

25-27 March 2010

EHBEA CONFERENCE



By Cara Evans

Photos taken by Z. Lewandowski

The 5th European Human Behaviour and Evolution Association Conference was held at the University of Wrocław, Poland from Thursday 25 to Saturday 27 March 2010. The conference gathered over 160 attendees from 25 countries. There were 48 thought-provoking talks, including six plenary presentations, across the full spectrum of Evolutionary Psychology, Cultural Evolution and Human Behavioural Ecology. The continued emphasis on serial rather than parallel sessions, promoted the interchange of knowledge and ideas across discipline boundaries, during coffee breaks, and further still into the evening as delegates mingled and perused more than 60 poster presentations over wine.

The triumph of the 2010 conference is credit to the local organising committee, and many thanks are extended to **Bogusław Pawłowski, Dariusz Danel, Stanisław Gronkiewicz, Sławomir Koziel, Monika Krzyzanowska, Monika Lopuszanska, Alicja Szklarska, Agnieszka Tomaszewska** and **Anna Ziomkiewicz** for their organisation of an excellent programme. Special thanks are also extended to the Galton Institute, Lower Silesian Voivodship Marshal, and the Faculty of Law, Administration and Economics from the University of Wrocław for their generous financial support of the conference. A summary of the conference proceedings is provided below.

Day 1

The opening ceremony, held in the exquisite surroundings of Wrocław University's Aula Leopoldinum, was followed by the first of six engaging plenary talks. **Daniel Fessler** presented a captivating case for the utility of integrating phylogenetic and ultimate approaches in understanding the evolution of the mind, and outlined why emotions underpinning human notions of morality are likely rooted in evolved mechanisms of pathogen avoidance. In keeping with this theme, **Lisa DeBruine** ended the early morning session reporting that women's preference for male facial masculinity (an indicator of disease resistance) is inversely related to the health of a nation. The conference Scientific Committee distinguished **Lisa DeBruine** for the best rated abstract of the conference.

Following a break for coffee, the first of two back-to-back sessions on the evolution of cooperation was begun. **John Lazarus** discussed the benefits of 'cheap talk' in kick-starting the evolution of cooperative behaviour, whilst **Stephen Le** presented data from Vietnam suggesting that patient people are not universally more cooperative. **Gilbert Roberts** used evolutionary simulation to investigate the role of reputation-based partner choice in unconditional cooperation, and the session was rounded off by **Laurence Fiddick** and colleagues who examined the effects of social

status on perceptions of fairness in cooperative exchanges.

After lunch, **Eckart Voland**, delivering the second plenary talk of the day, outlined a thought-provoking discussion of how cooperative breeding might have paved an evolutionary path to human conscientiousness and morality. **Leslie Newson** and colleagues followed with mathematical models used to explore the evolution of cooperative breeding. **Shakti Lamba** finished the session by questioning conventional group selection models of large-scale cooperation, using a combination of ecological and experimental data from 16 small-scale societies.

The final set was split into two parallel sessions. **Lewis Dean**, **Jamie Tehrani** and **Anne Kandler** addressed aspects of cultural evolution, covering areas as diverse as social cognition, phylogenetics and language shift, respectively. Meanwhile **Paul Matthews**, **Charlotte Stormer**, and **Jenni Pettay** took a behavioural ecology slant in addressing questions relating to fertility, life history and sexual selection.

At the end of the first day's talks, delegates mingled over wine, music, and dinner. And there was even an opportunity to enjoy night-time views across Wroclaw, for those who took the opportunity to climb to the top of the city's mathematical tower.

Day 2

The third plenary talk by **Stephen Shennan** examined the interesting relationship between the emergence of huge wealth and power inequalities in human societies and strategies associated with maximising reproductive success. The remaining two talks in this session were given by **Mathias Franz** and **Jeremy Kendal**, who both used modelling techniques to investigate the evolution of social learning.

After coffee, attention turned to reproductive decision making. **Rebecca Sear** presented a systematic review suggesting that kin influence fertility, but that the precise effects are dependent on kin category and ecology. **Mirkka Lahdenpera** reported findings of reproductive conflict between generations of pre-industrial Finns. **Evelyne Heyer** described a method that can be used to evaluate the cultural transmission of fertility with genetic data, whilst **Martin Fieder** presented data showing birth month effects on women's reproductive performance.

The first of the afternoon sessions began with **Ernst Fehr's** plenary, which examined the evolutionary foundations of strong reciprocity, employing experimental methods to distinguish between competing approaches among indigenous groups in Papua New Guinea. This was followed by two presentations describing results obtained from



public goods games: **Tunde Paal** discussed the effects of Machiavellian decision-making strategies whilst **Ulrich Frey** described a strategy that could facilitate success at climate conferences.

With delegates refreshed after coffee, the last session again split into two streams. One track was devoted to behavioural adaptations, with presentations from Matt Grove on hominin behavioural plasticity, **Gwenael Kaminski** on kinship detection, **Diana Fleischman** who discussed disgust sensitivity, and **Ruth Mace** on the evolution of political organisation. The other covered women's sexual strategies, with **Katerina Klapi-lova** discussing the effects of hormonal contraceptives, **Boguslaw Pawlowski** examining prenatal investment, and **Markus Rantala** considering body hair preferences.



Day 3

The penultimate plenary was by **Joseph Call**, who discussed the importance of temporal and non-temporal aspects of inhibitory control in evolving patience. Next, **Ben Jones** examined the relationship between facial cues of dominance and gaze-following in humans. **Zanna Clay** ended the session with a talk on the strategic use of copulation calls to indicate social status in bonobos.

After coffee, attention turned to hormones. **Indrikis Krams** and **Fhionna Moore** presented ex-

perimental evidence examining the relationship between sex-hormones and male facial attractiveness. Meanwhile, **Anna Ziomkiewicz** explored the relationship between testosterone and female social dominance, whilst **Michael Stirrat** presented data on male facial width and perceptions of untrustworthiness before the session ended for lunch.

The afternoon began with the final plenary talk. **Alexandra Alvergne**, winning the EHBEA New Investigator Award, provided a fascinating tour of her research addressing the proximate and ultimate factors shaping variation in paternal investment, presenting evidence from both human and non-human primate populations. This was followed by talks on parental loss and remarriage in the historical populations of Krummhoern and

Quebec (**Kai Willfuhr**), and differential parental investment in child education (**Annette Scheunpflug**).

In the final session, we again split into two parallel tracks. One covered sexual selection in humans (with presentations from **Alex Courtiol**, **Gert Stulp**, and **Thomas Pollet**), whilst **Jeffery Stevens**, **Jenny Volstorf** and **Michele Belot** discussed memory and cooperation.

Closing remarks followed, along with the

results of votes for best student talk and best poster presentation. The prize for the Best Student Talk from all conference attendees went to **Shakti Lamba** for the presentation entitled "Demography and ecology drive variation in cooperation across human populations", and the prize for the Best Poster to **Anke Bullinger** for poster entitled "Chimpanzees' Coordination in a "Stag Hunt" Game".

The last night brought everybody together once again for the conference dinner, and discussion included attendees' eager anticipation of the 2011 conference.

Programme and full paper titles

Day 1: Thursday the 25th March

Opening Session (Chair: Rebecca Sear)

PLENARY. The importance of attending to phylogenetic derivation in the study of the mind or why emotions are kludgy (and thus, incest is toxic).

Daniel Fessler

Best Abstract. The health of a nation predicts their mate preferences.

Cross-cultural variation in women's preferences for masculine men.

Lisa DeBruine, Benedict Jones, John Crawford, Lisa Welling, Anthony Little

Session A. Cooperation I (Chair: Tom Dickins)

Cooperation and communication. How much can cheap talk do?

John Lazarus, Jonathan Sayers, Peter Andras, Gilbert Roberts

Are patient people really more cooperative?

Contrasting results from Northern-Central and Southern Vietnam

Stephen Le

Unconditional cooperation driven by reputation-based partner choice.

Gilbert Roberts

Social status influences social cooperation.

A cross-cultural replication and real world validation.

Laurence Fiddick, Nicole Erlich, Maria Janicki, Sean Lee

Session B. Cooperation II (Chair: Ruth Mace)

PLENARY. The helper conflict-How cooperative breeding might have paved an evolutionary route to conscientiousness and human morals.

Eckart Voland

The evolution of cooperative breeding in a great ape.

Lesley Newson, Adrian Bell, Peter Richerson

Demography and ecology drive variation in cooperation across human populations.

Shakti Lamba, Ruth Mace

Session C1. Cultural Evolution I (Chair: Jeremy Kendal)

Why is cumulative culture only seen in humans?

Lewis G. Dean, Rachel L. Kendal, Kevin N. Laland

The prehistory of Little Red Riding Hood. a case study in folktale phylogenetics.

Jamie Tehrani

Language shift and the future of Britain's Celtic languages.

Anne Kandler

Session C2. Life history strategies, fertility and survival (Chair: Virpi Lummaa)

The influence of relatives on the timing of first birth. evidence from a low fertility population.

Paul Mathews & Rebecca Sear

Life histories of secondborns. Costs of elder sibling's sex and survival?

Charlotte Störmer

Relaxed sexual selection in enforced monogamy.

Jenni Pettay, Markus Jokela, Anna Rotkirch, Virpi Lummaa

Day 2: Friday the 26th March

Session D. Cultural Evolution II (Chair: John Lazarus)

PLENARY. Human wealth inequality – a long-term perspective.

Stephen Shennan

Social enhancement can create adaptive, arbitrary and maladaptive cultural traditions.
Mathias Franz, Luke J. Matthews

The evolution of social learning. individual variation and frequency-dependent rules.
Jeremy Kendal, Luc-Alain Giraldeau, Kevin Laland

Session E. Reproduction, fertility and fitness (Chairs: Rebecca Sear & Anna Ziomkiewicz-Wichary)

The impact of kin on female fertility. a systematic review.
Rebecca Sear & Paul Matthews

Reproductive conflict between generations in humans.
Mirkka Lahdenperä, Duncan Gillespie, Andrew Russell, Virpi Lummaa

Cultural transmission of fitness.
Evelyne Heyer, Michela Léonardi, Frederic Austerlitz

Birth month effects on human reproduction. analyses from different countries.
Susanne Huber & Martin Fieder

Session F. Reciprocity and social strategies (Chair: Kevin Laland)

PLENARY. The evolutionary foundations of strong reciprocity: An empirical test.

Ernst Fehr

Machiavellian decision-making strategies and their effectiveness in the Public Goods game.
Tünde Paál & Tamás Bereczkei

How to make climate conferences a success.
Making full contributions to a public goods game a rational strategy.
Ulrich Frey

Session G1. Behavioural adaptations (Chairs: Anthony Little & Monika Krzyzanowska)

Variability selection and hominin behavioural plasticity.
Matt Grove

Human ability to detect kinship in strangers' faces.
Gwenaël Kaminski, Fabien Ravary, Karine Mazens, Christian Graff Edouard Gentaz

Time awake influences disgust sensitivity.
Support for the compensatory behavioral prophylaxis hypothesis.
Diana S. Fleischman, Micheal DeBarra, Daniel M. T. Fessler, Valerie Curtis, Robert Aunger

Phylogenetic methods reveal regular sequence in the evolution of political organization.
Thomas Currie, Simon Greenhill, Russel Gray, Toshi Hasegawa, Ruth Mace

Session G2. Women's sexual strategies and preferences (Chair: Anna Rotkirch)

Dyadic, autosexual and extra-pair sexual behavior of coupled women under the influence of oral hormonal contraception.
Kateřina Klapilová, Aleš Kuběna, Petr Weiss, Jan Havlíček

Sexual strategy and woman's prenatal investment allocated into progeny – testing "hunting for good genes" hypothesis.
Boguslaw Pawlowski & Agnieszka Zelazniewicz

Preference for human male body hair changes across the menstrual cycle and menopause.
Markus J Rantala, Mari Pölkki, Liisa M Rantala

Day 3: Saturday the 27th March

Session H. Non-human primates behaviour – implications for human evolution

(Chairs: Michel Raymond & Slawomir Koziel)

PLENARY. Evolving patience.

Joseph Call

Facial cues of dominance modulate reflexive gaze-following in human observers.

Benedict C Jones, Lisa M DeBruine, Julie C Main, Anthony C Little, Lisa LM Welling, David R Feinberg, Bernard Tiddeman

Social implications of copulation calls in bonobos, *Pan paniscus*.

Zanna Clay & Klaus Zuberbuhler

Session I. Facial cues, hormones and personality (Chair: Lisa DeBruine)

Facial attractiveness signals the strength of immune function in men.

Indrikis Krams, Markus J. Rantala, Tatjana Krama

A test of the stress-linked immunocompetence handicap hypothesis in human faces.

Fhionna Moore, David Perret

Social dominance and sex steroid hormone levels in women.

Anna Ziomkiewicz, Aleksandra Gomola, Boguslaw Pawlowski

Robust male skull shape is associated with untrustworthiness.

Michael Stirrat, Davis Buls and David Perrett

Session J. Human parental investment (Chair: David Lawson)

PLENARY. Variation in human paternal care-ultimate and proximate factors.

Alexandra Alvergne [New Investigator Award Winner]

Surviving early parental loss and the consequences of remarriage.

Kai P. Willführ & Alain Gagnon

Differential parental investment in school contexts.

Annette Scheunpflug

Session K1. Sexual selection in humans (Chair: Boguslaw Pawlowski)

Sexual selection and human stature:

Homogamy as a unified framework for understanding mating preferences.

Alex Courtiol

Intralocus sexual conflict over human height.

Gert Stulp, Simon Verhulst, Thomas V. Pollet, Abraham P. Buunk

The iron grip of sexual selection. Grip strength is positively associated with male but not with female reproductive success.

Thomas Pollet

Session K2. Memory and cooperation (Chair: Gilbert Roberts)

Memory interference constrains the evolution of cooperation.

Jeffrey R. Stevens, Jenny Volstorf, Lael J. Schooler, Joerg Rieskamp

The good, the bad, and the rare. Memory focus on cooperators or defectors?

Jenny Volstorf, Jörg Rieskamp, Jeffrey R. Stevens

The efficiency losses of cognitive limitations in reidentification

Michele Belot