

6-8 April 2009

EHBEA CONFERENCE



By Daniel Nettle

Photos taken by Lewis G. Dean

The inaugural annual conference of the European Human Behaviour and Evolution Association was held in St. Andrews, Scotland on April 6th-8th 2009. The conference built on a successful series of earlier conferences (two at the London School of Economics, and one in Montpellier) that had predated the official formation of the association. In addition, the conference this year was supported by, and celebrated the achievements of, the EU-sponsored CULTAPTATION project, an inter-disciplinary research effort aimed at understanding human cumulative cultural evolution.

The local organising committee consisted of **Kevin Laland**, **Gillian Brown**, **Luke Rendell**, **Lewis Dean** and **Tamsin Saxton**, and the EHBEA committee thank them for their excellent organisation, which extended even to meeting delegates from airports and rail stations. There were 210 delegates, and over three days, 51 varied and interesting papers were presented, including four distinguished plenaries. Over 90 posters were also on display. With talks, posters and lunch all happening in the same building, there was a great opportunity for dialogue and conviviality. Below, we summarise some of the papers presented. The diversity and numbers were so great that unfortunately not all can be summarised here.

Day 1

On the first morning, EHBEA president **Kevin Laland** introduced the aims and ethos of EHBEA focussing on its breadth and inter-disciplinarity, and its potential to form a bridge between the biological sciences and the social sciences and humanities. This was followed by the first plenary talk, in which **Marcus Feldman** presented some

thought-provoking theoretical approaches to cultural evolution. **Christine Caldwell** and **Ailsa Millen**'s talk then moved nicely from theory to empirics, reporting results of recent experiments showing cumulative cultural evolution going on in chains of participants set simple tasks to complete.

Later in the morning, we heard a mix of behavioural ecology and cultural evolution. **Mhairi Gibson** examined the often counterintuitive impacts of labour-saving water projects on fertility and on competition for resources within families in rural Ethiopia, and **Violaine Laurens** examined a directly adaptive account of ritual wrestling amongst the Serer of Senegal, showing that men who were successful in wrestling had greater reproductive success. Meanwhile, **Anthony Little** and **Alex Mesoudi** reported recent experimental approaches to use of social information, forming a useful bridge between psychology and cultural evolution theory.

After lunch, **Magnus Enquist** introduced delegates to the CULTAPTATION project, and two of that project's cultural progeny, **Kimmo Eriksson** and **Pontus Strimling** presented some interesting recent empirical results. The former also revealed a hitherto unsuspected involvement in the staging of light opera. **Anna Rotkirch** and **Kristiina Janhunen** interpreted women's mixed emotions when they have young children in the light of female conditional investment in their offspring. Rob Barton rounded off the session with a review of data showing that the colour red confers an advantage in agonistic competitions in humans.

The afternoon was split into two parallel sessions. One, featuring **Pontus Strimling**, **John Odling-Smee** and **Michael O'Brien** considered issues of niche construction in human behaviour and material culture. The other had a behavioural ecological theme, with interesting papers on maternal condition and offspring growth, on arranged marriage and its consequences and on the evolution of monogamous marriage systems.

Day 2

The day opened with a plenary by **Joan Silk** in which she reviewed the adaptive importance of social bonds for primates, especially females, drawing on exquisite long-term field data from baboons. **Karl Grammer** reported an enviably large data set on mate selection from a video match-making service, whilst **Ulf Toelch** and colleagues again took an experimental tack in their consideration of the evolution of different social learning strategies in variable environments.

After coffee, **Ruth Mace** recalled the seminal contributions of her grandfather to both psychology and behavioural ecology, and used this to launch a discussion of vertical cultural transmission more generally. **Jitka Lindova** and colleagues presented intriguing data suggesting that latent toxoplasmosis affects behaviour in economic games. **Tim Fawcett** and colleagues, like Grammer the previous day, had used a dating service to gather data on human mate choice, though this time by staging Speed Dating events. **Sarah Johns** explored the psychological mechanisms underlying teenage motherhood in a sample of British women, showing that perceptions mediate between harsh environments and reproductive decisions.

After lunch came the much awaited prize-giving for the social learning strategies tournament. In this tournament, part of the CULTAPTATION project, researchers from all over the world had submitted strategies for deciding what to do in a variable environment, which were pitted against each other in silico. The 10,000 Euro prize was won by **Dan Cownden** and **Tim Lillicrap** of Queen's University, Ontario, and an interesting review by **Luke Rendell** showed how their strategy had worked, and what the implications were for theories of social learning. **Lynda Boothroyd** presented recent experiments manipulating visual diet to examine its effects on judgments of attractiveness, whilst **Gordon Ingram** presented data on 'tattling' – reporting on other children's behaviour – in human infants. Finally, **Helen De Cruz**

brought some archaeology to the fore in her study of Venus figurines from the European Upper Palaeolithic.

Fortified by tea, we again split into two parallel sessions, one on empirical investigations of human prosocial behaviour (with presentations by **Karolina Sylwester**, **Tim Phillips** and **Karthik Panchanathan**), and the second looking at reproductive success in Swedes (**Anna Goodman**), Finns (**Marcus Jokela**), and a cross-national data set (**Thomas Pollet**).

Day 3

The third plenary was by **Rob Boyd**, who outlined the crucial importance of cumulative culture to human adaptive behaviour. **Adam Powell** presented results of a cultural evolution simulation addressing the origins of the Upper Palaeolithic transition, the simultaneous appearance of increased symbolic and technical complexity around 45,000 years ago. **Gillian Brown** presented a review of sex roles in a number of different populations, showing that the inter-population variation in sex roles is much larger than simplistic generalisations would have us believe.

Andrew Whiten and his colleagues presented experimental data from children and chimpanzees that shed light on the remarkable ability in the former but not the latter for cumulative cultural learning, whilst **Sam Roberts** presented data on social networks and emotional closeness in humans. **Lisa Welling** discussed how men's judgments of facial attractiveness are affected by their hormonal levels, whilst, on a different tack, **Nicolas Baumard** examined the cognitive processes underlying the belief in immanent justice.

The final plenary talk, by **Val Curtis**, touched on the evolution of disgust as a defense mechanism, including moral disgust as a moral defence.



Her examples were as revolting as her argument was clear. Moving to the theme of cultural evolution, **Johan Lind** examined arguments on the age of human cumulative culture, whilst **Monica Tamariz** used a computer simulation approach to the emergence of patterned linguistic codes.

In the final pair of parallel sessions, one track was devoted to attractiveness and mate choice, with presentations by **Gert Stulp**, **Tamsin Saxton** and **Silviu Apostol**, whilst the other continued the vein of linguistic and cultural evolution models, with presentations by **Alberto Acerbi**, **Micael Eln** and **Carrie Ann Theisen**.

The first ever Annual General Meeting of the European Human Behaviour and Evolution was followed by the conference dinner and – by all accounts – some surprisingly proficient dancing.

The reader will hopefully have gained some idea of the diversity and quality of the presentations. This was truly an inter-disciplinary event which begun conversations across the boundaries between the natural and social sciences and the humanities. EHBEA seems well launched by this conference, and next year's conference is keenly anticipated.

