

John Templeton Foundation Progress Report

Grant ID	12992
Project Leader	Nancy Cartwright (LSE) and Eric Watkins (UCSD)
Reporting Period	1 October – 31 December 2010

Project Schedule

1. *Briefly summarize progress you made towards your project's objectives since your last report, including unanticipated results related to your grant. Where applicable, please reference your project timeline, benchmarks, work products, and outcomes/enduring impacts.*

At the close of 2010, there were 30 titles in the project's discussion paper series and papers continue to be submitted.

As the second year of the project approached its mid-point, Research Co-ordinator Eleonora Montuschi sent out to the research team a request for an update on activity relevant to the project. Details of research team activities are attached to this report (Appendix II).

Also, several progress meetings were held among the Director, Research Co-ordinator, Research Officer and Project Manager to assess how research input from the team was relevant to Stage One of the project. Part of the discussion was devoted to how to orient future activity in terms of meeting our objectives. The database will play an important role in this and once it is in place, we will have a more complete picture of which avenues of research to select. In addition, Research Officer Eric Martin will keep track of the various research projects of project members.

Eric Watkins has garnered the full complement of speakers for the conference at UCSD in March – Historical Perspectives on God's Order, Man's Order and the Order of Nature – and its website will be live in January 2011.

2. *Please explain whether you are on-track for completing your project's objectives. If you are not on track, please describe the challenges you are facing and your plans for getting back on track.*

Discussion papers and the research team's individual publications are on target to complete the number of publications envisaged by the project. It is nonetheless a challenge to ensure that team members recognise when their work is relevant to the Project and that unpublished articles may be appropriate for the discussion paper series. We are encouraging our authors to provide, with their discussion paper, a few lines of

introduction to help identify crucial issues and areas of discussion for the project. Also, we discuss with them areas of their research which could be of interest for the project.

An assessment of how the work already submitted feeds into the overall framework of the project and which areas of research need expanding was indeed a key part of the progress meetings described in Section 1 of this report. As part of the assessment exercise Eleonora Montuschi has launched a sub-section of the Discussion Paper series specifically devoted to book reviews, with particular focus on project member publications. New research team member, Russell ReManning (see New Members of the Research Team below) is preparing the first of these reviews: The Cambridge Companion to Science and Religion (ed. Peter Harrison). Tim Mawson's book, Free Will, will also be reviewed. Book reviews will form a new section on the project's publications web page and the research team is responding enthusiastically with possible titles for review.

Significant Accomplishments

3. *Please describe any significant accomplishments since your last report (include attachments): research results, submitted articles, conference proceedings, print/electronic materials, media coverage, funding, etc.*

Dissemination

As part of her ongoing attack on the idea of uniform and universal order, Nancy Cartwright has defended the idea of pockets of order and the implications of this. This research has been reported in a number of talks and papers during this period:

Causation in Epidemiology, Epidemiology, Risk and Genomics seminar series, Cambridge University, 'The Long Road from 'It Works Somewhere to It will Work for Us'', December 2010.

PSA Presidential Address, Montreal, Canada, 'Will this Policy Work for You? Predicting Effectiveness Better: How Philosophy Helps', November 2010.

Erasmus University, Rotterdam, 'RCTs: How Do We Know What to Conclude?' Causality in Biomedical and Social Sciences conference, October 2010.

Also Professor Cartwright's Foreword to Fictions and Models, New Essays, (Ed. John Woods), was published in *Philosophia* in November 2010

The Guardian newspaper published an article that came out of the Polkinghorne conference in July 2010 which makes reference to Nancy Cartwright and 'the dappled world':

<http://www.guardian.co.uk/commentisfree/belief/2010/jul/14/chaos-theory-polkinghorne-god>

Events

The Governance of Nature: This two-day workshop was held at LSE on 27/28 October 2010. Speakers addressed topics on Historical Views of Governance and Order, Laws of Nature and their Alternatives, and Laws and Evolutionary Science. The full programme of speakers is attached (Appendix 1)

Passions of the Unnatural: This talk by Professor Lorraine Daston, Director of the Max Planck Institute for the History of Science, was scheduled for 10 December, 2010. It was to address the question of why human beings in many different cultures and epochs look to nature as a source of norms for human conduct. Unfortunately, heavy snowfall in Berlin prevented her flight and the event was cancelled. The number of those wishing to attend showed how popular her talk would have been, so the lecture has been rescheduled for 4 November 2011.

Website

This quarter the project manager, Rebecca Robinson, requested quarterly records of the number of visits to the Order Project website. The initial results indicate that the Research Team page currently receives the most number of visits, with disappointing results for the events page. In light of this, forthcoming events will be listed on the project home page and the project manager has arranged a special link to Order Project events via the CPNSS home page.

The Discussion Paper series now has its own page and papers have been divided into those related to Year One and Year Two of the project.

A special section on the Discussion Paper page will be set out for review papers.

Quarterly Reports to the John Templeton Foundation can now be accessed via the Administration page.

Reading Groups at UCSD

'1. The Philosophy of Science Reading Group is devoted to exploring notions of order and disorder by considering articles in the secondary literature.

- Lawrence Sklar "Dappled Theories in a Uniform World" *Philosophy of Science* 70 (2003) 424-41
- Selections from Malebranche's *Search After Truth* (Book III, Part 2, Chapter 6) and *Elucidations* I and II.
- Ronald Knox, *Enthusiasm*, Chapter 12 "Quietism: The Doctrine"
- Robert Adams, "Pure Love" *Journal of Religious Ethics*, 1980.
- Selections from Newton's *Principia*
- Michael Friedman, "Newton and Kant on Absolute Space: From Theology to Transcendental Philosophy" in *Constituting Objectivity*, 2010
- Charles Taylor's *A Secular Age*, chapters 6 and 7 (Providential Deism and The Impersonal Order) 2007.

2. Historical Perspectives on God's Order, Man's Order, and the Order of Nature.

- The Leibniz-Clarke Correspondence
- Peter Harrison, Voluntarism and the Origins of Modern Science, *History of Science* 40(2002) 63-89
- Selections from Malebranche's *Search After Truth* (Book III, Part 2, Chapter 6) and *Elucidations* I and II.
- Ronald Knox, *Enthusiasm*, Chapter 12 "Quietism: The Doctrine"
- Robert Adams, "Pure Love" *Journal of Religious Ethics*, 1980.
- Selections from Newton's *Principia*
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New Members of the Research Team

Dennis Des Chene, Professor of Philosophy at Washington University, St Louis

Professor Des Chene was a speaker at the Governance of Nature conference and his research interests include: theories of the passions in the seventeenth century; conceptions of natural law; history and philosophy of mathematics.

Russell ReManning, University of Cambridge

Dr ReManning is an affiliated lecturer in Philosophy of Religion in the Faculty of Divinity, a research associate (Divinity Subgroup), Psychology and Religion Research Group and the Isaac Newton Teaching Fellow in Theology, St. Edmund's College. He has recently been appointed to the Lord Gifford Fellowship in Natural Theology at the University of Aberdeen and from June 2011 will be based in the department of either Philosophy or Divinity. His research project will include a critical account of contemporary forms of natural theology and a reappraisal of the early Boyle Lectures (1692-1732).

Publications

God, Belief and Explanation, by Michael Redhead is in production and is due for release early in 2011. An outline of the book's chapters is on the website.

The Research Co-ordinator, Eleonora Montuschi, has contributed to the project research with two papers: 'Order, Disorder, Noise' and, as part of the Governance of Nature conference, 'Order of Man, Order of Nature: Francis Bacon's Idea of a Dominion over Nature', both of which are on the Order Project website.

Research Officer, Eric Martin, is preparing a paper which reviews the natural philosophies of John Polkinghorne and Nancy Cartwright, with particular emphasis on the role played by pluralism in their respective writings. This paper will appear in the discussion paper series in due course.

The Governance of Nature conference will furnish further discussion papers which will be forthcoming at <http://www2.lse.ac.uk/CPNSS/projects/orderProject/Publications.aspx>

Publications Repository (Database)

Constructing the online database has proved to be a significant computational undertaking but with help from IT services, it is now in-progress. Eric Martin met with two website administrators from LSE to discuss the database's possible architecture. After meeting with IT experts and our own project staff, it was decided that a series of interconnected, search-able web pages would be the best configuration for the most useful scholarly tool. Eric next has a training session scheduled where he will begin making pages and uploading files.

Additional Reporting Requirements

4. *In this section, please address any additional reporting requirements, i.e. Cost Effectiveness Statement as outlined in your Original Grant Agreement or any amendments to that Agreement.*

The project continues to progress within budget. Financial statements for the second quarter of Year 2 (to 31 December 2010) are attached.

APPENDIX I



The Governance of Nature CPNSS Seminar Room T206 , LSE 27-28 October 2010

Day One

1 *Historical Views of Governance and Order*

Chair: Peter Harrison, Oxford

10.15-11.30 Eleonora Montuschi (LSE)

Order of Man, Order of Nature: Francis Bacon's idea of a 'dominion' over nature

11.30-12.45 Dennis Des Chene (Washington University, St Louis)

Law, Order, and Formal Conditions of Wisdom in the late 17th Century

14.00-15.15 Peter Harrison (Oxford)

The Invisible Hand and the Order of Nature

2 *Laws of Nature and their Alternatives*

Chair: Nancy Cartwright, LSE and UCSD

15.30-16.45 Jonathan Cohen (UCSD)

Special Sciences, Conspiracy and the Better Best System Account of Lawhood

17.15-18.30 Robin Hendry (Durham)

Dependence and Novelty

Day Two

2 *Laws of Nature and their Alternatives*

Chair: Roberto Fumagalli (LSE)

10.00-11.15 Stephen Mumford (Nottingham)

A Powerful Theory of Nature

11.15-12.30 Towfic Shomar (Philadelphia University and Jordan)

Causation and Order in Islamic Kalam

3 *Laws and Evolutionary Science*

Chair: Eric Martin, LSE

13.45-15.00 John Brooke (Oxford)
Darwin on Law and Order – and God

15.00-16.30 Chris Haufe (University of Chicago)
Darwin's Laws

17.00-18.15 Eric Desjardins (University of Western Ontario)
Is there a Role for Stability and Laws in Managing Imbalanced Ecosystems?

APPENDIX II

ORDER PROJECT – REQUEST FOR UPDATE ON ACTIVITY NOVEMBER 2010

RESPONSES FROM RESEARCH TEAM MEMBERS

Bill Bechtel has submitted two discussion papers

- ‘Localizing Cognitive Operations in parts of Dynamically Active Brains’
- ‘Identity, Reduction and Conserved Mechanisms: perspectives from Circadian Rhythm Research’

Eric Martin has written the following introduction to his work: *Mechanistic explanations constitute a noteworthy departure from appeals to universal natural laws. While biological laws have long seemed difficult to come by, working out specific and satisfying alternatives has been an on-going project for scientists and philosophers alike. Of particular interest to the Order Project is the local character of mechanistic explanation. Mechanisms explain, where they do, in particular domains, in specific contexts, and in certain organisms. The extent of their reach must be determined empirically and depends largely on evolutionary conservation, but in any case they are far from earlier deductive-nomological accounts of explanation advanced by some logical positivists. Mechanistic explanations provide an image of life sciences that advance by piecemeal understanding of discrete parts of nature. If scientific practice provides our best warrant for belief in nature, then such discreteness is precisely the image of nature that the Order Project seeks to investigate further.*

Robert Bishop gave a talk at the Free Will conference in the first year, ‘Free Will, Laws of Physics and Contexts’ and he has submitted two additional discussion papers:

- ‘Complexity, Contextual Emergence and Causation’
- ‘Excluding the Causal Exclusion Argument against Nonreductive Physicalism’.

Richard Bradley reported on the activity of the Choice Group, which has been working on the question of the nature of social order in a broad sense. One theme of recent work is of particular relevance to the project: the relationship between social mentality, if one might call it that, and individual mentality. Some members of the Choice group have been working on how epistemically virtuous properties of groups relate to characteristics of individuals and the manner in which they interact, others have been looking at how individual judgments can be aggregated, and more recently a number of them have been working on deliberative mechanisms for reaching social judgments. Deliberation will in fact be the theme of a major workshop in late May/early June when the group will join forces with its network partners.

John Hedley Brooke gave a paper at the Governance of Nature Conference, ‘Darwin on Law, Order – and God’ and has submitted a second discussion paper:

- ‘Laws impressed on Matter by the Creator?’

Craig Callender submitted a discussion paper, co-authored with Jonathan Cohen, 'Special Sciences, Conspiracy and the Better Best System Account of Lawhood'.

Roman Frigg's contribution has been in the field of reduction theories. He has been refining the content and expanding the research done for the two papers which appeared in the first year of the project:

- 'Confirmation and Reduction: A Bayesian Account', forthcoming in *Synthese* 179(2), 2011, with Foad Dizadji-Bahmani and Stephan Hartmann
- 'Who's Afraid of Nagelian Reduction', *Erkenntnis* 73, 393–412, with Foad Dizadji-Bahmani and Stephan Hartmann

Peter Harrison gave a paper at the Governance of Nature conference, 'The Invisible Hand and the Laws of Nature' and submitted a paper for the discussion series during the first year of the project.

Rom Harre

The latest in his long series of studies on the role of causal powers and agency concepts in both natural and human sciences is a paper on agentive concepts and a comparison among four different discursive locations (quotidian uses, the sciences of physics and chemistry, the law, and the social sciences). A draft version of this paper, 'The Diversity of Powers', now appears in the Discussion Paper series.

Shaun Henson has been working to turn his doctoral thesis into a book: 'God as Unifier or Pluralist? Scientific Fundamentalism, Metaphysical Pluralism, and the Christian God'. The thesis is directly in keeping with the Order Project's themes and one of its main foci was Professor Cartwright's views concerning laws and the pluralistic framework of nature, as described in The Dappled World.

Tim Mawson hosted and chaired the first project conference, on Free Will, in 2010 at his college in Oxford, St Peter's. His paper for this conference was 'A Sketch of How Agents Enter the World of Events'. He also arranged for the UK team members to hold meetings at St Peter's during the first year of the project. In 2010, he submitted a discussion paper, 'A Philosopher's Perspective on Anthropic Fine Tuning'. His book, Free Will: A Guide for the Perplexed will be published in the UK by the Continuum International publishing group in March 2011.

Nancey Murphy submitted to the discussion paper series her chapter 'Avoiding Neurobiological Reductionism: The role of Downward Causation in Complex Systems' from the forthcoming volume, Moral Behavior and Free Will: A Neurological and Philosophical Approach (eds *Juan José Sanguinetti, Ariberto Acerbi, José Angel Lombo*). She also arranged for the chapter by Carlos Moya from the same volume to become part of the series.

Towfic Shomar has been working on the Islamic philosophy (Kalam) point of view on scientific laws and how it differs from the Western perspective. In particular he has been exploring the multi-levelled concept of causation in Kalam. Part of this work was presented at the Governance of Nature workshop in October 2010 in a paper called

'Causation and Order in Islamic Kalam', which will shortly be published in the discussion paper series.

Keith Ward was a speaker at the 2010 'Views on Reduction' workshop. His paper 'Theological Attitudes to Naturalism' is now part of the Discussion paper series. He also published

- 'The Role of Faith in Science and in Religion', in *Crossroad Discourses between Christianity and Culture*, ed. J. Gort, H. Jansen, and W. Stoker (Rodopi, Amsterdam, 2010)
- 'God as the Ultimate Informational Principle' in *Information and the Nature of Reality: from Physics to Metaphysics*, ed. Paul Davies and Niels Gregersen (Cambridge University Press, 2010)
- *More than Matter*, Oxford: Lion Hudson, September 2010

Some themes relevant to the project can be extrapolated from his forthcoming book *Is Religion Irrational?* due for release in March 2011 by Lion Hudson.

Margaret Yee's own research into the 'Principles of Knowing: Science, Humanities and Theology' (<http://www.theology.ox.ac.uk/index.php?id=216>) overlaps with questions addressed within the Order Project. One question of particular relevance is whether we should accept that all things have their own nature and order and whether a dynamic dappled view of the world may prove therefore inescapable. Research on the metaphysics of Austin Farrer is pursued in view to address this question and expand on its significance and scope.