Towards a Unified Science of Religion

University of Otago, 12–14 February 2010

All papers will be presented in the Valentine Common Room, at St Margaret's College.

Thursday Feb 11th

5.30 – 7.00 pm	Registration and Reception (Executive Residence, cnr Forth and Union Sts) [Late Registrations: Friday morning]

Friday Feb 12th

9.00 – 10.00 am	Keynote Address: Explaining Religion	Harvey Whitehouse
10.00 – 10.30 am	MORNING TEA	
10.30 – 11.30 am	What is Religion? Identifying the *Explanandum*	Greg Dawes & James Maclaurin
11.30 – 12.30 pm	Extending the Religious Mind: Early Quakerism and "Modes of Religiosity"	Nicholas Keene
12.30 – 1.30 pm	LUNCH (*at St Margaret's for all registered participants*)	
2.00 – 3.00 pm	Thinking about Religion: Examining Progress in Religious Cognition	Aaron Smith
3.00 – 3.30 pm	AFTERNOON TEA	
3.30 – 4.30pm	Animal Magnetism and Social Prediction	Joseph Bulbulia
3.30 – 5.30 pm	Social Stratification and Higher Gods in Polynesia	Russell Gray

Saturday Feb 13th

9.00 – 10.00 am	Keynote Address: Religion as a Product of Evolution	David Sloan Wilson
10.00 – 10.30 am	MORNING TEA	
10.30 – 11.30 am	Explaining the Attribution of Personhood to Large Non-Human Systems	Graham Wood
11.30 – 12.30 pm	The Effect of Synchronised Group Movement on Prosocial Behaviour	P. Reddish, J. Bulbulia, R. Fischer
12.30 – 1.30 pm	LUNCH (*at St Margaret's for all registered participants*)	
2.00 – 3.00 pm	The Return of Religious Non-Cognitivism	Kelby Mason
3.00 – 3.30 pm	AFTERNOON TEA	
3.30 – 4.30pm	Cognitive Ecologies and Structures of Worship in Early Modern England	Evelyn Tribble
4.30 – 5.30 pm	Implicit Measures in the Experimental Psychology of Religion	Jonathan Jong
7.00 pm	CONFERENCE DINNER	

Sunday Feb 14th

9.00 – 10.00 am	Keynote Address: *to be announced*	Jesse Bering
10.00 – 10.30 am	MORNING TEA	
10.30 – 11.30 am	Subversive Explanations, Modern and Early Modern	Charles Pigden
11.30 – 12.30 pm	Do Scientific Explanations of Religious Beliefs Debunk Religion?	Robert Nola
12.30 – 1.30 pm	LUNCH (*at St Margaret's for all registered participants*)	
2.00 – 3.00 pm	Do Evolutionary Explanations of Religion Debunk Religion?	Paul Griffiths & John Wilkins
3.00 – 3.30 pm	AFTERNOON TEA	
3.30 – 4.30pm	The Evolution of the Human Soul	Grant Gillett
4.30 – 5.00 pm	FINAL REMARKS & PUBLICATION PLANS	James Maclaurin & Greg Dawes

Abstracts

(in alphabetical order by speaker)

Jesse Bering

Title to be announced.

Animal Magnetism and Social Prediction

Joseph Bulbubia

Few interactions appear more remote from each other than hypnotic trance and the pursuit of the middle class dream. Yet both are grounded in social cognition requiring the granting of conscious control to others. What enables varieties of ordinary mesmerism? This talk:

1) describes data revealing the remarkable scope and power of hypnotic effects in ordinary life.

2) explains these data by a model of cooperative assurance called 'charismatic signalling', in which an uncertainty over cooperation's benefits rather than a certainty over cheating's benefits presents cooperations's most fundamental challenge.

What is Religion?
Identifying the *Explanandum*

Greg Dawes and James Maclaurin

Religious traditions are both internally complex and extraordinarily diverse. This has made difficult the longstanding task of defining religion as an object of study. We stand on the threshold of a new era of scientific study of religion. So how should scientists understand religion? Will recent advances in these sciences provide a new definition, or at least a better way of interpreting the plethora of existing definitions? In this paper, we set out the history of debate about the nature of religion and taxonomise existing theories. We survey a number of scientific results that promise to explain aspects of the complexity and diversity of extant and extinct religions. We compare the methodologies of the existing tradition with this new scientific approach. We conclude that the new scientific approach shows more promise than earlier theories based on conceptual analysis.

The Evolution of the Human Soul

Grant Gillett

The soul of a human being is, for an Aristotelian, a specific instance of the form of humanity in relation to its intellectual and emotive functions. An evolutionary perspective encourages us to see such a form as biological specified but we are aware that human beings also participate in a world of meaning and that that aspect of our being involves an appreciation of cognitive neuroscience as the basis of human adaptation to a human life-world, The nature of that adaptation is deeply problematic for natural science . A discussion of the evolution of the soul/psyche therefore needs to encompass both how we come to be the creature of flesh and blood (and neural networks) that our biological evolution has produced but also how those neural networks enable us to partici-

pate in the world of meaning with its governing values of goodness and truth. The resulting account incorporates notions of nature and second nature in trying to understand spirituality as a widespread feature of human existence.

Cultural Phylogenetics, Social Stratification and the Evolution of Higher Gods in the Pacific.

Russell Gray

In this talk I will use computational phylogenetic methods to test hypotheses about the evolution of social stratification and higher gods in the Pacific.

Do Evolutionary Explanations of Religion Debunk Religion?

Paul E. Griffiths & John S. Wilkins

Similar arguments have been advanced according to which the evolutionary origin of human cognition provides grounds for scepticism in three domains: morality, religion, and science. However, advocates of evolutionary scepticism rarely advocate scepticism in all three domains. Here we examine why some counterarguments to evolutionary scepticism work in one domain and not another. One way to counter an 'evolutionary debunking argument' is to defend a connection between the truth of beliefs in the target domain and success, so that evolution can be expected to design systems that produce true beliefs in that domain. We call a connection between truth and evolutionary success a 'Milvian bridge', after the tradition which ascribes the triumph of Christianity at the battle of the Milvian bridge to the truth of Christianity. We argue that a Milvian bridge can be constructed for commonsense beliefs, and extended to scientific beliefs. But construction cannot be extended to moral and religious beliefs. Another way to counter an 'evolutionary debunking argument' is to analyse the content of truth-claims in a domain so that the truth is analytically linked to evolutionary success. There have been several attempts to do this for moral beliefs. We describe some of these, and point out that this strategy is unlikely to appeal to those who hold theological beliefs. Theological beliefs thus emerge as particularly vulnerable to evolutionary debunking arguments, as neither class of counterargument seems to be viable in that domain.

Implicit Measures in the Experimental Psychology of Religion

Jonathan Jong

However the unified science of religion develops, experimental social psychology is bound to play an important role in hypothesis- or theory-testing. Indeed, the experimental data is already quickly accumulating. However, there has been little scrutiny of our methodological practices. Much of the experimental research on religion still relies on explicit psychological measures (e.g., religiosity questionnaires), despite the fact that the limitations of such measures have been discussed *ad nauseum*. Recently, however, some investigators (e.g., Barrett, 1999; Gibson, 2004; Shariff, 2008) have employed implicit or covert measures from social psychology in their research. In this paper, I shall discuss the weaknesses of explicit measures of religious belief again, and pro-

vide suggestions about how we should increase efforts in designing, testing, and using implicit measures.

Extending the Religious Mind:
Early Quakerism and "Modes of Religiosity"

Nicholas Keene

This paper seeks to outline the potential for developing a cognitive model of historical investigation by exploring the origins and early development of a seventeenth-century English religious sect from the perspective of the cognitive science of religion. Harvey Whitehouse's influential 'modes of religiosity' thesis constructs a testable theory of how religions are created, passed on, and changed, based on a distinction between imagistic and doctrinal religious forms. This study will test the usefulness of the theory in helping to understand the early years of the most radical and successful religious sect to emerge during the British Civil Wars and survive the Restoration to grow into a global denomination - the Quakers or Religious Society of Friends. Drawing on other theories from within the cognitive science of religion field, and critiques from without, this paper will evaluate ritual practices and gesture in worship, religious experience as socially embedded, sacramental forms and anti-externalist thinking, group identity and regulation, codification and the transmission of ideas. The argument will be advanced that, when refined by the extended mind/distributed cognition model and integrated into a wider cognitive ecology, 'modes of religiosity' has the potential to be tremendously useful to historians of religion and presents one viable approach to developing a broader cognitive history.

The Return of Religious Non-Cognitivism

Kelby Mason

Moral non-cognitivism--that is, the view that moral discourse doesn't express propositions--is widely known to have been a popular view in the mid-twentieth century (and remains so today). What is less well-known is that some philosophers such as Ayer maintained a religious non-cognitivism--the view, that is, that religious discourse doesn't express propositions. This view has re-emerged in recent years from an unlikely source: the so-called epidemiological theory of religion associated with the cognitive anthropologists Atran, Boyer and Sperber. In this paper, I lay out the basics of the epidemiological theory and why we should take it seriously, then critique it on three accounts, with particular emphasis on the third: (1) their solutions to the "Mickey Mouse" problem don't work; (2) the central notion of minimal counter-intuitiveness is seriously underspecified; and (3) their avowal of religious non-cognitivism is incoherent.

Do Scientific Explanations of Religious Beliefs
Debunk Religion?

Robert Nola

Yes. There are a host of ways whereby beliefs can be formed in our brains. But not all of these ways are acceptable as being reasonable or justifiable. In fact some of the means of belief formation undermine and debunk any rational grounds for the belief. If the beliefs are true other means need to be found for making them reasonable or justifiable (if there are any). This much is an impor-

tant part of modern epistemology which places emphasis on certain truth-tracking conditions for the rational acceptance of belief. Various attempts have been made to explain why we hold a number of different kinds of belief that by-pass these tracking conditions; instead an appeal is made to certain kinds of causal factors leading to belief formation which have the effect of debunking the rationality of these beliefs. Thus the rationality of scientific beliefs has been impugned by explanations offered by the strong programme in the sociology of science; similarly religious beliefs have been impugned by causal-explanatory theories proposed by Marx, Nietzsche, Freud and recent evolutionary psychology. The paper will focus on the different roles played in the formation of religious beliefs by considering truth-tracking conditions alongside scientific causal conditions which can give rise to their debunking.

Subversive Explanations, Modern and Early Modern

Charles Pigden

The scientific explanation of religious belief is commonly taken to be a subversive enterprise. To explain religion as due to natural causes is to explain it away. But this seems odd since at first sight the causes of a belief are irrelevant to its truth or to its status as knowledge. I believe the Times Table because I was taught it at school. Nonetheless, my belief that 11 x 11 = 121 is not only true but something I can reasonably claim to know. Can a causal explanation of why we believe something cast doubt on thing we believe? Yes – under certain circumstances.

1) If the explanation shows that X would have believed P whatever its truth-value, then X's belief that P does not constitute knowledge.

2) If the explanation shows that P would have been (widely) believed whatever its truth-value, and if the only reason to believe P is true is that P is either (widely) believed or individually difficult to doubt, then this suggests that P is false.

Thus, an explanation can only suggest that a belief is false if there are no other arguments for the belief. I illustrate these claims with modern and early modern explanations of belief.

An Experimental Investigation into the Effect of Synchronised Group Movement on Prosocial Behaviour

Paul Reddish, Joseph Bulbubia, Ronald Fischer

Despite impressive cultural variation, religious rituals the world over reveal strong levels of coordinated body expressions among participants. We find synchrony expressed in such rites as collective chanting, prayer, singing, prostration, marching, and dancing. Why is synchrony strongly conserved? This study examined the theory that moving in synchrony is an important cultural adaptation to help people bond in a group and so increase prosocial behaviour (Durkheim, 1915/1965; McNeil, 1995; Ehrenreich, 2006). We tested this theory by randomly assigning participants, in groups of three or four people, to one of four main conditions: synchronous movement, asynchronous movement, blindfolded synchronous movement, or no movement. Subsequent levels of anonymous unrewarded volunteering were measured. Participants who moved in synchrony were significantly more willing to

donate time than participants who did not move. However, differences in prosociality between the synchrony, asynchrony, and blindfolded synchrony groups were not significant. While the study gives evidence that group movement in general enhances prosocial tendencies, it found no special effect from synchronic motions.

Thinking about Religion:
Examining Progress in Religious Cognition

Aaron Smith

My interest lies with a collection of scholarship labelled the 'Standard Model', which I propose constitutes an emerging framework for theoretical and empirical work on religious cognition. I map the features of the Standard Model and assess the strength of its claims to offer a progressive program for understanding religious cognition. My conclusion dilutes the Standard Model in that I suggest it overstates the mind's susceptibility to religious content and sidesteps other culturally prolific activities that also engage emotion, memory, belonging and belief. While I acknowledge some convergence pressures upon cultural activities, I argue that these pressures lead towards more generic tendencies such as the ability to hold belief sets, rather than the predisposition to hold religious beliefs. On this view, religion is not a unique domain but operates within the domain of social agency. I also note that the mind is adept at learning; we can change our minds, discard ideas we acquired in the past, and choose to become or remain an atheist. The Standard Model is an overconfident but nevertheless progressive research framework guiding work on religious cognition because it has revealed previously unforeseen connections between theories and observations derived at different analytical levels.

Cognitive Ecologies and Structures of Worship
in Early Modern England

Evelyn Tribble

In this paper, I advance the concept of "cognitive ecology" as offering a lens through which to view the interplay of internal cognitive mechanisms , objects, and social systems in structuring religious practices. My test case is the transition from Catholicism to Protestantism in early modern England, which I examine from the perspective of Extended Mind/Distributed Cognition. Rather than imagining the two religions as possessing an essential internal doctrinal identity supported by various material props, we should instead imagine both as extended systems, distributed across the believer/practitioner and an array of material and social practices. Moreover, the English rReformation provides a particularly telling test case for External Mind/Distributed Cognition precisely because the role of objects was contested so bitterly. Historians have often puzzled over the reasons that the most crucial arguments in the Protestant reformation were not over theology, but instead over seemingly "indifferent" issues. A distributed/extended approach would anticipate that the most emotive issues would be those that relate to ordinary human interactions, gestures, objects, and social affiliation. The power of habit, or embodied memory, and the attention paid to all aspects of religious worship within the cognitive ecology constructed by

those habits, would magnify the disruptive effect of any changes, however superficially minor. In the paper, I use examples from the controversy over set forms, prayers, gestures, and objects in worship.

Explaining Religion
Harvey Whitehouse

Much research in the cognitive science of religion emphasizes that some features of religious thinking and behaviour are universal, arising from our species' evolutionary history. Examples include certain qualities attributed to supernatural agents (e.g. gods and ghosts), which humans everywhere appear to recognize with minimal need for instruction. But religious traditions are also complex systems of representations and part of the challenge in explaining religions is to discover how locally or regionally distinct sets of beliefs and practices are created and reproduced, and what general principles govern their transformation over time.

Religion as a Product of Evolution
David Sloan Wilson

Evolutionary theory is becoming a powerful framework for the study of religion, but not in the way that most people think. It is *not* new to study religion as a human construction. Even the earliest scholars of religion, such as Frazer, Durkheim, and Weber, avoided the concept of an intervening God as scrupulously as Darwin. What's new about evolutionary theory is its capacity to *organize* the voluminous knowledge about religion in particular and cultural systems in general, using the same toolkit that explains biological diversity. The 21st century will witness an integration of knowledge about humanity from an evolutionary perspective, comparable to the integration of the biological sciences during the 20th century (and continuing). I will provide a broad overview of what evolutionary theory means for the study and practice of religion.

Explaining the Attribution of Personhood to Large Non-Human Systems
Graham Wood

This paper takes Daniel Dennett's 'intentional stance' and considers how it might be adapted to explain the attribution of personhood to large non-human systems, such as ecosystems and the universe. Following Dennett, a system (e.g., a particular human individual) has beliefs and desires, if by attributing beliefs and desires to that system, another system (say, another human individual), can successfully predict the first system's behaviour. Common sense suggests that systems with beliefs and desires are persons. So the intentional stance together with common sense can explain the attribution of personhood to other humans. In this paper, I explore the implication of changing the measure of success of the intentional stance. Rather than successful prediction of the behaviour of another human, I consider the evolutionary fitness of a particular human when applying the intentional stance to large non-human systems. I use the distinction between the manifest goal and the latent function of belief to argue that attributing personhood to non-human systems, such as ecosystems or the universe, may increase the evolutionary fitness of a particular human that makes such an attribution. This may explain the attribution

of personhood to large non-human systems, or the inference to the existence of a person 'beyond' the universe.