interpretation and application one prefers.

Moving on from this discussion of simple compatibility to the matter of actual usefulness, much of this is inevitably speculative and hypothetical, since the actual answers to these questions lie in research practices and possibilities. No matter how nuanced and thorough a theoretical discussion on these matters is, there is always the possibility that actual practice will prove it wrong. That said, there are a few combinations one can think of as potentially useful, given the inherent problems and limitations every one of them faces. The first one I have in mind is the combination of methodological agnosticism and the dialogical position. As I noted in my critical assessment, dialogism does not really elaborate how it is supposed to be practiced in any kind of research that is not primarily hermeneutical. Here adopting a kind of a combination of methodological agnosticism and dialogism could be helpful. Depending on one's specific research approach, it is possible to make use of one or another and ideally a deliberate and continuous dialogue between such different approaches helps to

maintain a situation where their results and conceptualizations remain mutually translatable.

Secondly, one could also clearly point to the compatibility of methodological agnosticism and role-neutrality in quite the same way as the combination of methodological agnosticism and dialogism would work, but I do not find this combination as significant. This would require the kind of interpretation of role-neutrality that understands the rules of academic practice as the ones that define the 'role' of the 'neutral' scholar and thus it becomes kind of meaningless to portray this as a combination of two positions, since in actual practice it would just be methodological agnosticism anyway, simply in a slightly more context-sensitive way. On the other hand, if one were to think of the rules of the role-neutrality more directly comparable to arbitrators, mediators, judges and so on and thus really emphasize the context-specificity of any kind of positioning, then role-neutrality and methodological agnosticism simply become incompatible, since methodological agnosticism does try to establish the kind of a position which at least in some sense is not dependant on the specificities of the contexts.

Of course, one could also next point to the compatibility of role-neutrality and the dialogical perspective, since they certainly are compatible, but I do not find this particularly significant. Both of them struggle with explaining the position of the scholar in the context of research programmes that are not focused on specific communities and groups and thus their combination would not really solve certain problems both of them face. And lastly, at least from a theoretical perspective it does indeed seem that methodological naturalism is not really compatible with any of the other three options, unless of course one were to portray it as the 'rules of the role' the scholar in role-neutrality is supposed to take, but this again assumes the kind of interpretation of role-neutrality that very much downplays its inherent emphasis on context and the impossibility of justifying context-independent positions.

All in all it should be fairly apparent that we cannot declare any of these positions as superior to the others. None of them are obviously preferable to all others. Each one of them comes with its problems, unresolved issues or conflicts. But none of them are wholly unreliable and unjustifiable either. In light of this it is now time to take a new look at the ecological and cognitive sciences of religion that I depicted in the first chapter and ask if and how one could pursue such research programmes from perspectives other than that of methodological naturalism.

7.4. Cognitive and ecological sciences of religion from alternative perspectives?

Since I have spent quite a bit of space in several previous chapters on criticising many of the ecological and cognitive approaches to religion due to the epistemological premises of their research programmes, this is a topic that definitely needs to be addressed. After all, if it turned out that they are not really trying to

deliberately ‘undermine’ religious worldviews as much as they are simply relying on the only available set of premises that makes that kind of research possible at all, it would rather be practical concerns and not really an epistemological agenda that caused their approach to religion have the kind of premises that they have. Now I have shown in the third and fourth chapter that there is no epistemological or evolutionary necessity to apply such specific premises in the evolutionary study of religion, but the question still remains – what kind of alternatives could one then turn to in actual research practice? I will not present detailed examples of alternatively conducted empirical studies – due the (meta)theoretical and (meta)methodological focus such empirical studies remain outside the focus of this study. Rather, I will be focusing on existing research programmes, to discuss whether these could be perhaps developed based on other kinds of premises as well.

But to begin with I should note that I do not find such problems urgently burdening all kinds of evolutionary treatments of religion. In some cases problems of positioning and epistemology are more immediately present than in others. This obviously does not mean that there could be evolutionary approaches that somehow avoid issues of methodology, positioning and epistemology. Rather, the key difference is that some treatments of religion do not rely on premises so specific as to rely specifically on one positional perspective. Geertz’s (2014a) analysis of the evolution of religion, cognition and culture is one noteworthy example which attempts to present a general overview of the aforementioned aspects in human evolution. But similarly the general treatments of the cultural and cognitive evolution of humanity by Donald (2011) as well as by Tomasello (1999a; 1999b) are also equally good examples of such generality that positional and epistemological divisions do not become urgent concerns. However, these are the exception rather than the rule – the Geertzian overview remains too general and attempts to present a generalized theory of religion want to uncover far more detailed developments and causes in the evolution of religiosity than what one can find in Geertz (2014a). And in such a case issues of epistemology and positioning become far more immediately relevant.

Turning to the specific examples and the possibility of alternative perspectives, I am primarily going to concentrate on two main research programmes – that of the costly signalling theory of religion as developed from an ecological perspective and that of the cognitive science of religion. But I will also briefly comment on a few others as well. I covered the epistemological arguments and premises of both of these research programmes already in the third chapter, noting how explicit declarations of falseness of religious positions are a common, basic premise of the cognitive approach and similarly, how assumptions about the sub-optimality and uselessness (thus: costliness) of religiosity are a common characteristic of the costly signalling approach. Much of this is subsequently justified by appealing to methodological naturalism – but as I have also highlighted, not really as convincingly and unproblematically as claimed.

Starting with the cognitive science of religion, I find it particularly interesting that much of the research actually done from this perspective does not really

require the presumptions cognitive researchers emphatically rely on. For example, one could here think of all the research done on TOM and HADD and its relevance for the study of religion. Earlier in section 3.1.3. I noted how the epistemological argument of unreliability as typically derived from these remains very unconvincing, but even the relationship of TOM and HADD to the explicitly atheistic or methodologically naturalistic premises is actually rather indirect. Empirical studies of the human mind and its treatment of various things as ‘acts of a mind’ do not really require a preliminary assessment about the actual existence of those things. Similarly with HADD, one can study the hyperactive actions of the human mind and its eagerness to find minds in the world without the need to constantly decide which of the ‘agents it finds’ actually exist or not. The same applies to such questions as theological correctness as well – it is a useful way for exemplifying the capabilities and limitations of our mind, but we do not need to base this study on an explicit categorization of ‘existing’ and ‘not-existing’ phenomena. And in this sense, indeed, much of the epistemological problem-setting²³⁵ is not really inevitably necessary for the comprehension or justification of the specific empirical studies that follow such ambitious epistemological claims. Still, it would be misleading to conclude from this that perhaps one can simply drop all the naturalistic premises and continue doing cognitive research all the same. As far as narrowly defined research questions are concerned, this could be quite possible, but things become more complicated as soon as one attempts to develop a general explanatory exposition of religion based on such detailed studies. Looking for large-scale causal links that explain the appearance and functionality of one or another phenomenon do appear to inevitably necessitate the imposition of some kind of presumptions about what can exert causal influence and what cannot. At the same time, studies focusing on narrowly defined ‘objects’, ‘functions’ or such can avoid definitive claims or presumptions concerning fundamental (or ‘ultimate’) causation more easily.

Therefore one can say that cognitive science of religion in its specific empirical studies and the theoretical elaboration of these studies emphasizes its naturalistic basis unnecessarily too much. Then again, given the theoretical ambitions of this research programme, this is hardly surprising as they have always looked for ways how to derive ambitious theoretical conclusions out of narrowly focused experimental results. This is the situation where the question for the possibility of alternative perspectives arises. Yet, there does not seem to be many promising options here, as discussed previously. Many of the options put forth are mostly focusing on the immediate interaction of the researcher and the ‘religious insiders’ and thus they are either not applicable at all or not really successful in fields of research which have a different kind of focus. Dialogism and role-neutrality with their focus on the cultural-social context and the positional relationship of the different interacting parties are the obvious examples here.

²³⁵ Most of the examples I rely on in the third chapter (especially see section 3.1.) are typically presented in the introductory sections of the books and chapters (but occasionally also in the conclusions).

This leaves us with methodological agnosticism as the only potential option to evaluate. From an agnostic point of view one would obviously have to abandon the atheistically inclined questions and research premises that typically appear in the works of cognitivists as explanations why religion is an evolutionarily interesting and puzzling phenomenon. As noted, one should be able to do narrowly defined empirical research just fine. The problematic part of methodological agnosticism emerges when one tries to derive generalizations from these specific studies. As noted earlier in this chapter, methodological agnosticism comes with two major problems: first, is it really possible to maintain it consistently, and secondly, whether we can actually develop generalizations while positioning ourselves in such a way. The first one is quite debatable and in the discussion here I have relied on a more ‘generous’ approach to this issue, assuming that it is possible to at least come close to maintaining a consistently agnostic position. However, it is the second one that becomes an issue here, if one really emphasizes the pursuit of generalized theories. In short it would appear that cognitive science of religion pursued from the position of methodological agnosticism can be done and would not require any kind of major overhaul of the regular empirical research practices, but it would require researchers to rethink the reasons for their studies²³⁶ and furthermore, it would necessitate the kind of research approach which does not attempt to present all-encompassing explanatory theories of religiosity, but rather indeed focuses on the ‘piecemeal fashion’ research that many often emphasize. As such, cognitivist research on religion done from an agnostic position would come with a more explicit acknowledgment that any kind of generalized theories we propose come with inevitable and influential premises about epistemological issues we cannot (as things stand right now) test, evaluate or solve empirically. Obviously, this is not really an entirely satisfying option for the cognitivist researcher, but this would appear to be the best one out of all the options which do try to avoid the (epistemological and other) problems of methodological naturalism.

In comparison, things appear quite a bit more complicated for the costly signalling approach. As I showed earlier in the third chapter,²³⁷ epistemological costliness lies at the centre of this theory and it is not possible to argue in favour of any specific interpretation of the available data from the perspective of costly signalling without assumptions what the ‘currency’ of foraging is and thus what is ‘optimal behaviour’. The costly signalling approach follows classical ecological paradigm and measures that currency strictly materialistically, thus ending up with the kind of analysis that by design assumes religious beliefs to be ‘suboptimal’ (at least as far as their adequacy as descriptions and interpretations of the world is concerned). I do not think that this problem can be generalized to the ecological approach as a whole, but this is certainly an unavoidable issue in the context of the costly signalling. Potentially one could even argue that this

²³⁶ Descriptions like „we study why people believe misleading things?“ obviously are unacceptable from an agnostic point of view.

²³⁷ To be more specific: see sections 3.2.2. and 3.2.3.

might go so far as to become an issue even in the context of specific research projects – in contrast to the dominantly experiment-based research of the cognitive science of religion, the costly signalling approach relies a lot on anthropological fieldwork – but this would require a case by case analysis of all the specific instances. Still, epistemological presumptions are here far more central to the approach as a whole than they are to the cognitive science of religion and since it is misleading to conceive of empirical data/results and theoretical premises and conclusions as separate,²³⁸ one cannot claim to have empirical data about the costliness and signalling aspects of religiosity without already relying on some central theoretical tenets.

As one might expect, this also complicated the possibility of pursuing this kind of research from perspectives other than that of methodological naturalism. Predictably, role-neutrality and the dialogical position remain inadequate due to the same reasons as they are inadequate as alternatives for pursuing a cognitivist approach. But it is also doubtful whether methodological agnosticism could be properly applied or not. After all, epistemological presumptions that the costly signalling approach relies on are specifically the kind of things methodological agnosticism deliberately wants to avoid. This something a few commentators have also pointed out in their criticism of the costly signalling approach (Murray, Moore 2009). They also note the issue of epistemological and practical costs and they have argued that the advocates of the costly signalling approach have not shown the existence of the minimal requirements necessary for the emergence of costly signalling (Murray, Moore 2009: 231–239). Therefore, they argue in favour of seeing religion as a case of honest, index signalling (Murray, Moore 2009: 239–242) and thus one does not need to delve into the whole issue of costliness (including epistemological costliness). But this does not so much solve the problem costly signalling theory faces as it tries to develop an alternative, even if closely related, theory of religion. Religion as index signalling is likely more compatible with methodological agnosticism, but that still leaves us with the problem that costly signalling as a theory is likely only compatible with methodological naturalism (at least from the options available to us right now). Perhaps the behavioural-ecological approach as a whole can avoid this kind of problems,²³⁹ but this is certainly concerning about the costly signalling approach as such.

Looking further one could certainly also find many more interesting cases to analyse. For example, the ‘big gods’ approach of Norenzayan (2013, 2015) would offer an intriguing and complicated problem, since it is trying to develop a unified theory that grows out of all the notable approaches and theories in existence. And even though most of those are very much relying on methodological naturalism, this is not necessarily universally so. After all, Norenzayan is not just relying on evolutionary research, he is also looking into archaeology and other relevant

²³⁸ This is something I discussed earlier in section 2.2.

²³⁹ And yes, I would call it a problem, if a theory of religion requires specific epistemological premises to be true regarding the reliability of religious beliefs to even ‘get off the ground’, so to say.

fields to tie his approach to the study of prehistorical times in general and I would hypothesize that these are not nearly as explicitly reliant on methodological naturalism as evolutionary research programmes are. Elsewhere one could also analyse Harvey Whitehouse's theory of the modes of religiosity (Whitehouse 2002, 2004a, 2004b). In this case there are good reasons to think that Whitehouse's approach might be more compatible with methodological agnosticism than any of the approaches I have evaluated here thus far. After all, it is different from others because it is not trying to determine the 'ultimate causes of the appearance or/and existence of religion' as it is interesting in finding out the cognitive functionalities that enable the kind of cognitive processing which we would describe as 'religious'. As such it is a more specifically focused theory and thus I find it more compatible with methodological agnosticism than any of the ones I have discussed thus far. Compatibility with role-neutrality and the dialogical perspective is just as unlikely and problematic as with all the other ecological and cognitive approaches though.

But on top of the examples I have discussed here one should also not forget the important conclusion I pointed out in my discussion of underdetermination and its relevance for this topic. Even if some research programmes need to definitely rely on methodological naturalism just to 'get off the ground' by specifying one's research question, research object and research method(ologie)s, then most of the research started naturalistically is empirically too underdetermined to rule out alternative interpretations post factum. And thus even if one or another research approach in the cognitive or ecological study of religion needs naturalistic premises to specify its research, its eventual results can be most of the time interpreted in many different ways, thus enabling many different theoretical conclusions.

In any case, what I hope to have shown here is the complexity of the situation. This indicates very clearly that we cannot simply insist on one or another position in general without detailed analysis of the specifics of research programmes. Furthermore, as good and as applicable possible alternative positioning options might be elsewhere, none of them are universally and easily applicable in the context of the ecological and cognitive sciences of religion. Here of course one could argue that if studying religion is not possible from the epistemologically favourable position, then that kind of an approach or a research programme cannot be justified at all or at least it is inherently problematic and thus perhaps it should not be taken as seriously as those which are more compatible with the position found epistemologically favourable (whichever that might be). This is an approach I do not support – some kind of research, even if problematic and arguable, is still better than no research at all or even a general dismissal of all existing research. Yet, if possible, a more justifiable position should be preferred and this is why I also think that cognitivist as well as ecological scholars should look for ways how to rely on atheistic presumptions as little as possible. As noted, it is likely that some evolutionary research is not really possible without the problematic and epistemologically weak premises of methodological naturalism, but even so, it is possible to manage without such premises in many situations.

Knowledge acquired by relying on methodological naturalism or methodological agnosticism is likely reciprocally translatable without major losses or difficulties and thus one ought to prefer the position which is better in sync with the greater goals and ideals of the study of religion as a whole.

7.5. Preferable positioning as the compromise or balance of goals as possibilities?

By now it has hopefully become glaringly obvious that I do not consider any of the suggested options generally satisfying for the study of religion. They all wrestle with the unobtainable goal of objectivity and since that is not feasible, scholars look how to build their research on a foundation as reliable as possible. As I have shown, this can be approached in different ways. It is specifically the full extent and diversity of all the research approaches that complicates matters for anyone who tries to look for a unifying, shared position for the study of religion in general. As emphasized, epistemological virtues are not worth much without actual applicability. Some kind of research – even if in some aspects problematic – is still better than no research at all and because of this one needs to look for the best compromise available. Overall it could be said that the position everybody seem to be looking for would be as objective as possible, yet as conscious of our inevitable limitations as possible, while still maximizing our abilities to learn things about the world around us. Unfortunately, as things stand right now it would appear that there is no clear favourite, no clearly ‘preferable candidate’ we could apply in all the research approaches.

This brings me back to the issue I raised in the sixth chapter – is it possible to determine or establish a shared foundation for the study of religion as a discipline? There I analysed some of the attempts to conceptualize ideals of scientificity as the foundations of the discipline, yet also pointed out numerous reasons why this has not been as successful as some have hoped. All in all, it became apparent that there is no easy way to conceptualize foundations of scientificity for the study of religion and thus depict that as the shared basis of all research. As exemplified through the case of ‘religion’, not much attention has been paid to working out proper translations of the scholarly conceptual tools. Instead, most of the time they are simply adopted in the way most convenient for the goals and methods of the approach at hand. A similar situation also surfaces in the analysis of positioning and the options available for scholars of religion. There as well adopting any of the advocated options as normatively mandatory would cause serious problems for some of the subdisciplines. Hence, it would seem that the study of religion is facing inevitable fragmentation into divergent research perspectives that rely on different understandings of scientificity, the position of the scholar, the acceptability and unacceptability of presumptions, goals, perspectives, methods and so on.

However, if that were indeed the case, then why has it not happened already? How come do these diverging perspectives still see themselves as working towards a similar goal – and thus oftentimes consider each other as competitors?

After all, if they did not see themselves as working towards the same goal and contributing to the study of the same supposed object of study, then there would be no essential need to take others' research into account (at least no more than people take existing research in other 'neighbouring fields' into account anyway) or show why others should take their research into account. But the fact that all sides of this 'debate' are indeed paying very much attention to this, does show that this idea of the shared goal does continue to have relevance. Also, the existence of diverse research approaches is not a new thing. Most of the research approaches in existence today have histories going back more than half a century and one could easily point to earlier research approaches which have faded away²⁴⁰ to counter the argument of new approaches making the field more diverse than it was during earlier times. Of course, it could be that earlier developments have just been so slow that the fragmentation is only now really beginning to take visible shape, but I find such an argument too speculative to be particularly convincing.²⁴¹ Furthermore, as noted, even if proposed perspectives are at times very different, none of them are really dismissing whole research approaches in general. Whether we look at conceptualizations of scientificity or positioning, they are all still trying to account for everything, from hermeneutics to neurological experimentation. And perhaps even more significantly – they are sticking to the same conceptual toolbox. There is no inherently inevitable reason why all these diverging research approaches should keep using the same basic conceptual tools, but for the most part they indeed have done just that. This is very well exemplified through the continuous insistence that it is indeed 'religion' that everybody is after, even though they might be conceptualizing and operationalizing that term in noticeably different ways.

This is why I find it unlikely that a complete divergence and fragmentation would really take place. As long as all the involved parties continue to understand each other as essentially studying the same phenomenon and as long as everybody continues to accept the existence and legitimacy of other research approaches (even if they would like to reform them in one way or another if given the opportunity), there will always remain some kind of a shared foundation for the discipline overall. However, this is clearly not the kind of foundation advocates of one or another kind of scientificity have in mind when they try to establish a clear foundation for the discipline, nor is it the kind of foundation Gavin Flood (1999: 4–8) had in mind when he insisted on the need for a solid metatheoretical foundation. It is a far more loosely envisioned foundation, one more reliant on a shared understanding of the end goal of all research and the ideal way of getting there than on anything more concrete than that. Furthermore, such goals of completion are oftentimes the very reasons that lead many scholars to look for answers in other disciplines, thus sometimes eventually bringing about the development of a separate subdiscipline (or simply the attempt to incorporate

²⁴⁰ For example, phenomenology of religion in its classical (all-encompassing) form is no longer practiced any more.

²⁴¹ One would need to come up with very strong empirically founded arguments to claim that.

methods and ideas of another discipline into one's own). Underdetermination of all and any more ambitious theories will also continue to trouble the discipline as there does not seem to be a position that we could generally utilize in such a way that would not leave proposed theories inevitably open to theoretically possible alternatives. Because of that different research approaches will also continue to behave as competitors, even when they are clearly and explicitly reliant on each other.

Now, if so, does it even make sense to look for a way of self-positioning that is epistemologically justifiable and consistent with the ideals of the disciplinary activity? I think it does make sense. If the only shared foundation we can agree on – and which does not require abandoning significant parts of current research activities – has to do with conceptual tools, disciplinary ideals and visions of the final goal, then conceptualizations of the position of the scholar could also begin to function as one of those shared ideals that we try to achieve, even if they might be almost unobtainable. Of course, as noted, ideally scholars of religion would prefer to be objective. But in our actual situation scholars try to look for a position that comes closest to the epistemological ideals and practical applicability, all the while taking the inherent human limitations into account in the best possible way. It will still remain just an ideal, but not such an ideal which one cannot even get close to.

Here I think if one tries to make an argument in favour of any of the possibilities at all, then it should be methodological agnosticism. It does not come with the severe problems of application the dialogical position and neutrality face in research approaches, which do not focus on a specific group of people and their self-conceptions. At the same time, it also does not come with the problematic premises of methodological naturalism. Its major weakness is its epistemological applicability – whether we can really consistently maintain an agnostic stance. Discussions of this and theories developed thus far certainly indicate that it is not possible to develop theories and explanations of religion while remaining a methodological agnostic. However, as noted earlier, this could be possible as far as description and interpretation is concerned. Furthermore, as also noted in section 7.4., in many parts of the evolutionary and cognitive research, there is no inevitable need for naturalistic premises and some of that research could be developed from the perspective of methodological agnosticism just as well. Of course, presented in such a way this argument in favour of methodological agnosticism is certainly not particularly strong. But it does come closest to the prevalent, implicit goals of the study of religion all the while maintaining basic epistemological credibility and practical applicability. Yet, even in this form, it is at best a rather modest argument. In all likelihood practitioners of different research approaches will continue to pursue their projects from the position they find useful within the more specific context of their own research approach and there is certainly no good argument to justify any kind of top-down enforcement of one position over all others to all the approaches.

CONCLUSION

In this thesis I have dealt with the issue of self-positioning in the context of the study of religion and as it relates to the contemporary behavioural and cognitive evolutionary sciences of religion. I have concentrated on its place in the larger issue of methodology and highlighted its relationship to the debate over the nature of scientificity. In addition, I have extensively discussed various arguments presented to justify methodological naturalism. I have also focused on a couple of ways how one can present equally credible alternatives to the naturalistic perspective. I concluded all of this with a critical and comparative evaluation of the positioning options available for a scholar of religion and assessed the applicability and justifiability of methodological naturalism as well as that of three alternative possibilities. To close this complex topic, I will here sum up my six main conclusions.

First, in my critical assessment of the discussions over method(ology) as one can find these in the study of religion, I have shown how it would make more sense to talk of three distinctly different dimensions in matters of methodology. This way it is possible to distinguish between procedural practices, research approaches and self-positioning, instead of trying to establish a clear difference between method and methodology and thus ignoring the whole methodological debate about positioning in the process (or trying to portray it as methodology analogously to, say, participant observation or experimentation).

Secondly, I have shown why arguments in defence of methodological naturalism are in fact much weaker than claimed. Furthermore, these arguments are also incapable of excluding possible alternatives. Instead of any epistemological strengths, the strengths of methodological naturalism appear to be in its applicability – it is easy to specify research problems, study those problems and offer general explanations for them from the perspective of methodological naturalism. At the same time, possible alternatives are not capable of all that within the limitations they have set themselves (however, see also the fourth conclusion below concerning this).

Thirdly, I have shown the immediate relevance of evolutionary epistemology for the debate over methodological naturalism, especially in relation to the possibility of alternatives. As exemplified, discussions in evolutionary epistemology have shown how one cannot conclusively link the theory of evolution to any specific philosophical position and thus naturalism is no more privileged or preferable as an epistemological position in evolutionary research than any other position. Furthermore, I showed how evolutionary theory enables justifying a position diametrically opposed to methodological naturalism, which is just as defensible as methodological naturalism (but also just as weak in some aspects).

Fourthly, I have shown the relevance of underdetermination for the positioning debate as it takes place in the study of religion as it is discussed in the philosophy of science. Here the perspective of empirical equivalence can show how methodological naturalism can be more applicable in formulating research questions

and research projects, but due to the underdetermination of its empirical research, it is perfectly possible for competitors to rely on most of the results developed naturalistically to defend alternative positions. This also means that theoretically possible alternatives are not as completely inapplicable as it might at first seem.

Fifthly, even though study of religion would appear to be fragmenting more and more into distinctly separate research approaches and thus it would seem to be rather questionable whether there is even any possibility or need for discussing the position of the scholar in general, a closer look does reveal its continuing relevance. The reason for this grows out of the continuing dialogue and desire to establish a general, unified understanding of religion as it is visible in the disciplinary discussions concerning religion. Therefore, for the purposes of striving towards that idealized goal, it is necessary to maintain positional compatibility between different approaches and thus look for the favourable position.

Sixthly, in my comparative evaluations of methodological naturalism and its more noteworthy alternatives I have shown why none of the positions can really claim to be generally more preferable than all other positions. All of them have their strengths and weaknesses, depending on the specific research approach one intends to follow. Still, it could be said that one of them is perhaps somewhat better off when comparing justifiability and applicability – particularly in the context of evolutionary studies on religion. As I have shown, methodological naturalism is not the only evolutionarily consistent position here and as highlighted, most of the specific research questions as they are pursued in behavioural and cognitive research, can be pursued from the perspective of methodological agnosticism as well. Quite significantly, methodological agnosticism makes it possible to avoid the more problematic premises of methodological naturalism. Therefore, even if methodological agnosticism in its ideal form is not feasible in all aspects of research for humans due to our inherent limitations, even the possibility of applying it in a form coming relatively close to the ideal still enables epistemologically less problematic research than methodological naturalism.

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SUMMARY IN ESTONIAN

Uurijat positsioneerides: epistemoloogilised ja metodoloogilised küsimuseasetused evolutsioonilises religiooniuurimises

Käesoleva doktoritöö põhiküsimuseks on religiooniuurija positsioon kui selline. Tegu on komplitseeritud probleemiga, kus saavad kokku metodoloogilised ja epistemoloogilised küsimused. Lihtsustatult võiks öelda, et positsioneerimise teema on küsimus sellest, kes uurija on või saab olla seoses uuritavaga? Kuivõrd on uurijal võimalik jääda neutraalseks, teaduslikuks kõrvalseisjaks? Kuivõrd on ta paratamatult osa uurimisväljast või peab uurimisvälja osaks eduka uurimistegevuse nimel saama? Aimatavalt pole sellisele küsimusele sugugi lihtne vastata, nõnda kombineerib ka siinne uurimistöö vägagi erinevate teadusalade ja lähenemisviiside käsitlusi ja järeldusi. Siinse doktoritöö raames olen sellele küsimuse keskendunud spetsiifilisemalt kognitiivsete ja käitumisökoloogiliste religiooniteaduste raames. Neis uurimisvaldkondades on viimastel kümnendil väga jõuliselt argumenteeritud metodoloogilise naturalismi kasuks, mida nähakse kõige õigema viisina, kuidas uurija peaks ennast positsioneerima uuritava suhtes. Siinses doktoritöös ongi põhirõhk metodoloogilise naturalismi õigustatavuse hindamisel ning võimalike alternatiivide võrdleval analüüsil. Selline küsimusepüstitus tingib ka vajaduse integreerida uurimistöösse arutlusi mitmesugustest erinevatest teadusaladest, sh ka näiteks evolutsioonilisest bioloogiast, teadusfilosoofiast ja evolutsioonilisest epistemoloogiast.

Ülesehituslikult on töö jaotatud kolme osa ning seitsme sisupeatüki vahel. Esimeses sisupeatükis annan ma ülevaate peamistest uurimissuundadest ja lähenemisviisidest evolutsioonilistes religiooniteadustes. Neid uurimisvaldkondi iseloomustab soov vaadelda religiooni kui nähtust üldistatuna ja seejuures lähtudes evolutsiooniteoreetilistest paradigmat. Kognitiivne religiooniteadus pöörab seetõttu eriti tähelepanu inimreligioossuse kognitiivsetele alusmehhanismidele ja seega sellele, kuidas üks või teine mehhanism tingib inimese kalduvuse mõelda ühest või teisest asjast just mingil konkreetsel viisil, mitte kuidas iganes. Käitumisökoloogiline religiooniteadus samal ajal vaatleb religioossust pigem käitumise pinnalt, kuivõrd just meie valikud toimimises on need asjad, mis hakkavad mõjutama evolutsioonilist valikut. Sellest tulenevalt on põhirõhk palju olulisemalt ka rituaalsetel praktikatel ja nende rollil evolutsioonilises valikuprotsessis. Sellele lisaks tõstan esile nn biokultuurilise perspektiivi, kus pööratakse eelnevatest palju enam tähelepanu kultuurilisuse rollile evolutsioonilises arengus ja seejuures eriti viisidele, kuidas kultuurilisus võib mõjutada inimese bioloogilis-kognitiivset evolutsioonilist arengut. Viimaks osutan mõningatele katsetele arendada välja lähenemisi, mis kombineeriksid kõik eelmainitud üheks tervikuks.

Ühtlasi pööran esimeses peatükis oluliselt tähelepanu sellele, kuidas evolutsioonilistes religiooniteadustes on mõistetud teadustöö teaduslikkuse küsimust ehk teisisõnu, mis kriteeriumid peavad olema täidetud selleks, et üht või teist uurimistööd pidada igas mõttes teaduslikuks? Mis on teaduslikkuse kõige

olulisemad tunnused? Toon välja viisi, kuidas evolutsioonilistes lähenemistes seostatakse teaduslikkust eelkõige eksperimentaalsete loodusteaduste kui teaduslikkuse ideaalidega ning mõistetakse igasugust muud tegevust vähemteaduslikuna. Eriti kriitilised ollakse seetõttu mõistagi igasugusele hermeneutikale ja tõlgendamisele tugineva humanitaarteaduse suhtes, leides, et niisugused valdkonnad saavad olla teaduslikud ainult niivõrd, kui nad suudavad sisuliselt suhestuda loodusteaduslike meetoditega ja neid ka enda tegevusse integreerida. Võrdlevalt osutan selles punktis asjaolule, et varasemalt leidub religiooniuuringutes ka teisi viise, kuidas religioonialase uurimistöö teaduslikkust on mõistatud, osutades varasemate arusaamade ja selle uuema suuna sarnasustele ja erinevustele.

Teises peatükis esitan süstemaatilise ülevaate meetodi/metodoloogia teemast religiooniuuringute kontekstis. Põhjaliku ülevaate toel näitan, kuidas mõisted meetod ja metodoloogia on religiooniuuringute kontekstis tähendanud vägagi erinevaid asju ning ühes kontekstis 'meetodiks' peetav võib tihtipeale teises kontekstis olla 'metodoloogia' ja vastupidi. Nõnda on meetodiks ja/või metodoloogiaks religiooniuuringute kontekstis peetud kõike spetsiifilistest protseduurilistest tehnikatest üldiste uurimisvaldkondadeni (nt võidakse rääkida 'religioonisotsioloogia meetodist'). Kõigele eelnevale lisaks räägitakse ka enesepositsioneerimise temaatikast tüüpiliselt metodoloogia kontseptuaalse sõnavara raames, olgu siis jutt metodoloogiliselt naturalismist, metodoloogilisest agnostitsismist või muust. Niisuguse mitmekesisusega toime tulemiseks pakkusin välja kolme-dimensionaalse mudeli, mis võimaldab eristada rangetele reeglitele tuginevaid praktikaid (nt eksperiment, faktoranalüüs vms), teaduslikke lähenemisviise üldisemas mõttes (nt hermeneutika, diskursuseanalüüs, strukturalism või ajalugu) ning enesepositsioneerimisi (nt metodoloogiline naturalism). Igas konkreetses uurimisprojekti esinevad alati kõik kolm dimensiooni korraga, moodustades erineva kombinatsiooni. Näiteks võivad üheskoos toimida kognitiivne religioonteadus lähenemisviisina, metodoloogiline naturalism positsioonilise valikuna ning eksperiment protseduurilise tegevusena. Teisal aga võivad kombineeruda dialoogiline enesepositsioneerimine, osalusvaatlusepõhine välitöö ning diskursuseanalüüs selle mõiste kitsamas, protseduurilisemas tähenduses. Suures plaanis ei ole aga see kolmikjaotus mõeldud kirjeldusena sellest „kuidas asjad päriselt on“, vaid üksnes praktiliselt kasuliku viisina, kuidas struktureeritumalt mõelda sellest metodoloogilisest kirevusest, mida religiooniuuringutes leida võib. Väga oluline on tähele panna, et niiviisi on võimalik välja tuua asjaolud, miks positsioneerimise küsimuse puhul on tegu selgelt eristuva aspektiga igasuguses religiooniuuringulises teadustöös ning just see eristus on keskselt oluline ka järgneva arutelu raames.

Doktoritöö teise osa kolmes peatükis (st doktoritöö kolmandas, neljandas ja viiendas peatükis) keskendungi metodoloogilise naturalismi põhjalikumale analüüsile, vaatlemaks selle kasuks esitatud argumentide tugevust, kui ka võimalust esitada alternatiivseid positsioone, mis lähtuksid samadest alustest. Selleks vaatlen kolmandas peatükis kõigepealt kõiki argumente, mida on religioossete uskumuste tõesuse võimalikkuse vastu esitatud evolutsioonilise religioonteaduse perspektiivist. Osutan tervele reale asjaoludele, mis pärast ei saa ühtegi neist

pidada kuidagi märkimisväärselt õnnestunuks ning miks seetõttu ei ole praeguse uurimisseisu puhul põhjust arvata, et evolutsioonilise uurimistöö pinnalt oleks võimalik midagi väita uskumuste endi tõesuse kohta. Ühtlasi vaatlen kolmandas peatükis lähemalt religioossete uskumuste kulukuse argumentatsiooni, nii nagu see evolutsioonilistes religiooniteadustes on tuginedes evolutsioonilisele bioloogiale välja arendatud. Lähemalt analüüsin seejuures tervet rida argumente, mis on esitatud õigustamaks metodoloogilist naturalismi kui väidetavalt ainukest võimalikku enesepositsioneerimise varianti, mis teaduslikus ja evolutsioonilises kontekstis õigustatav on. Analüüsi käigus näitan, kuidas need argumendid pole sugugi nii veenvad, kui väidetakse ning kuidas igaühega neist kaasnevad märkimisväärsed probleemid, või siis toimib mõni argument ainult tuginedes täiendavatele eeldustele. Üldiselt osutab esitatud analüüs tervikuna sellele, kuidas metodoloogiline naturalism ei ole sugugi nii selgelt õigustatav positsioon, kui eriti näiteks kognitiivse religiooniteaduse esindajad on väitnud.

Töö neljandas peatükis käsitlen lähemalt evolutsioonilise epistemoloogia uurimisvaldkonda ning näitan, kuidas see on väga oluline siinse diskussiooni raames. Nimelt on üheks metodoloogilise naturalismi õigustajate keskseks argumendiks väide, et ainult metodoloogiline naturalism on kooskõlas nende filosoofilis-epistemoloogiliste eeldustega, mis evolutsiooniteooriast paratamatult tulenevad. Evolutsioonilise epistemoloogia valdkonnas on aga just selliste küsimustega suure põhjalikkusega tegelenud. Põhjaliku analüüsi abil näitan, kuidas evolutsioonilise epistemoloogia alaste uurimiste tulemusena on siiski ilmnenud, et evolutsiooniteooriast ei saa kuidagi tuletada argumente ühegi konkreetse filosoofilise positsiooni kaitseks. Või siis vastupidi – samavõrd edukaid argumente on võimalik tuletada kõigi positsioonide kaitseks. Selle tõdemuse näitlikustamiseks esitan detailse skeemi sellest, kuidas oleks võimalik kaitsta ka metodoloogilise supernaturalismi positsiooni viisil, mis on samuti evolutsiooniteooriaga igati kooskõlas.

Ometi tekib sellises punktis küsimus, kas niisugusest positsioonist lähtudes on empiiriline uurimistöö üldse võimalik on ning selle küsimuse ilmentamiseks pöördungi ma töö järgmises, viiendas, peatükis lähemalt teadustegevuse empiirilise alamääratuse küsimuse juurde, nii nagu seda on ulatuslikult analüüsitud teadusfilosoofias. Selle käsitluse raames osutan asjaoludele, miks on erinevatest positsioonidest lähtuvaid religioonialaseid käsitlusi võimalik vaadelda empiiriliselt ekvivalentsete uurimisperspektiividena, mistõttu on suurt osa naturalistlikult perspektiivist läbi viidud uurimismaterjalist võimalik ühtlasi käsitleda ka tuginedes oluliselt teistsugustele positsioonidele. Asjaolu, et uurimistöö on läbi viidud lähtudes ühest positsioonist, ei välista omandatud empiirilise materjali tõlgendamist lähtuvalt mõnest muust positsioonist just alamääratuse ja empiirilise ekvivalentsuse tõttu.

Töö kolmandas osas (ehk kuuendas ja seitsmendas peatükis) võtan eelnevad asjaolud kokku ning vaatlen võrdlevalt positsioneerimise küsimust kui sellist. Määratlemaks selgemalt, millisest erialasest alusest lähtuvalt peaks võrdluse läbi viima, käsitlen kuuendas peatükis küsimust sellest, kas religiooniuuringuid üldsegi on vaadeldud või saab vaadelda piisavalt ühtse ja koherentse uurimisala/

distsipliinina, rääkimaks religiooniuurija positsioonist kui milleski üldisest. Välja toodud küsimuse lähema analüüsi abil osutan põhjustele, miks see on endiselt õigustatav, tulenedes peamiselt asjaolust, et kui ka kõiges muus võidakse oluliselt erineda, mõistetakse erineva lähenemisega uurijaid tegelemas sama uurimisobjektiga ja sellisel tajutakse üksteist ka konkureerivate lähenemisviisidena, siis järelikult on õigustatav arutleda ka religiooniuurija positsiooni üle üleüldiselt.

Töö seitsmes peatükk ongi pühendatud sellekohasele võrdlusele, vaatlemaks metodoloogilist naturalismi ühe võimaliku variandina uurija enesepositsioneerimisel. Võimalike alternatiividena tõstan esile metodoloogilist agnostitsismi, neutraalsust ning dialoogilist perspektiivi. Toon välja igauhe tugevused ja nõrkused ning näitan, kuidas ükski neist neljast ei saa apelleerida üleüldisele eelistatavusele kõigis religiooniuurimise valdkondades. Igauks neist sobitub kokku mingi(te) lähenemisviisi(de)ga kõige paremini, ent mitte millistega iganes üleüldiselt. Küll aga osutan ühtlasi asjaolule, et suur osa evolutsioonilisest uurimistööst ei pea üldse tingimata tuginema neile probleemsetele epistemoloogilistele eeldustele, mis on metodoloogilise naturalismi aluseks ja seega oleks mõttekam niisugust uurimistööd läbi viia pigem lähtudes metodoloogilisest agnostitsismist, millel on küll omad probleemid, ent need pole päris nii põhimõttelised, kui metodoloogilise naturalismi ateistlikud eeldused.

Üldistatult toon kokkuvõttes välja kuus peamist järeldust, mida kõige eelneva pealt saab teha. Esiteks, kogu metodoloogilist kirevust oleks mõttekam vaadelda kolme eristuva ent üksteisega läbi põimunud dimensiooni raames. Teiseks, epistemoloogilised argumendid metodoloogilise naturalismi kasuks on tegelikult palju nõrgemad, kui on väidetud ning praktikas on ainukene tugev argument metodoloogilise naturalismi kasuks tema kerge rakendatavus praktiliste uurimisprojektide läbi viimiseks ja konkreetsete uurimisküsimuste käsitlemiseks. Ent ka see on asjaolu, millega kaasnevad mõningad „agad“ (vt neljas järeldus allpool).

Kolmandaks saab selgeks evolutsioonilise epistemoloogia olulisus niisuguse debati tarvis, kui võrd evolutsioonilise epistemoloogia abiga on võimalik näidata, miks ei ole evolutsiooniline uurimistöö kuidagi paratamatult seotud ühegi konkreetse filosoofilise positsiooniga. Neljandaks ilmestab alamääratuse teesi rakendamine eredalt seda, kuidas metodoloogilise naturalismi vaatenurgast läbi viidud uurimistöö võib küll kergesti võimaldada uurimisprojektide määratlemist ja läbi viimist, ent ühtlasi ei kohusta see omandatud empiirilisi andmeid tingimata tõlgendama naturalistlikult, jäädes avatuks alternatiivsetele võimalustele. Viiendaks olen osutanud sellele, kuidas hoolimata näiliselt süvenevast killustumisest seob ühtne arusaam religioonist kui kõigi uurimislähenemiste ühisest objektist endiselt kõiksugu erinevad religiooniuurimuslikud uurimisvaldkonnad kokku. Kuuendaks ja viimaseks olen näidanud, miks ei saa ühtegi positsioneerimisvarianti pidada teistest selgelt eelistatumaks kõigis uurimisviisides. Pigem võib rääkida igauhe tugevustest ja nõrkustest, olenevalt spetsiifilisest olukorrast, küll aga on ilmneb metodoloogiline agnostitsism positsioonina, mille raames on ka võimalik läbi viia suurt osa evolutsioonilisest religiooniuurimisest, ent ühtlasi siis ka viisil, mis võimaldab vältida metodoloogilise naturalismi probleemsemaid eeldusi.

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2014 autumn	Aarhus University, Department of Culture and Society, Section for the Study of Religion, Visiting PhD candidate
2011 July–August	University of Kiel, Germany, Summer University Programme
2008–2011	University of Tartu, Faculty of Theology, Master cum laude in Religious Anthropology
2009–2010	University of Idaho, USA, graduate exchange student
2008 July–August	Fulda University of Applied Sciences, Germany, Summer University Programme
2004 – 2008	University of Tartu, Faculty of Social Sciences, Bachelor in Government and Politics; and Faculty of Theology, Bachelor in Theology
2001–2004	Rocca al Mare School
1992–2001	Saue Gymnasium

Employment:

2017–...	University of Tartu, School of Theology and Religious Studies, Junior Research Fellow in Religious Studies
2016–2017	University of Tartu, School of Theology and Religious Studies, School’s Website redesign Project Leader
2015	University of Tartu Press, Contractual Editor
2014–2017	University of Tartu, School of Theology and Religious Studies, Contractual Lecturer
2012–2018	“Akadeemia” journal, Contractual Translator

Academic Membership:

2018–...	Estonian Academic Theological Society, member
2014–...	Estonian Society for the Study of Religions, member (since 2019 board member)
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Activity as a Student Representative:

- 2016–2019 University of Tartu, Faculty of Arts and Humanities,
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Academic publications:

- Peedu, Indrek. 2018. "What Game Are We Playing?: A New Look at the Identity and Beginning of the Study of Religion." *Numen* 65 (1): 88–108.
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- Peedu, Indrek. 2012. "Kuluka signaliseerimise religiooniteooriast." *Akadeemia* 24 (3): 492–507.

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Teenistuskäik:

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2012–2018 “Akadeemia” ajakiri, lepinguline tõlkija

Kuuluvus teadusseltsidesse:

2018–... Akadeemilise Teoloogia Seltsi liige
2014–... Eesti Akadeemilise Usundiloo Seltsi liige (alates 2019
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2014–... European Association for the Study of Religions, liige
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DISSERTATIONES THEOLOGIAE UNIVERSITATIS TARTUENSIS

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