

Appendix

Key Information for Potential Applicants

I. What are the aims of the Explaining Atheism programme?

Atheism, agnosticism, and other forms of non-belief in God or gods are widespread and growing, raising public debates about the personal and social impacts of non-belief and how to include such perspectives in legal frameworks, education, and public policy. Further, the growth of non-belief, as well as its uneven distribution around the world, raises questions for the scientific study of religion and culture. If the growing scientific consensus in the cognitive and evolutionary study of religion is correct and beliefs in God or gods are largely the products of evolved human psychology and biology, then how are we to explain the growth and distribution of atheism, agnosticism, and other forms of religious non-belief? What are the main causes of atheism?

While a limited amount of research has examined the causal origins of atheism and other forms of non-belief, there has been no systematic, multi-disciplinary, cross-cultural attempt to establish the relative importance of the various causal factors hypothesised by researchers.

The central objectives of the Explaining Atheism programme are to:

- test the most widely held theories of the causes of atheism with large samples and across cultures
- combine and compare causal theories of atheism and ‘atheisation’ (Sheard, 2014) at individual and societal levels, and move towards the integration of distinct causal accounts (e.g. psychological, biological, sociological, and historical)
- make further advances in establishing the scientific study of atheism, agnosticism, and nonreligion in the academy
- facilitate future research into the effects of atheism and agnosticism on individuals and societies
- improve public understanding of the evidence for and against commonly held notions of the causes of atheism.

To meet these objectives, the Explaining Atheism programme must overcome a variety of challenges that have hindered progress towards satisfactory causal explanations of atheism. These include the following major challenges:

1. **Terminology and Systemic Analyses:** The term ‘atheism,’ as well as related terms such as ‘agnosticism,’ ‘unbelief,’ ‘non-belief,’ and ‘irreligion,’ is used by scholars and social actors to denote different things and to different ends, with no objective procedure for determining a ‘correct’ definition. Consequently, past attempts to provide causal explanations for ‘atheism’ have worked with different phenomena and, in some cases, conflated distinct objects of analysis (Lanman, 2012; 2016). This limits the effectiveness of some studies, but more importantly makes it difficult to cross-analyse studies to build a more advanced understanding of the causes of atheism.

2. **Disciplinary Silos** While excellent work has been done in developing particular explanatory accounts of particular forms of atheism in different disciplines, this work has never been systemised and collectively evaluated. One significant challenge to systemizing and collectively evaluating this existing work is that it involves qualitatively distinct types of causal explanation. Much quantitative work aims to uncover general causal factors at work probabilistically across individual cases (e.g. individual differences in cognitive biases or the intensity of religious socialisation) while much qualitative work aims to uncover the particular or 'actual' (Hitchcock, 2018) causal factors involved in a particular historical movement (Ledrew, 2016) or personal event. Unfortunately, these different research agendas are often seen as competing with one another and it is common for scholars holding to one of these agendas to ignore the work of those holding the other. This harms both efforts.

3. **Inherent Obstacles to Causal Understanding:** In addition to the difficulties surrounding our general understanding of atheism, there are substantial epistemological and methodological challenges to developing a causal understanding of any human phenomena. One of the most relevant and obvious challenges is the difficulty of making principled causal inferences from observational data (i.e. you cannot infer causation from correlation). While some experimental work has been done in the scientific study of atheism (Shariff, Cohen, and Norenzayan, 2008), this has only been done on a limited number of causal factors, in a limited number of contexts and with questionable ecological validity. To improve our causal understanding of atheism, we need to employ principled methods of causal analysis and be wary of overinterpretation.

The aim of the Explaining Atheism programme is to advance our causal understanding of atheism through a research programme that addresses and overcomes each of these difficulties.

1. In response to the challenge of terminology, we encourage scholars to disentangle the distinct phenomena associated with 'atheism' using the meta-theoretical principle of fractionation employed in the cognitive science of religion (e.g. Boyer, 2010; Whitehouse & Lanman, 2014, Lanman, 2016). For example, one should note that not holding theistic beliefs, identifying as an 'atheist' and having a moralistic opposition to 'religion' are not the same thing and are likely to have different causal antecedents. Further, we would highlight work in sociology (Lee, 2015), religious studies (Taves, 2013), and even behavioural ecology (Sosis, 2009) suggesting that such fractionated elements or 'building blocks' are assembled into cultural packages and identities that guide individual lives (e.g. Humanism, Marxism, Transhumanism). Consequently, we encourage researchers to recognize the value of examining not only beliefs/non-beliefs in isolation, but also as part of wider worldviews. We would endorse moving away from any essentialized or supposed correct definition of 'atheism' and towards greater specificity in the precise phenomena to be explained. We provide details below of the particular forms of 'atheism' examined by this programme.

2. In response to the challenge of disciplinary silos, the Explaining Atheism embraces two principles. The first is that there are different legitimate causal questions and aims when

discussing atheism. It is a valid scholarly question to ask if there are psychological, biological, or other general causal factors at work across individuals and societies that are influential in determining whether someone is a theist or atheist (Willard, Cingl, and Norenzayan, 2020). Likewise, it is a valid scholarly question to ask why a particular historical change occurred (e.g. the decline of church attendance in Britain in the 1960s (Brown, 2010) or why a particular individual either becomes or remains an atheist (Zuckerman, Galen, and Pasquale, 2016).

The second principle is that researchers working on each of these types of questions can learn from those working on the other. Researchers engaged in establishing general causal factors can learn much from engaging with individual case studies, as this may lead them to hypothesise new interaction effects (e.g. cognitive thinking style (Pennycook et al., 2012) may be a predicting factor of atheism but perhaps only in contexts in which there is a cultural tradition of opposing science & critical thinking with religion). Similarly, researchers engaged in explaining particular atheist movements or individual worldviews can learn much from engaging with more general causal research, as they can discover a plethora of causal mechanisms, some of which may be contributing to explaining their individual case studies, even in cases where they are directly unobservable. Consequently, we welcome proposals that address either/both question types and our programme activities are designed to foster cross-disciplinary collaboration.

3. In response to the challenge of causal analysis, we encourage researchers to be mindful of what their research methodologies permit in relation to causal claims and have prepared programme activities to discuss how causality is being conceptualised and empirically assessed across projects.

II. What varieties of atheism and non-belief are we interested in explaining?

Researchers have persuasively argued that the terms ‘atheism,’ ‘unbelief,’ and ‘nonreligion,’ do not point to simple, unified objects of analysis. Rather, they are cover terms for a variety of distinct phenomena. For example, Lanman (2009; 2016) has made the case that beneath everyday discourse of ‘atheism’ may lie at least 3 causally relevant kinds:

- The absence of belief in the existence of a theistic God, or non-physical agents more generally.
- Moral judgements of the immorality of “religion.”
- Social identities that prominently feature the concept “atheism” or other forms of “nonreligion.”

Moreover, in the wider literature on secularism, atheism, and nonreligion, there are a number of distinct foci beyond belief and non-belief, such as religious affiliation and disaffiliation, nonreligious worldviews, and political ideologies.

While further research is warranted on all of these topics, the Explaining Atheism programme will focus its efforts on explaining non-belief in the existence of God, gods, and other supernatural phenomena. This narrow conceptualisation will allow for a shared focus across both core and funded projects and substantial scope for collaboration between research teams. While moral judgments of the immorality of religion and positive nonreligious worldviews and ideologies such as Humanism, Marxism or Transhumanism may be important to investigate as potential explanatory factors for non-belief in the existence of God or gods, they do not, themselves, constitute the explananda of the programme.

In relation to non-belief in God or gods, the Explaining Atheism programme will focus on improving our explanatory understanding of the following phenomena, as derived from research on Understanding Unbelief (Bullivant, Farias, Lanman, and Lee, 2019) and elsewhere:

1. **Non-theism:** non-belief in the existence of a theistic God
2. **Non-belief in other supernatural kinds.** While there are a large number of additional supernatural kinds, the Explaining Atheism programme is most interested in explaining non-belief in:
 - a. spirits, ghosts, ancestors and other culturally relevant supernatural agents
 - b. a universal spirit or lifeforce
 - c. underlying forces of good and evil
 - d. fate
3. **Metaphysical Naturalism:** non-belief in all supernatural phenomena

Beyond these forms of non-belief, the Explaining Atheism programme is also interested in explaining the following attitudes towards questions of the existence of God and other supernatural kinds.

4. **Strong Agnosticism:** the view that nothing is known or can be known about the existence of God, gods, or other supernatural kinds
5. **Supernatural Indifference:** Taking little interest in the question of the existence of God, gods, or other supernatural phenomena

Further, the Explaining Atheism programme is interested in explaining particular 'types' of atheism that emerge in particular countries by examining supernatural beliefs and a number of additional variables using latent class analysis. In Denmark, Finland, and the Netherlands for instance, research has indicated the existence of three atheist types (Lindeman et al., 2019):

6. **Spiritual Atheism:** Non-theism but with moderate to high levels of belief in other supernatural phenomena, less certainty in one's views, and less negative evaluations of religious traditions.
7. **Analytical Atheism:** Non-theism with few, if any, supernatural beliefs, higher levels of confidence in one's views, and generally negative evaluations of religious traditions.
8. **Uncertain Unbelief:** Non-theism but with ambivalent views of other supernatural phenomena and religious traditions.

II. What types of explanations do we aim to produce?

The Explaining Atheism programme aims to determine:

- The most powerful general predicting factors of non-theism and other forms of non-belief at the individual level. Determining these factors will allow us to better understand who is likely to become a theistic or supernatural believer and who is likely to become a non-theist or non-believer.
- The most powerful general predicting factors of levels of non-theism and other forms of non-belief at a societal or national level. Determining these factors will allow us to better answer the question of why some groups or countries have higher percentages of non-theists and non-believers than others.
- Well-evidenced causal accounts of how and why particular individuals became or remain non-theistic and/or non-believing.
- Well-evidenced causal accounts for how and why particular groups, populations, or nations developed high levels of non-theism or other forms of non-belief.

III. What theories are we particularly keen to see investigated?

Dozens of causal factors have been proposed for non-theism and other forms of non-belief at both individual and national levels. While the Explaining Atheism programme is open to projects investigating any of these, we are especially interested in research examining the following:

1) Individual level explanations

- Individual differences on cognitive and motivational variables as identified in the psychology and cognitive science of religion such as:
 - Anthropomorphism (Guthrie, 1995; Waytz et al., 2010)
 - Mentalizing (Norenzayan, Gervais, and Trzesniewski, 2012)
 - Promiscuous teleology (Kelemen & Rosset, 2009)
 - Mind-body dualism (Willard, Cingl, and Norenzayan, 2020)
 - Need for perceived control (Kay, Gaucher, Napier, Callan, & Laurin, 2008)
 - Perceived need to control and moralize other's behavior (Jacquet et al., 2021)

- Absorption (Lifshitz, van Elk, & Luhrmann, 2019; Luhrmann et al., 2021)
- Cognitive Style (Pennycook et al., 2012)
- Implicit Pattern Learning (Weinberger et al., 2020)
- Individual differences in religious socialisation such as:
 - Exposure to Credibility Enhancing Displays (Lanman & Buhrmester, 2017)
 - Religious and Nonreligious Emphasis (Hunsberger & Altemeyer, 2006; Sthran & Shillitoe, 2019)
 - Normative status of theism and other forms of supernatural belief in one's nation or social environment
- Commitment to worldviews and meaning systems featuring non-theism and other forms of non-belief such as:
 - Rationalism
 - Humanism
 - Marxism
 - Transhumanism
 - Postmodern scepticism
 - Secular nationalisms
 - Scientism
 - Subcultures (e.g. musical fandoms)
- Exposure to worldview pluralism (McLure, 2016; 2017; Bullivant, 2014)
- Internet use (Downey, 2014; Brown, 2014)
- Popular theories in the public sphere:
 - Intelligence (Zuckerman, Silberman, and Hall, 2013)
 - Education (Beit-Hallahmi, 2007)
 - Missing or dysfunctional families (Vitz, 2013; Dudley, 1978)
 - Rebelliousness (Vitz, 2013)
 - Selfishness (Vitz, 2013)

2) Societal & National Level Explanations:

- Existential security (Norris & Inglehart, 2004)
- Education (Mocan & Pogorelova, 2017)
- Secular Competition (Stolz, 2020)
- Religious Pluralism (Olson et al., 2020)
- Government Regulation (Fox and Tabory, 2008)
- Technological change/uptake (Taira, 2021)

IV. What topics are outside the scope of this programme?

The scholarship surrounding atheism, secularity, and nonreligion is growing rapidly as researchers examine a number of important issues and questions. While we view all of the topics below as important for the continued development of the field, they fall outside the scope of this particular programme.

- Explanations of religious disaffiliation
- Explanations of atheist self-identification
- Explanations of anti-religious campaigning
- The effects of atheism on individuals and societies
- The phenomenology of atheism and other forms of non-belief
- Discrimination against atheists and other non-believers
- Descriptive and interpretive accounts of different forms of atheism and non-belief
- Conceptual critiques of terms such as 'atheism,' 'religion,' and the 'secular'

V. What methods and research strategies do we see as most productive?

Determining the most powerful causal factors in individual and societal non-belief is difficult. So too is determining the extent to which those factors are at work in causing particular individuals or groups to become non-believing or retain non-belief. Consequently, it is necessary for researchers to utilise the affordances of a number of research methods and strategies. Applicants are invited to formulate their own research methods in addition to the core cross-cultural surveys. We note that the following methods may be particularly useful.

- Natural or laboratory experiments (Willard & Cingl, 2017; Shariff, Cohen, and Norenzayan, 2008)
- Survey research (Norris & Inglehart, 2004; Gervais & Najle, 2019)
- Textual analysis of deconversion narratives (Sheard, 2014; Zuckerman, 2011)
- Longitudinal research using existing datasets (Mocan & Pogorelova, 2017; Fox and Tabory, 2008; Olson et al., 2020)
- Historical analysis (Smolkin, 2018; Turner, 1985)
- New fieldwork aiming to test causal theories in particular contexts or with particular individuals (Turpin, 2018)
- Emerging methods for exploring the 'digital social' and/or 'digital religion' (Possamai-Inesedy & Nixon, 2019; Campbell, 2017), especially those harnessing Big Data approaches (Balažka, Houtman, and Lepri, 2021).
- Computational modelling (Cragun et al., 2021)

Project Team

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