Request for Proposals: The Evolution of Science and Religion as Meaning-Making Systems

We are delighted to announce an approximately \$3 million re-granting project to examine **the evolution of science and religion as meaning-making systems**, directed by Dominic Johnson (University of Oxford) and Michael Price (Brunel University London), with funding and support provided by the Templeton Religion Trust and the Issachar Fund.

This project seeks to utilize the **tools and insights of evolutionary and behavioral science** to explore, from a new angle, conflict and complementarity in the **science-religion relationship**, and to better understand and inform **narratives about this relationship**. We will explore the deep origins, universal dispositions, and cross-cultural variations of these meaning-making systems, to build a big-picture view of the development of science and religion and associated narratives across human cultures. This RFP serves to identify and support a network of subgrantees with relevant expertise to conduct original research, to build and shape the future of this research topic, and to communicate it to a wide audience beyond just academia, to include opinion leaders, policy professionals, and the public.

Project Context

What influences the way in which people respond to the deliverances of science and to the teachings of religions, and more specifically, what influences the way in which people think about the relationship between science and religion? Human belief formation is responsive to evidence, reason and logic; but in addition to such evidential factors, numerous psychological, social, and perhaps other contextual factors also affect the formation, maintenance, and transmission of beliefs and attitudes about science, religion, and the relationship between science and religion. The purpose of the research program of which this RFP (Request for Proposals) is a part is to advance understanding of the narratives (or positions) about the relationship between science and religion that are in fact adopted in contemporary societies, and about the psychological, social or other contextual factors that shape these narratives and promote their adoption or persistence. What contextual factors, for example, lead to a rejection of science as an aid to thinking about moral and spiritual questions, or of theology as a source of insights or clues that can contribute to a better scientific understanding of human experience or the natural world? What contextual factors affect the acceptance or rejection of the idea that there is an inherent and inevitable conflict between science and religion? (These examples are given for the purposes of illustration and are not meant to be exhaustive.)

Research Questions

Eligible proposals for this project should address the main project theme: "The evolution of science and religion as meaning-making systems". The goal of this theme is to illuminate **why and how particular forms of scientific or religious meaning-making systems may**

prove adaptive in particular kinds of environments (and thus how they tend to emerge, grow, compete, and decline). The "environment" of interest may be any set of conditions in which a meaning-making system may emerge, or that influences how likely that system is to persist or spread (i.e., to retain or gain adherents). Relevant environmental conditions may be, for example, social, cultural, ecological, economic, or geographical. We are open to a multi-level evolutionary perspective on the meaning of "adaptive" (i.e., adaptive in a biological, cultural, and/or biocultural sense), and **invite applications that focus on adaptation at the individual biological level and/or group cultural level**. We welcome proposals to explore this topic among contemporary societies, indigenous (small-scale) societies, and (especially) from a cross-cultural perspective. Applicants are encouraged to think broadly about how one could approach this, theoretically and methodologically, but some illustrations of the kinds of topics and questions that might begin to address the theme include:

- What kinds of environmental conditions favor different types or features of meaning-making systems? For example, what contexts favor scientific over religious meaning-making systems as effective means of living (or vice versa), or one religious system (or particular religious beliefs and behaviors) over others, or indeed what conditions favor a stable equilibrium of scientific and religious systems (in which each type of system may solve adaptive problems that the other type does not, such that they coexist in a complementary manner)? Eligible projects might be guided by questions such as "why has a particular religious or scientific meaning-making system proven adaptive in a particular environment?", "what unique adaptive problems are solved by scientific versus religious meaning-making systems (or vice versa) in a particular environment?", what unique adaptive problems are solved by scientific versus religious meaning-making systems (or vice versa) in a particular environment?", what unique adaptive problems are solved by scientific versus religious meaning-making systems (or vice versa) in a particular environment?", what mechanism or process enabled a particular meaning-making system to adapt so successfully to its environment?" We will also encourage projects to consider how these states of affairs change over time, as the world has changed around us.
- We are also especially interested in how scientific and various religious meaningmaking systems conceptualize "**meaning and purpose in life**" in particular, and if differences in these conceptualizations have any adaptive consequences. This particular kind of meaning-making is especially salient to the project theme, both because a sense of meaning and purpose in life is positively related to individual well-being, and because scientific and religious systems often conceptualize it quite differently.
- What is the role and adaptive significance of skepticism, and how does this impact on religion and science? While we know quite a lot about skepticism (that is, publicly expressed doubt about a widely-held religious or scientific claim) in contemporary and historical societies, we know much less about its occurrence in societies of our deep, evolutionary past. What is the extent of skepticism in small-scale societies? What kinds of belief does it tend to pertain to? How common is it? How does it vary? Does it serve individual or group-level social functions? When does it tend to rise or fall? What is the role of leadership, identity and conformity in skeptical perspectives? Is there an adaptive, evolutionary function of skepticism? Or is it an aberration amidst a more general universal adaptiveness of conformist beliefs and behaviors? This adaptive perspective offers to shed new light on contemporary debates and narratives about science and religion.

- A logical extension of the analysis of skepticism would be to add an evolutionary analysis of the *other* end of the distribution as well: **the extremely devout** (in a religious or scientific context). These include a range of examples across cultures such as shamans, prophets, religious leaders such as the Pope and Mother Theresa, the clergy, fundamentalist movements, evangelist celebrities and so on, as well as highly devout advocates of scientific methodology and knowledge. How does extreme devoutness affect those individuals, and the dynamics of their groups? Do such individuals generate novel hypotheses for understanding the evolution of religion, conformity, and ultimately acceptance (or rejection) of scientific beliefs? How, when, and for whom may variation in devoutness serve adaptive functions?
- What mechanisms enable religious and scientific meaning-making systems to become better-adapted to their environment? These mechanisms may include features of the system that permit it to vary or "mutate" in potentially advantageous ways. For example, returning to the skepticism topic discussed above, can the meaning-making system manage skepticism (about a scientific or religious claim) among its members in ways that enable to it adapt more effectively? If a skeptical view does turn out to be correct or advantageous, for instance, is the system flexible enough to accommodate the improvement that it offers?
- Finally, how are narratives about science and religion affected by relations and competition between groups? The topics listed above tend to focus on *internal* characteristics of groups, or of individuals within a given group. We also welcome work on the influence of *other* groups in the environment, which may suppress or increase the utility of religious versus scientific narratives, in any given setting. How does such competition affect the leadership and organization of religions—and, indeed, of scientific movements as well? How have leaders tended to balance or privilege *religion over science*, or vice versa, and when do people tend to resist or follow? How do leadership patterns in science mirror or diverge from those in religion? And when and why are they more successful—among like-minded followers, as well as among differently-minded members of other types of groups? How do these factors depend on the demands of the environment? Are there certain circumstances in which scientific narratives tend to come to the fore, and others in which they tend to become subordinated to social needs fulfilled by religion?

Timeframe

All funded projects will run for **two years, with a start date between 01 March and 01** September 2020, and an end date between 28 February and 31 August 2022.

Awards

A fundamental aim of this project is to support promising new research on the functional advantages of diverse worldviews along the religion-science spectrum. To increase the chances of shedding new light on these issues, we encourage researchers across the full range of career development—including those with established track records for producing new knowledge, and more junior researchers eager to develop innovative and ingenious

new approaches to doing so. Funds will therefore be divided among 12-14 two-year projects, with the aim of supporting scholars at various stages of their careers. Four types of awards are available (all dollar figures refer to the total amount of the two-year award):

- Doctoral dissertation subgrants (\$50,000 each)
- Post-doc fellowship subgrants (\$150,000 each)
- Early career scholar subgrants (\$100,000 each)
- Mid-career/senior scholar subgrants (\$200,000-350,000 each)

Allowable expenses

For all subgrant types, allowable expenses include salaries or stipends for researchers and/or research assistants, as well as costs associated with attending and presenting research at academic conferences, participant recruitment, statistical consulting, fieldwork (including travel and lodging), and research equipment. For doctoral dissertation subgrants only, allowable expenses also include academic tuition and fees. Institutional overhead or indirect costs are *not* allowable expenses, for any subgrant type, as all subgrants are expected to support 100% of the research activity itself.

Selection Criteria

For all four award types, projects will be selected based on their likelihood, as assessed by an expert selection panel, to produce new and important knowledge that relates directly to the project theme ("the evolution of science and religion as meaning-making systems"). Favored projects, therefore, will be those most likely to provide novel insights into why and how specific forms of scientific or religious meaning-making systems tend to evolve and persist in particular kinds of environments, and under what conditions they are challenged or change. A project's likelihood of achieving such success will depend on factors such as:

- Overall scientific quality and potential for scientific impact, including familiarity with relevant literature and theory, insightfulness and originality of hypotheses, methodological innovativeness and rigor, and possession of relevant methodological and analytical skills.
- Cross-cultural focus (or where appropriate, carefully designed fieldwork or experiments).
- Track record of project leaders making important research contributions, especially in the case of early and mid/senior career (as opposed to dissertation and post doc) subgrants.
- Willingness to engage with a broader network of related projects.
- Interest in outreach to communicate results of the subgrant and wider project.

- Potential for seeding new research and scholarship in the future.
- Possessing strong team dimensions, including leadership and mentoring for earlier career collaborators.

Eligibility Criteria

• **General eligibility:** To be eligible for an award, all applicants must either be pursuing (in the case of doctoral dissertation awards) or have already earned (in the case of all other awards) a PhD in any field of social or behavioral science, including anthropology or another social science, psychology, and behavioral biology. Pursuit or possession of a PhD in anthropology may be especially commensurate with the project's evolutionary and cross-cultural emphases, but is certainly not required.

• Award-type specific eligibility:

- 1. **Doctoral dissertation awards:** Applicants must be currently enrolled as a student in a social or behavioral science PhD program, and have completed all coursework required of this program (meaning that their status is "ABD", if applying from a country or program that uses this terminology).
- 2. **Post-doc fellowships:** Applicants must have received a social or behavioral science PhD no more than two years prior to the proposed project's start date, and have the support of an educational or research institution and appropriate mentor.
- 3. Early career and mid-career/senior awards: Applicants with a social or behavioral science PhD that was awarded within ten years prior to the proposed project's start date will be considered "early career", otherwise they will be considered "mid-career/senior". Applicants must be employed by and have the support of an educational or research institution.

Network Building

Successful subgrantees will be invited to build connections, both among themselves and within a wider research network, to help forge and shape future research related to the project theme. To this end, we are proposing some specific collaborative activities:

- Regular meetings of all subgrantees (possibly one each in the US, UK, and Europe):
 - Spring 2020: Launch meeting (subgrant recipients present research plans).
 - Summer 2021: Mid-project meeting (subgrant teams present progress).
 - Summer 2022: Results meeting (subgrant teams report results and future plans).
- **Network Website**: We will establish a professionally-designed website in order to promote and provide updates on the overall subgranting program, including its aims, participants, outputs, and outreach activities.
- Joint Conference Panels: Funding for 12-14 subgrantees to participate together on themed science and religion panels, spread out over two professional conferences (which could be, for example, the Human Behavior and Evolution Society [HBES]

conference in 2021, and the American Association for the Advancement of Science [AAAS] in 2022).

Note: funding for the above network-building activities will be provided by the broader project and need *not* be included in the applicant's proposal budget.

Application Process

For all award types, the application process involves two stages:

- 1. Expressions of Interest (due 05 September 2019; decisions by 15 September). Applicants should submit a 2-3 page expression of interest in the first instance (not to generate more work, but to save work in case of non-fit). These should include:
 - Proposal outline
 - Description of how proposal relates to the RFP theme
 - Description of the unique perspective of an evolutionary approach
 - Brief outline of proposed methods, data, and study populations or fieldsite
 - Rough budget anticipated
 - CVs of project personnel (not included in page limit)
- 2. Full Proposals (due 15 November 2019; decisions by 10 December). *These guidelines were revised on 16 Sept. 2019.* If invited to submit a full proposal, applicants should prepare a research proposal in accordance with the following guidelines:
 - Post doc and early/mid/late career proposals should be a maximum of 10 pages, whereas PhD proposals should be a maximum of 7 pages (page limits apply to proposal main text, including executive summary, but not to references list)
 - For sake of readability, please do not use atypically small font, margins, etc.
 - A full proposal should include:
 - Page 1 of your proposal should include (a) a maximum 250-word executive summary of your project, followed by (b) a list of the specific hypotheses that will be tested, and/or the specific research questions that will be investigated, in the project
 - A full description of the research design and methodology proposed
 - Explanation of the fit and complementarity with the RFP theme
 - Timeline of project deliverables
 - Budget and budget justification
 - CVs of all project personnel (not included in page limit)
 - Applicants for doctoral dissertation and post-doc fellowship awards must also include a letter of support from a supervisor/mentor (not included in page limit); this supervisor/mentor must be a permanent employee of the educational or research institution at which the research will be conducted

Please remember: all projects must run for two years, with a start date between 01 March and 01 September 2020, and an end date between 28 February and 31 August 2022.

Please use the project email address for any enquiries, and to submit Expressions of Interest and Full Proposals: srevolution2019@gmail.com