# Request for Proposals Cambridge New Directions in the Study of the Mind

# Summary

The University of Cambridge, with the help of a generous grant from the John Templeton Foundation and under the direction of Tim Crane, welcomes proposals for philosophical and scientific approaches to the study of the mind which do not make the physicalist and reductionist assumptions familiar in these disciplines.

Successful proposals will be part of the research funding initiative *New Directions in the Study of the Mind*, based at the Faculty of Philosophy in the University of Cambridge.

The total value of all the projects to be funded under this initiative will be £700K. We expect to make between eight and twelve awards across the two years of the project, depending on the size of the successful proposals.

Proposals can be for funding that supports various research needs: a major project on a specific interdisciplinary theme; a workshop or a conference; a period of leave to work on a piece of work under the general heading of the project, which may involve course buyout, summer salary or lab time; a research visit to Cambridge to spend time in discussion with the project members; help with bringing a project to publication (e.g. by employing a research assistant); and any other reasonable request for support (e.g. the purchase of books or other materials) for research initiatives which fall under the general project heading.

The funding available for each proposal will be within the range £10,000 to £200,000, with projects lasting for a maximum of two years. Larger proposals will be expected to have a significant empirical component: it is more likely that a larger award would be considered for an empirical project lasting two years; more purely philosophical projects are likely to be supported by smaller sums.

There will be two requests for proposals, one for the academic year 2015-16, and one for the academic year 2016-17.

#### Research areas

The Cambridge New Directions Project seeks to support research of two kinds:

- (1) research that will articulate non-physicalist, non-reductive approaches to consciousness or intentionality, or explore their feasibility;
- (2) research on consciousness or intentionality that does not presume that all mental phenomena are wholly physical or reducible.

The project does not assume that these approaches are more plausible than their alternatives, but nevertheless embodies a cautious optimism that philosophical and scientific progress in understanding the mind might be achieved by promoting such approaches.

We anticipate proposals from philosophers and scientists at any stage of their career, whose main interest is in the philosophy of mind and psychology, or the interdisciplinary study of the mind with a background in empirical science.

We construe *philosophy of mind* broadly, to include phenomenology, analytic metaphysics of mind, theories of consciousness, theories of intentionality, theories of emotion, the philosophy of perception and action theory, among other areas.

Similarly, *philosophy of psychology* is understood so as to include the philosophy of neuroscience and general philosophy of science relevant to the project (e.g. the nature of reduction and explanation, the possibility of a science of human nature).

We also welcome specific theoretical and experimental projects in psychology and neuroscience themselves.

It will be helpful to make explicit what we mean by terms like *physicalism*, *reductionism*, *non-reductive*, etc. in this project.

Physicalism is understood (as is usual now in contemporary philosophy) as the view that the physical facts determine all the facts: once the physical facts are fixed, then this fixes all the facts. Or, in the equivalent formulation deriving from David Lewis, which will be well-known to philosophers: any world which is a minimal physical duplicate of the actual world is a duplicate in every respect. 'Physical' here refers to the subject-matter of physics and other physical sciences.

Reductionism means one of two things: either the ontological claim that entities of one category can be identified with entities of a more fundamental kind (e.g. all mental events are physical events); or the epistemological claim that one kind of theory can be explained in terms of another more fundamental kind (e.g. psychology can be explained in terms of neuroscience). The first type of reductionism appeals to ontological reduction (the reduction of entities) and the second type appeals to explanatory reduction (the reduction of theories).

### Interdisciplinary work

We welcome interdisciplinary proposals on consciousness and intentionality that incorporate actual concrete engagement with the sciences of the mind. Such proposals may be relatively substantial empirical projects involving a number of researchers in different disciplines. Alternatively, they may involve collaborations between philosophers and neuroscientists, or between phenomenologists and psychologists.

Philosophers may wish to spend some time on research visits to neuroscientists or cognitive psychologists to better inform themselves on the details of specific empirical research. Or, conversely, neuroscientists may wish to collaborate with philosophers on broad theoretical questions.

The actual engagement with the sciences of the mind within a nonreductionist framework is something which the Cambridge New Directions Project actively encourages. (However, it should be emphasised that although interdisciplinary proposals are welcomed, interdisciplinarity is not a requirement for successful proposals.)

# Sample research questions

Here is a list of some of the research questions that are eligible for funding, organized by topic. (This list is intended to be illustrative rather than exhaustive.)

Questions that focus explicitly on consciousness & intentionality

- What is the role of neuroscience in answering key questions about consciousness or intentionality? For example, how can neuroscience contribute positively to an account of the place of consciousness or intentionality in the natural world? How might the search for 'neural correlates' of consciousness be a fruitful strategy in understanding this place, and how might this search be improved?
- How should we understand the different varieties of consciousness (sensory, cognitive, affective)? For example, does Ned Block's well-known distinction between phenomenal and access consciousness imply any particular physicalist or reductive approach to consciousness, or is it independent of such approaches? What is the status of functionalist theories of consciousness with respect to questions about reduction?
- How should we understand the epistemological significance of fMRI studies? If mental organization is not reducible to neural organization, what do such studies tell us about mental organization?
- Are there novel, empirically motivated or informed philosophical arguments for the irreducibility or non-physical nature of consciousness or intentionality? If so, what are these arguments? Do they offer distinctive advantages over existing arguments against reduction of this sort? (In the case of consciousness, the existing arguments are those like the wellknown Zombie, Explanatory Gap, and Knowledge arguments.) Are there novel, empirically informed or motivated arguments for physicalist or reductive accounts of consciousness or intentionality?
- Can the central concepts in the theory of intentionality (e.g. intentional content, intentional mode) be usefully incorporated within a correct account of the methodology of cognitive psychology? For example, can we illuminate the different kinds of memory by reference to the metaphysics of intentionality? Or can the theory of intentionality help in the individuation of

sensory modalities? Can cognitive psychology or neuroscience employ the notions of intentional content or intentional object within a non-physicalist, nonreductionist framework?

- What are the limits of the application of intentional psychology?
- How should we understand the intentionality of emotion? How can emotional phenomena be integrated into a full account of human psychology? Is the category of the emotions a coherent one, metaphysically or from the perspective of cognitive psychology?

Questions that focus on fundamental ontological categories

- What kind of ontological categories do we need in order to make sense of consciousness or intentionality, consistent with the results of psychology and neuroscience? For example: Should we understand mental states to be the basic category, or is there a need for an ineliminable reference to events, processes or mental actions?
- Does the framework of so-called 'neo-Aristotelian' metaphysics offer any benefits to our understanding of consciousness or intentionality? Are these phenomena illuminated by employing the ideas of disposition, power, or capacity, or even substance (in the neo- Aristotelian sense)?

Questions that focus on current research paradigms in the science of the mind

- Is a reductive or physicalist approach to consciousness or intentionality a necessary condition for a proper understanding of the evolution of the mind?
   If not, what might an alternative approach look like?
- Are theories or models of human behaviour employed elsewhere in the human sciences (e.g. decision theory, game theory in economics) essentially reductionist or physicalist? If not, in what ways are they antireductionist or non-physicalist, or neutral with respect to such questions? And if so, might there be ways of articulating alternative approaches?
- How do recent theories of embodied, enactive and extended cognition fit within a nonphysicalist, nonreductionist framework? Can such theories be developed more creatively within such frameworks? What is the relationship between the hypothesised extended cognition and its neural basis?

## **Timeline & Application Process**

The Project will issue two requests for proposals, the first call will be in July 2015, the second will be in July 2016.

- Letters of intent should be received by 31 July 2015 (first call) and 31 July 2016 (second call).
- Letters of intent should explain the proposal's relation to the central questions of the Cambridge New Directions Project, the background and significance of the activity being pursued, and a summary of its main ideas or arguments. The letter should not exceed 1,500 words (excluding references).
- Letters of intent should be accompanied by a complete curriculum vitae for the project leader and all other team members (if applicable); and a specification of the amount of funding requested (a one-sentence description is acceptable). No budget narrative or justification is needed at this stage. The amount can be revised at the full proposal stage. Applicants will be informed by 14 August 2015 (first call) and 7 August 2016 (second call) about whether they are invited to submit a full proposal. Those invited to submit full proposals should submit them by 31 August 2015 (first call) and 15 August 2016 (second call). Those invited to submit full proposals should submit them by 31 August 2015 (first call) and 15 August 2016 (second call).
- Full proposals must include:
  - (i) A cover letter with the title, the sum requested, the duration of the project, and team members (if applicable)
  - (ii) A description of the work to be carried out, not to exceed 3,000 words (not including references). The description should include an account of the proposal's relation to the central questions of the Cambridge New Directions Project, the background and significance of the activity being pursued, and a summary of its main ideas or arguments (and, in the case of empirical projects, a summary of the methodology and hypotheses).
  - (iii) A project abstract of up to 500 words which explains the project and its significance to non-academics, and which would be published on The Cambridge New Directions Project website and possibly on the Templeton website, and included in publicity materials if the proposal is funded.
  - (iv) A timeline including preferred start date. (The earliest start date could be 1 October 2015 and the latest end date 31 December 2017)
  - (v) A detailed budget with accompanying narrative explaining line items. Funds cannot be used for major equipment purchases, augmentation of the applicant's salary or institutional overheads.

(vi) Approval from the applicant's department chair or head of department, where relevant. It is not necessary that applicants have a permanent or full-time academic post. Where successful applicants do have an academic post, their host institution will administer the grant.

### NB All DOCUMENTS MUST BE COMBINED INTO A SINGLE PDF FILE

- Letters of intent and full proposals must be submitted as a single PDF file on the Cambridge Faculty of Philosophy application portal, accessible from the New Directions Project's website (<u>www.newdirectionsproject.com</u>).
- Proposals will be assessed by a team consisting of the Project Leader, Professor Tim Crane) the other members of the Project Team, and where appropriate, other experts in the field, which may include members of the Advisory Panel (see the Project's website) and other international advisors
- Selection criteria will include: feasibility of the project in the specified timeframe; prior research accomplishments of the project leader and other team members; originality, innovation, and significance of the intended project; relevance of the project to the themes and aims of the New Directions Project as described above; quality of the budget justification; coherence of the intended research plan. While additional funding from other sources is not required, applicants are encouraged to seek such funding and to list the amount and sources of additional funds in their proposals.
- Informal inquiries may be made to the Project Leader, Tim Crane by email at tc102@cam.ac.uk
- Results of the competitions will be announced at the beginning of October 2015 and the beginning of October 2016.

July 1, 2015