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Dear Directors of the Understanding Unbelief Project,

I am writing to apply for an Early Career Award from the Understanding Unbelief Project. I am quite excited by the prospect of participating, and hope the following ideas, along with my expertise and experience can contribute to the project's success. In this letter, I briefly detail my plan to assess unbelief cross-culturally. Specifically, using a cross-cultural dataset focused on religious commitment that is unprecedented in its inclusion of understudied populations, I will be able to assess unbelief across a host of contexts and cultures by addressing the following questions:

- What is the cross-cultural frequency of unbelief? Is the rate of unbelief constant across societies with varying modes of subsistence and levels of social complexity?
- How does do people express religious unbelief cross-culturally? Is its expression consistent across deities and traditions? Does unbelief vary between ideological and behavioral commitment? Are the two always correlated?
- Is unbelief and its differential expression consistent across demographic factors such as sex, age, wealth, and family size?

Recent years have witnessed a surfeit of studies attempting to make sense of religious unbelief. There has been a host of limitations in this work, however, including a lack of cross-cultural assessments of unbelief among non-Western and non-Abrahamic populations (see Henrich, Heine, & Norenzayan, 2010; Sears, 1986). Indeed, virtually every cross-cultural assessment of atheism and secularism are of state-level societies. Moreover, their focus is overwhelmingly of religious traditions emphasizing ideological commitment as an indicator of secularism (i.e., "faith") rather than affiliation or practice. With the support of the project, I will overcome these limitations by utilizing a large cross-cultural dataset I have been developing in collaboration with a wide network of researchers from around the world (Purzycki, et al., 2016a).



Culture	Country	World Religion	Economy
Cachoeira Brazilians	Brazil	Christian	Market
Coastal Tanna	Vanuatu	Christian	Horticulture/Market
Guanghzou Chinese	China	Buddhism	Market
Hadza	Tanzania	NA (Traditional)	Foraging
Hong Kong Chinese	China	Buddhism	Market
Inland Tanna	Vanuatu	NA (Traditional)	Horticulture
Lovu Fijians	Fiji	Hinduism	Market
Luluwa	Democratic Republic of Congo	Christian	Market
Marajo Brazilians	Brazil	Christian	Market
Mauritians	Mauritius	Hinduism	Market
Native Fijians	Fiji	Christian	Horticulture/Market
Quechua/Aymara	Peru	Christian	Horticulture/Market
Samburu	Kenya	Christian	Herding
Sursurunga	Papua New Guinea	Christian	Horticulture/Market
Turkana	Kenya	NA (Traditional)	Herding
Tyvans	Tyva Republic	Buddhism	Herding/Market
Shaivite Hindus	Mysore, India	Hinduism	Market

Figure and Table 1. Field sites in data set with some descriptive features of each society.

This dataset ($n \approx 2,000$) now includes individual-level data from 17 societies ranging from the foraging Hadza of Tanzania and the herding Turkana of Kenya to fully market-integrated samples from Mauritius and Brazil (see figure and table 1). The sample includes societies at various scales of human social complexity (from bands and tribes to states) and its religious traditions are remarkably diverse, including animism, shamanism, polytheism, and monotheism among others. Assessing the cross-cultural ubiquity of unbelief and noted patterns its presence (e.g., sex differences, generational trends, traditional emphasis, etc.) in non-state societies will be an important benchmark toward a cross-cultural ethnography of unbelief. As the data are already collected, the support of the Understanding Unbelief Project will go toward planning, data preparation and analysis, writing up results, and training a graduate assistant. All of which will lay the groundwork for long-term use of the data on this topic.

The late social anthropologist Jack Goody presaged this proposal in 1996 when he detailed the cross-cultural prevalence of skepticism, agnosticism, and atheism. In his qualitative critique of many who viewed traditional populations as uncritical and/or homogenous (see Evans-Pritchard, 1965 for review of debates), he pointed to the need of more work in this area as the bulk of ethnographers emphasized what people believe rather than focusing on beliefs' absence or variation (cf. D'Andrade, 1981). Since this essay and its predecessors were published, the field has yet to produce a systematic assessment of unbelief in a variety of ethnographically important societies.

The first component of my proposed project, then, is to provide a detailed examination of the cross-cultural ubiquity of unbelief in the existence of spiritual agents, and the demographic factors associated with such unbelief. Our survey includes questions about whether or not participants believe in two kinds of deities, relatively more "moralistic" ones and locally salient deities claimed to care about things other than morality (e.g., ritual, ecology, etc.). We can easily examine individual-level demographic correlations with this data that will result in the first cross-cultural ethnography of unbelief using such a unique sample.

Drawing from this, the second component will assess the ethnographically critical distinction between belief and practice. As both arguably constitute essential elements of "unbelief" both emically and etically, we will be able to examine the apparent jostling between kinds of commitment that remains underappreciated in much of the literature. By way of illustration, take the case of my own field experience in the Tyva Republic (southern Siberia). There, many are simply indifferent to whether or not local spirits exist. However, this appears to have little to no effect on the likelihood that someone engages in practices devoted to these spirits. Indeed, in many traditional societies, there is considerable variation in religious concepts and/or simply no emphasis on actually believing in spiritual beings. In his study of a Fang (Central Africa) cult, Fernandez (1965) observed what he characterized as a trade-off between sharing beliefs and behaviors. There, variation in beliefs about the meaning of religious symbols (what Fernandez calls "cultural consensus") varied while the understanding of the purpose of ritual and its engagement was virtually unanimous (i.e., "social consensus"). In such cases, religious participation appears to be more crucial for conveying solidarity and maintaining social ties (Soler, 2012; Sosis & Ruffle, 2003). As such, people appear to emphasize ritual engagement rather than what others believe as an important indicator of group solidarity and religiosity (Cohen, Siegel, & Rozin, 2003; Fernandez, 1965; Goody, 1996; Purzycki & Sosis, 2011). In summary, while there is ethnographic, sociological, and psychological research hinting at the

possibility of a trade-off, there is no systematic cross-cultural examination of its existence, and concomitantly not one utilizing quantitative data. This project, then, would not only expand the horizon of our knowledge of unbelief's prevalence, but also assess how unbelief can express itself differentially within and across societies.

Using a scale specifically designed for this purpose along with a host of our ideational and practical commitment questions, we will examine whether or not this trade-off exists. Specifically, we will be able to see whether or not individuals and their cultural groups emphasize belief over practice across two locally salient traditions, and create composite corollary values for this trade-off. This metric will then allow us to examine the demographic patterns we find in the first component by focusing on variation in religious emphasis. We will also be able to make reliable comparisons across deities and world traditions. In other words, this will allow us to determine whether or not ideational and practical commitment and their correlates are reliable indicators of unbelief around the world.

Ultimately, these analyses will provide the groundwork for future work devoted to explaining the patterns we find. Once we have a thorough sense of what our ethnographic data tell us (as detailed above), we will be able to more reliably test hypotheses by appropriately modelling higher-order and nested factors such as group-level demographic factors, tradition, and material security on religious unbelief based on appropriate distributions uncovered in the aforementioned focal assessment. We will also be able to link this data to behavioral economic experimental data as well. This would allow us to examine how various levels of unbelief affect cooperative behavior.

I am in a unique position to execute this study successfully with little risk for a host of reasons. In terms of experience, I have published in major journals and magazines on the topic of religious belief and practice and continue to work on a variety of projects with many collaborators. I also have considerable field and management experience. Drawing from my extensive methods and analytical training, I am committed to assessing the data using cutting-edge analytical and modelling techniques. Moreover, as I co-developed, managed, and executed the major cross-cultural project that led to the development of this dataset (Purzycki, et al., 2016b, 2016a) along with a publication in *Nature* (Purzycki et al., 2016) and a special issue in *Religion, Brain and Behavior* (Purzycki, Henrich, & Norenzayan, in press), I will be able to take advantage of this momentum to successfully manage these studies in collaboration with the field researchers who collected the data for further contextualizing. Appendix A includes a proposed timeline and budget for the project.

Moreover, the funding will go toward making unique contributions to a variety of fields in other important ways. For example, if granted funding, I will coordinate with the Evolution of Religion and Morality Project based at Harvard University. There, I will pool, structure, and process the required data sets with Dr. Martin Lang (Harvard), with whom I have been collaborating on the data set's development. We will pre-register the analyses that we develop in the winter of 2017. Once these analytical strategies are registered, I will coordinate with a graduate analyst (Adam Baimel at the University of British Columbia) to write the corollary analytical scripts for use in R followed by an analysis of the data. Baimel and I have had a productive working relationship over the past few years and he is already equipped with the foundational analytical skills to carry out the analyses and write up the results. This will be a unique training opportunity for him, as it will feed into building cross-cultural models of

unbelief using multiple sites. Given the inevitable next-step questions that emerge from our results, this project will also encourage more research on unbelief among the next generation of scientists. And again, all materials will be made public for use in the future. In summary, your support will help us coordinate and execute this low-risk, high-output, multi-disciplinary project using innovative analytical techniques to answer important questions using our unique data.

We are confident that some analyses will be ready by the time of the first project meeting in Canterbury. Using the feedback from this meeting, we will subsequently plan for and execute the next phase of the analyses over the following year. In addition to contributing to Baimel's doctoral dissertation, we envision at least two major papers from these analyses, as well as some popular articles for the public. The first paper will focus on the cross-cultural demography of unbelief and the second will attend to cross-cultural variation in the expression of unbelief. In my experience, idiosyncrasies in such major cross-cultural projects require further scrutiny. These often lead to site-specific assessments as well, so there will likely be further case study development that arises out of our collaborations. If given the chance, we will not hesitate to use our study and its generated insights to help inform other awardees' projects.

Many thanks for your consideration. I hope you find the project of value and look forward to hearing from you.

Sincerely,

Benjamin Grant Purzycki

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