CULTURAL EVOLUTION OF RELIGION
23–24 May 2017, Venue: Faculty of Theology, University of Helsinki, Faculty hall and room 532

Can evolutionary theory help us in understanding religion? The use of evolutionary perspectives on the study of religion or culture more generally has a long history which is full of controversies and misunderstandings. To take one example, the shadow of Social Darwinism has been long-standing in cultural and social studies. In the wake of the cognitive study of religion, however, a growing number of religion scholars have begun to apply various aspects of evolutionary theory to explaining the origin and the spread of religious ideas and behaviours.

Can culture be analyzed in terms of biological evolution? Are common patterns in religious beliefs and behaviours across cultures due to genetic evolution? Can evolutionary theory provide a unifying framework for social sciences and humanities? What has evolutionary perspective to offer for the study of early Judaism and early Christianity? These and many other questions will be addressed in a two-day workshop organized by the "Ritual and the Emergence of Early Christian Religion" project (REECR) and CoE on "Changes in Sacred Texts and Traditions" (CSTT), University of Helsinki. The venue of the event is Faculty of Theology, Vuorikatu 3, Faculty hall (23 May) and room 532 (24 May).

The workshop is open for all. Registration by 15 May required for meals. For further information, contact Risto Uro (risto.uro@helsinki.fi) or Nina Nikki (nina.nikki@helsinki.fi).

In connection of the workshop a lecture course on "Evolutionary and Psychological Foundations of Religion" will be offered, taught by Docent István Czachesz. This course will include a full-day intensive seminar, on the 22th of May, followed by participation in the Cultural Evolution of Religion workshop. For further information concerning the course, contact István Czachesz (istvan.czachesz@uit.no).

PRELIMINARY PROGRAM

First Day: Cultural Evolution and Religion

9.00–9.15	Welcome
9.15–10.30	Joseph Bulbulia (Victoria University of Wellington, New Zealand): "Darwin meets Luther: How Evolutionary Religious Studies Explains the Protestant Reformation" (by Skype)
10.30–11.00	Coffee break
11.00–12.00	Fiona Jordan (University of Bristol): "Evolutionary approaches to cultural and linguistic diversity"
12.00–12.30	Discussion
12.30–14.00	Lunch break
14.00–15.00	Petri Ylikoski (University of Helsinki): "Cultural Evolution and Social Science"
15.00–15.30	Coffee
15.30–16.30	Vojtěch Kaše (University of Helsinki/ Masaryk University) & Tomáš Glomb (Masaryk University): "Uncovering the Secret of Christian Success in Terms of Spatial Network Analysis: Introducing the GEHIR project"
16.30–17.00	Discussion

18.00–20.00   Reception

Second Day: Cultural Evolution and Early Judaism/Christianity

9.00–10.00   Ronit Nikolsky (University of Groningen): "Transitions between Cognitions as a Tool for Cultural Evolution"
10.00–10.30   Coffee break
10.30–11.30   Istvan Czachesz (University of Tromsø): "Evolution as Learning: Early Christianity as a Test Case"
11.30–13.00   Lunch break
13.00–14.00   Rikard Roitto (Stockholm School of Theology): "Cultural Evolution of Baptism"
14.00–15.00   Nina Nikki (University of Helsinki): "Cultural Evolution of 'Pauline Christianity'"
15.00–15.30   Coffee
15.30–16.30   Petri Luomanen, Elina Lapinoja & Pasi Hyytiäinen (University of Helsinki): "A Research Project: The Spread of Early Christianity in Cultural Evolutionary Perspective"
16.30–17.00   Conclusion

ABSTRACTS

Joseph Bulbulia
Darwin meets Luther: How Evolutionary Religious Studies Explains the Protestant Reformation
This non-technical talk offers a gentle introduction to the cross-disciplinary field of Evolutionary Religious Studies using the Protestant Reformation and its aftermath. By applying computational methods to rigorously quantify the dynamics of religious change in Christian history, we find that a key function of religious change is to mark group boundaries. This result is interesting because, on the face of it, religious change reflects theological disagreements rather than social functions. Broader advantages and limitations of evolutionary approaches to religion will be discussed.

Fiona Jordan
Evolutionary approaches to cultural and linguistic diversity

How can we infer features of social life in the past when there are no material remains? What can language relationships tell us about the prehistoric movements of people? To what degree do social and linguistic phenomena, like counting systems and kinship, share commonalities across cultures? What explains cultural patterns: shared ancestry, spatial proximity, or environmental variation? In this talk I will showcase work in comparative cultural phylogenetics that draws on methodology from evolutionary biology to answer these big questions about cultural and linguistic diversity, and demonstrate the Database of Places, Language, Culture, and Environment (D-PLACE: www.d-place.org) as a new tool for investigating cultural evolution.

Petri Ylikoski
Cultural evolution and social science
Applications of theory of evolution to culture are as old as Darwin's theory of evolution. While there has been quite drastic changes in the understanding of the theory of evolution, two themes have remained constant: first, the claims that the theory of cultural evolution will unify or provide foundation for social sciences and humanities, and second, the utter failure to develop any theory that will match these ambitions. I argue that the presumption of the foundational nature of cultural evolution is based on a set of confusions and that it gets things backward. If we conceive social scientific theorizing in terms of causal mechanisms, the models developed by cultural evolutionists are special cases of more general ideas, rather than other way around. The explanatory and evidential convergence of biological, cognitive and social sciences is achieved by consistent employment of mechanism-based thinking rather than through the homeopathy of abstract analogies. To illustrate my points, I will discuss recent debates about the evolution of ideas about moral gods and human large-scale cooperation and argue that consistent social scientific approach to the issue will help to set the debate to more fruitful direction.

Vojtěch Kaše & Tomáš Glomb
Uncovering the Secret of Christian Success in Terms of Spatial Network Analysis: Introducing the GEHIR project
The documented spatial distribution of Christianity at the beginning of the fourth century CE strikingly resembles to the spatial distribution of the material evidence associated with the cult of Isis a century or two earlier. Our paper aims to answer why the network of Christian congregations continued to flourish onward while the Isiac network crashed. A closer look at the data reveals one important difference navigating us further when answering this question: Since early Christians were prolific producers of texts, the reconstructed spatial distribution of their congregations is, too, primarily based upon information from texts. Even at the time of the turn of Constantine, Christians are almost invisible in the archaeological material. Nevertheless, Christians overcome any of their rivals in the number of texts they produced. It appears that instead of erecting archaeologically detectable monuments, Christians invested their energy into the production and exchange of texts. As an implication of this, we hypothesise that although Christians definitely were not unique in forming a Mediterranean-wide social network, relying heavily on textual exchange gave them better chance to function as a global entity, what lead to their final success. We use quantitative data when comparing the spatial distribution of Christianity and the cult of Isis to demonstrate that relying on texts could make the Christian network much easier to maintain than the Isiac network lacking advantages associated with this medium. We expect this difference would become of special historical significance in times of population decrease or economic crisis, i.e. under conditions arising in the Empire repeatedly from the end of the second century onward. Therefore, on the contrary to the scholarly accounts seeking the main reasons for the success of Christianity in its belief system or in the altruistic behavior of its adherents, we find support for the hypothesis which sees the main advantage of Christianity simply in the medium it adopted for maintaining its social and trans-congregational ties: i.e. the book in the form of a codex.

Ronit Nikolsky
Transitions between cognitions as a tool for cultural evolution
My work is based on Merlin Donald's theory of three stages of human cognitive evolution - the mimetic, mythic and theoretic cognitive strategies.
I will focus on mythic cognition, particularly on the role of emotions in narratives, and study how emotions transition between various platforms that represent these strategies and enabling cultural evolution.

In the presentation I will typify the three cognitive strategies and explain the role of emotions in narratives. I will then address three case studies that show the transference of emotions.
The first is how the verb 'to love' functions in different genres in the bible, in the Song of Songs, in patriarchal narratives, and in legal text; these genres represent different cognitions and address cultural and social issues differently.
The second case study is the translation of an emotion from a biblical narrative (the one of the expulsion of Hagar) to the rabbinic context. The human story turned into a story that is promoting *halakha* as an incentive for action.
The third case is the story of Abraham's circumcision and its reception in classical midrash (*GenR*), and again in later midrash (*Yelammedenu*). Here we find a parable enabling the cultural transition, which is an opportunity to theorize the use of this narrative form.

István Czachesz
Evolution as Learning: Early Christianity as a Test Case
This paper will discuss an emerging body of scholarship on evolution as a learning process. In recent years, it has been suggested that genetic evolution employs learning strategies known from probability theory and computer science. In their latest contribution, R. Watson and E. Szathmary articulated a theory of how genetic evolution involves intelligent learning processes on multiple levels, based on the complex network structures present in both genetic and ecological organization. We will review some of the key aspects of the theory of evolution as learning and explore the ramifications of this emerging paradigm in the domain of cultural evolution. Finally, we will turn to the question of how this new approach to evolution helps us understand the problem of biblical traditions, with particular attention to the development of early Christianity. In particular, we will consider texts and textual corpora as networks of words and passages and ask how such adaptive networks of memes could solve problems in novel historical situations in the history of ancient Judaism and early Christianity.

Rikard Roitto
Cultural Evolution of Baptism
Baptism, the Christian ritual of initiation, expanded into an increasingly intense and complex ritual experience during the first five centuries of Christianity. (Most Christians were baptized as adults in this era. Infant baptism probably existed from late 2nd century, but was less common. Known liturgies are adapted for adults.) Texts and archaeology give witness to long-term drift in the direction of more and more elaborate ritual procedures. First century sources suggest a rather simple ritual, but in the fourth and fifth century elements such as repeated exorcisms, multiple anointings, elaborate prayers and confessions, and dedicated buildings known as baptisteries are commonplace. To what extent can ritual theory account for this development?
This paper aims to test a number hypotheses emerging in cognitive ritual theory, for which epidemiology of representations is an important auxiliary theory, against the developments of the Christian baptismal ritual the first five centuries. Simultaneously, a new type of history of baptism, guided by new interpretative categories, is outlined. The aim of the paper is thus bi-directional: The historical development of the baptismal ritual is suggested as a test-case for the explanatory value of central hypotheses of cognitive ritual theory. At the same time, the mentioned hypotheses provide models to understand the expansion of the baptismal ritual.

Petri Luomanen, Elina Lapinoja & Pasi Hyytiäinen
A Research Project: The Spread of Early Christianity in Cultural Evolutionary Perspective
The overall goal of the project can be explicated in the form of two main hypothesis to be tested: 1) Early Christian groups, or some of them, had selective advantage over other religiously oriented

groups in the same environment. 2) Some variants of early Christian social formation and textual tradition had selective advantage over other corresponding early Christian variants in the same environment. In the presentation Petri Luomanen will first introduce the macro-level methodological reasoning and framework behind the project. Two presentations by doctoral students, Elina Lapinoja and Pasi Hyytiäinen, will provide examples of micro-level case studies contributing to the macro-level analysis.