

Evolutionary Perspectives on Unbelief: An Introduction from the Editor

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Abstract:

The scientific study of atheism and unbelief is at a pivotal turning point: past research is being evaluated, and new directions for research are being paved. Organizations are being formed with an exclusive focus on unbelief research, and large grants are funding the topic in ways that historically have never happened before. This article serves as an introduction to the state of the literature and study of evolutionary perspectives towards unbelief, which incorporates cognitive, adaptive, and biological contributors. This article serves to contextualize the subsequent articles, which all have distinct perspectives on the evolutionary factors that contribute towards unbelief.

Keywords: unbelief, atheism, non-belief, evolution, cognition, adaptive, functional.

1. Introduction

The scientific study of atheism and unbelief is on the cusp of major change. Traditionally, the study of unbelief has been problematic in the same way that studying any group based on religious categorization is problematic – the researchers are going to have a predisposition towards belief or non-belief, so bias is inevitable. Just as the psychology of religion has addressed these concerns in the study of religion [12], researchers are now criticizing early works on unbelief that claim that humans have an innate predisposition towards religious belief, and therefore to be non-religious is to have violated human nature. In criticizing early approaches to non-belief, researchers are also coming up with new ways to explain the phenomena of non-belief through a multitude of approaches, a number of which are covered in this special issue.

Unbelief is another term referring to non-believers or atheists that maintains the traditional dichotomy between religious believers and those who do not identify as religious. This introduction will primarily use the term ‘unbeliever’ to refer to a person that is non-religious, but the subsequent articles in this special issue leave the preferred terms up to the author’s discretion (e.g., atheist, non-believer, unbeliever). It should be noted, that as the authors of the subsequent articles in this special issue will use whichever term they prefer, that this is in no way to over-generalize to all non-

believers, as we know there are substantial differences between people who are not involved in organized religion [23], [28].

Early research on atheists approaches them from a default position of religion being innate and natural, and therefore making an absence of deist beliefs unnatural. In the last decade, social scientists have begun to criticize existing frameworks for studying atheism, as many of them investigate atheism as an afterthought or by-product of religion, rather than studying atheism in its own right. Recently, the study of unbelief has become a focal point for many researchers, with organizations such as the Nonreligion and Secularity Research Network (NSRN) promoting research on the topic, and some major funding initiatives are now underway, including the Unbelief Project funded by the John Templeton Foundation. This point in history marks the divergence between previous ways of thinking about unbelief (as a consequence of disobeying natural mechanisms), and the future of studying unbelief, which increasingly makes an argument for unbelief as similarly and/or equally evolutionarily natural through new cognitive, adaptive, and biological explanations – among others. This volume is intended to further promote the critical discussion that is now underway, which assesses existing empirical frameworks, and proposes alternative ways to study unbelief while accounting for the confounding baggage that studying anything in relationship to religion inevitably introduces. The primary focus of this special issue is on evolutionary perspectives towards unbelief, so this can exclude some social and affective explanations for a person being non-religious, but it is important to acknowledge that these too play a role in explaining unbelief. Evolutionary perspectives about non-religion are especially sparse, which is another problem that this issue brings to light. Due to the inter-disciplinary nature of this issue and the early stages of the topic, the definition of evolutionary perspectives here is broad, and allows the incorporation of many factors into explaining how unbelief has persisted and has spread across generations of people and societies. We are hopefully at the beginning of a new zeitgeist, where unbelief is not just studied from the default starting position of religion, but instead is progressed as a novel scientific discipline.

2. Explanations for Unbelief

There have been a number of explanations for the existence of the non-religious, but research towards each of those explanations is still in its formative stages, and as thus, it is often methodologically flawed, or contradictory. I've outlined some of the most influential approaches to unbelief, including cognitive, functionally adaptive, and biological explanations – all of which play a role in how unbelief has evolutionarily persisted across generations. These are only some examples of explanations that can be approached from an evolutionary perspective, which do not exhaust other possibilities that are not covered in this introduction, but these will help provide context to the articles that follow in this special issue.

2.1. The Cognitive Explanation

Some have argued that religious belief is the result of a more intuitive thinking style (e.g., [26]). One of the most prominent theories within the cognitive science of religion assumes that religious belief is natural, innate, and intuitive, and so, in order to be an unbeliever, one must first effortfully violate the cognitive predispositions towards religious belief [3], [18]. There have been growing criticisms of this theory, since studies applying it are consistently methodologically flawed, and the data is often contradictory [29], [17], [14], [31]. Some have even tested the theory directly, showing that there is no relationship between intuitive thinking and religious belief [8]. Even with all of the evidence and criticism of the contrary, the intuitive thinking explanation for non-belief persists as being one of the most prominent theories to explain the existence of unbelievers.

2.2. The Functional (Well-Being/Adaptive) Explanation

A stronger argument for an evolutionary role in religious belief and unbelief is the *functional* argument. Traits that are more functionally efficient are generally passed on to future generations because they assist in survival, so some have argued that religious belief is more natural because it is more adaptive than unbelief [4], [10]. With this argument, religion is not cognitively innate as much as it is functionally convenient and efficient. It is well documented that religious belief is adaptive [4], [10], [11], [15], [21], [24] but the perspective that is changing is about the adaptiveness of unbelief. Religious belief helps fulfil a number of psychological needs, including a need for social relatedness, reducing fears about mortality, providing security, well-being, and meaning in life. In areas of the world where those functions are fulfilled through other secular means (e.g., wealthier countries more easily provide a high standard of living for inhabitants), then those countries tend to be more secular [20], [19]. To give a specific example, involvement in societal groups lowers mortality rates, regardless of that societal group being religious or secular [27]. In other words, when the functions of religious belief are made redundant through other mechanisms, then religion tends to be less culturally dominant. In addition, we are beginning to understand the role of secular beliefs, such as believing that science is a moral guide to life, in being functionally adaptive in ways that are similar to religious belief [7], [1]. People that are well-off without religion are less likely to be religious because they don't have the functional need for religion, whereas people that struggle and experience much hardship are more likely to use religion as a means to find greater well-being. The functional argument has largely argued that religion is more functional and thus evolutionarily more efficient than unbelief, however, as we increasingly understand more about how psychological functions and needs are fulfilled for the non-religious through secular beliefs and societal mechanisms, this calls into question earlier claims of religion being more evolutionarily beneficial, adaptive, and efficient.

2.3. The Biological Explanation

There has been increasing evidence that parts of the brain are associated with religious belief and experiences or a lack thereof, but this research has yet to conclusively explain the evolution of belief and unbelief [16]. Some insight comes from brain lesion studies, as increases and decreases in religiosity can be observed dependent on which area of the brain has the lesion, as posterior lesions can lead to higher religiosity, whereas anterior lesions lead to lower [30], which hints at the biology of the brain playing a role in whether or not someone is religious. To give another example, the prefrontal cortex is associated with processing doubt, so people with damage to this area frequently exhibit higher levels of religiosity, and it is also not a coincidence that many religious conversions happen around adolescence, when the doubt processing part of the brain dramatically grows [2]. The prefrontal cortex also interprets religious imagery differently depending on if one is a believer or an unbeliever [32]. Besides parts of the brain, there is also evidence that the accessibility of hormones such as dopamine play a role in whether or not someone is religious [22], [25], [9], [5], [6]. Evidence for biological explanations are still new, and many of the findings are contradictory, but the evidence seems to point to there being a role of biology in being a non-believer; we just aren't sure exactly what that role is yet since replications and further research are still needed.

3. This Issue

Contained in this special issue of *Studia Humana* is a selection of papers from authors across various disciplines discussing different evolutionary perspectives towards unbelief. In reading over these articles, I was quick to identify that some of the claims made in this tome will generate strong responses, and that is largely the goal of releasing this special issue: to generate critical discussion about a topic that needs more of it to progress. Even though large strides have been made, the

scientific study of unbelief is still in its formative stages, and as such, it is important to learn not only from the difficulties of studying religion, but to also study unbelief in its own right, while acknowledging the interconnected nature that non-belief has with religion and the history of studying religion. Many have criticized the early works on unbelief as having come through the lens of religion, and many of those criticisms are legitimate, so this gathering of manuscripts across multiple disciplines hopes to add scope to how far those problems lie, elucidate and criticize them, and offer some suggestions moving forward. The scientific study of unbelief is now coming to a crossroads, where it is now increasingly being studied as something other than a by-product of religion, moving away from cognitive claims that unbelief results from the rejection of an innate, religious predisposition [29], [13], [31], [3], [18].

A variety of inter-disciplinary perspectives are included in this special issue. Lluís Oviedo provides a culturally adaptive sociological explanation for atheism, while warning of limitations. Jay Feierman gives a functional, biological perspective on how non-religion can be a by-product of in-group breeding clusters, explaining that as breeding clusters no longer need to compete, the by-product that is religion that stems from these clusters becomes obsolete. Religion becomes superfluous in his explanation, causing religion to be a deteriorating phenomenon because of modernity. The paper by Mikloušić and Lane makes an argument for the role of personality in determining the relationship that people have with an overseeing God, explaining through their own empirical work that the religious see God as having personality traits more similar to the self, whereas unbelievers have a perception of God that is less relatable to their own personality traits. Although similar investigations have been done looking at personality fusion with a divine being, Mikloušić and Lane's findings are novel in that they also incorporate sociosexual variables, which have previously been shown to play an important role in understanding religious attitudes and behavior. This special issue concludes with a paper by Alogna, Bering, Balkcom, and Halberstadt, which criticizes modern frameworks and questions the notion of unbelief entirely, since even self-processed atheists show signs of implicit supernatural belief, but the studies making these claims often overreach from what their data can support. This final paper serves as an appropriate word of caution when empirically investigating unbelief and its evolutionary correlates. This special issue should serve as a point of entry for seeing the breadth of directions in which unbelief is being approached evolutionarily, which should promote discussion, further criticism (including of the articles held within this volume), which will hopefully result in a further expanding of research, and eventually theories that are stronger when placed under vigorous scrutiny.

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