

**INTERNATIONAL SOCIETY FOR HUMAN  
ETHOLOGY TRAVELS TO AMAZON: A NARRATIVE  
OF A SPECIAL ISSUE BASED ON THE XXII ISHE  
CONFERENCE, 5-9 AUGUST 2014 IN BELÉM,  
BRAZIL**

**Marco Antonio Correa Varella<sup>1,2</sup> & Jaroslava Varella Valentova<sup>1,3</sup>**

<sup>1</sup> Department of Experimental Psychology, Institute of Psychology, University of Sao Paulo (USP), Brazil

<sup>2</sup> Department of Basic Psychological Processes, Institute of Psychology, University of Brasilia (UnB), Brazil

<sup>3</sup> Center for Theoretical Studies, Charles University in Prague (UK), Prague, Czech Republic

[macvarella@gmail.com](mailto:macvarella@gmail.com)

[jarkavalentova@gmail.com](mailto:jarkavalentova@gmail.com)

The Federal University of Pará (UFPA) located in the city of Belém, state Pará, in Brazil hosted the XXII Conference of the International Society for Human Ethology in 2014. As such, the ISHE meeting took place for the first time in Latin America since its beginning in 1972, and it is more than symbolic that it happened in Belém, which is considered the gateway to Amazon. The event has marked the international recognition of Latin America's potential in Human Ethology research, opening a reciprocal fruitful gateway. Literally fruitful, given the variety of new fruits full of unexpected forms and tastes we were offered in Belém, and figuratively fruitful, given the potential for cross-cultural research collaboration which has already begun. Thus, this happening broadened the impact of this society from the West European and North American context to a new territory, which has played an enormous role in the development of this scientific field since its very beginnings.

In 1800, Alexander von Humboldt did the first of its kind scientific expeditions to Latin America. In the course of this expedition he discovered the existence of the communication between the rivers Amazon and Orinoco, and also documented the life of several native

tribes, local animals and plants, besides the geographical specifics of this region. Unlike the ISHE conference members, Humboldt had big trouble entering Brazil. Since he was sent by the Spanish crown, Portuguese colonizers saw him as a threat and to protect their land they prohibited his entrance, forcing him to give up and go rather to Spanish speaking countries (Kohlhepp, 2006). Although some of us might think that over time not many things have changed at the level of the local bureaucracy, since US, Canadian, and Japanese citizens still needed a visa to attend the XXII ISHE. They, however, got it with no major trouble.

In the years 1832 and 1833, Darwin sailed from the Old continent to the New world on board the HMS Beagle to explore considerable parts of Brazil, Argentina, and Chile, Peru, and Ecuador. He collected and preserved many specimens during the whole voyage, found fossils in Patagonia, observed the tribal natives in Tierra Del Fuego, made notes and wrote letters, made comparisons of his findings, which all later culminated in articulation of the transmutation of species and natural selection (Darwin, 1909/2010). Like the ISHE conference members, Darwin was fascinated and overwhelmed by the majesty of local rain forests, but unlike the attendees, he never really got to Amazon, instead he explored the Atlantic forest and other places along the eastern and southern coast of Brazil.

A few years later, in 1848, it was Alfred Russel Wallace who travelled to Brazil, and as well as the ISHE conference members, he explored the area of the city of Belém (Wallace, 1889). There, he and Henry Bates collected insects and other specimens in order to sell them to British collectors and museums to make a living. This work later on helped Wallace support his idea of transmutations of species. Wallace also observed the tribal peoples and languages he encountered on the Amazon Forest. The variety of indigenous tribes offers one of the amazing fields for ethological research, which, so far, has not been fully explored (Coimbra, Flowers, Salzano, & Santos, 2004). Unlike the conference attendees, Wallace was not as lucky regarding boat trip. After four years of expedition on the way back to the UK, almost all recently collected specimens were lost because of a fire on his boat. He and the crew were forced to abandon the ship and were eventually rescued later. On the contrary, our ISHE boat trip through the meandering branches of the Guama river was amazing. We admired the richness of local plants and animals, such as mangroves, huge ants and cute squirrel monkeys, and we finished the trip by observing a parrot island right at the time of sunset, when thousands of screaming orange-winged parrots (*Amazona amazonica*) returned after a whole day of foraging.

Humboldt, Darwin and Wallace weren't the only ones whose groundbreaking theoretical assumptions concerning evolutionary processes were tightly connected to this part of the world. Some 120 years later, William Donald Hamilton made his first visit out of many to Brazil, where he spent, in particular in Amazon, a great part of his scientific and personal life. Again, this region gave him material and inspiration for his new ideas, supporting his theory of inclusive fitness and social evolution, among others. In 2014, in the gateway to the ecosystem he visited several times, we celebrated 50 years of publishing one of the most important papers in evolutionary thinking (Hamilton, 1964). More about his inspirations

and creativity is described in a great paper by sociologist Ullica Segerstrale (2015), presented as an initial talk at the 2014 ISHE conference, and published in this special issue. Evolutionary thinking did not leave Brazil with these great names. In 60's of the 20<sup>th</sup> century, Professor Walter Hugo de Andrade Cunha, now already emeritus, brought comparative animal psychology and ethology to Brazil. He was followed by his famous former student Professor César Ades, a great ethologist, who helped organizing ethological meetings in Brazil since 1983, founding the Brazilian Ethological Society in 1992, and he also started to focus more on studying human behavior. These two pioneers and their numerous former students mostly focused on non-human species, at least in part of their academic life, and research on many interesting species is well flourishing in Brazil (see, Hogan & Izar, 2014). One of the areas necessary for studying human behavior in a broader context, that is well established in Brazil, and is based on ethology and comparative psychology, is primatology.

The new world monkeys, in particular tamarins, marmosets, capuchin and squirrel monkeys, owl monkeys, titis, sakis and uakaris, and howler and spider monkeys are specific for this world region, and are well studied by researchers from inside and outside the country. One of the former students of professor Ades, primatologist Eduardo Ottoni (2015) represents this area in a paper of this special issue focusing on his main research topic, the tool use in capuchin monkeys. This paper then makes a great keynote duet with article by William McGrew (2015), who proposes and defends the concept of culture in great apes, more specifically in chimpanzees, to whom he has devoted his whole professional life in particular in their natural environment in Africa.

Together with the mentioned 3 researchers and their papers, Maryanne Fisher (2015) (Saint Mary's University, Halifax, Canada), was one of the keynote speakers at the last ISHE conference, focusing on humans, in particular on women's intrasexual competition. In her paper published in our special issue, she stresses the necessity of ethological methods applied to this and other fields of human behavior and she highlights specific challenges that the field faces.

The conference was held at the Benedito Nunes Convention Centre of the UFPA, hosted by professor Regina Celia Souza Brito (from the Graduate program Theory and Research of Behavior, UFPA, BR), and organized by many of her students and members of the Brazilian ethological and evolutionary psychological team, with most of the work done by a Ph.D. candidate Hellen Vivianni Veloso Correa. During the conference, 36 general talks and 30 posters were presented. In addition, 2 Symposia were organized as a part of the conference: 1. "Parental investment in contemporary context" chaired by Mauro Luís Vieira (Department of Psychology, Federal University of Santa Catarina, BR), and 2. "The scented ape: communication, perception and application" chaired by Jan Havlíček (Department of Zoology, Faculty of Science, Charles University, Prague, Czech Republic). The first Symposium is represented in this special issue by a paper by Mendonça, Bussab, Lucci, & Kärtner (2015) (Institute of Psychology, University of São Paulo, BR) aimed on post-partum depression, while the second Symposium will appear in a separate special issue of this journal.

As mentioned in a paper by Kruger, Fisher, De Backer, Kardum, Tetaz, & Tifferet, (2015), whose research presented in this issue is aimed to be comparative across several world regions, most contemporaneous psychological research has been carried out on American university (psychology) students, and in general on WEIRD (Western, Educated, Industrialized, Rich, and Democratic) populations, which makes the research hardly representative for the human species (Henrich, Heine, & Norenzayan, 2010). Interestingly, out of 36 general talks presented at the last ISHE conference, 10 (28%) were based on a research comparing 2 or more populations (Brazil x Chile, the Czech Republic x Brazil, USA x UK, The Czech Republic x Cameroon X Brazil, USA x Australia, different regions of Brazil x Germany, US x Australia, Korea x Croatia x Argentina x Israel x China, cross-cultural epidemiology). And in total, every second talk (50%, 18 talks) represented research which was either carried out on several populations, or a single population which was non-student (e.g., population with and without internet access in Argentina, married couples from the US and Chile, children between 10-12 years) and/or outside of Western Europe and North America, several of these even aimed at comparative inter-species perspective, or paleo-archeology. From the rest of the talks, several were aimed rather theoretically, and several were aimed specifically on evolutionary psychopathology and medicine, focusing on topics, such as anorexia, obesity, dark triad personality factors, post-partum depression, or more generally taking into question the mismatch between ancestral and modern times. From the 30 presented posters, 2 were cross-cultural, and the vast majority of research was carried out on non-US population, of course, most of them done in Brazil, and Chile. We assume that these are wonderful numbers, clearly showing that a good evolutionary based research is being done on many populations all around the world, which gives us much higher possibility to draw more general conclusions about human behavior, and about the main factors influencing it. In this issue, a great deal of the cross-cultural problematic is further discussed in a paper by Köster, Schuhmacher, & Kärtner (2015) aimed on cultural aspects of prosocial development.

Besides a great conference program, the organizing team also managed an unforgettable social program, which was composed of tasting local Amazon beer flavored with jungle fruits and regional food during the social evening. Moreover, we could appreciate a traditional live music band and a pair of dancers, who were representing the local folklore dances and songs, some of them together with surprised conference participants. One of the dances embodied, for example, one of the local myths according to which during nights the Amazon river dolphin, or pink river dolphin (*Inia geoffrensis*) steps out of the water, transforms into a handsome man wearing white clothes and a hat (to hide the blowhole on top of his head), and during parties seduces and impregnates human females. In the morning, he returns to the river, and takes back his dolphin form. Many local people still believe in this myth, and some even claim they saw such a dolphin-man with their own eyes. Ethologically interesting, this story is a nice cultural excuse for women who conceived a child without having a stable partner, or with a man other than their partner.

It is amazing how an evolutionarily oriented mindset can reframe behavior of mythological characters, like the one described above, and embed it explicitly into mating context. As Dávid-Barrett, Rotkirch, Carney, & Behncke Izquierdo (2015) showed in their paper, even an opera by Mozart, like the famous *Marrige of Figaro*, has in its heart a network of mating strategies, with people manipulating, guarding, seducing and interfering on each other's reproductive goals. In the end, the mixture of reproductive interconnections might add the spice that captures people's attention. As Kruger et al. (2015) discovered in their cross-cultural sample, people intuitively identify and understand mating strategies adopted by characters of fictional pieces.

In a line of research aimed at mating and reproductive strategies, Wlodarski and Dunbar (2015) modeled and showed that there are coexisting frequency dependent mating strategies within each sex. This paper is based on a presentation that received a student prize at the last ISHE conference. Finally, Fernandez, Muñoz, Dufey, Pavez, Baeza, & Kinkead (2015) (Universidad de Santiago de Chile), who represents the Chilean branch of evolutionary and ethological research, showed that although many developmental factors can influence mating strategies when it comes to jealousy, the individual's attachment style does not mediate the sex differences in the kind of jealousy context found more distressing.

In general, the conference was a great success, and many of the presented topics appear in this special issue. The articles are very diverse – from historical, through primatological, cross-cultural, evolutionary psychopathology, until literary Darwinism. We hope that the event started new collaborations and motivated researchers towards cross-cultural and/or cross-species comparisons. Now the International Society for Human Ethology includes new fans from huge Latin America, who are ready for international collaborations.

## **ACKNOWLEDGEMENTS**

We thank the organizers of the conference, members of the ISHE society, the Brazilian funding agencies, and to authors who submitted their work into this special issue. During the conference and most of the work on the special issue, JVV was supported by grant of the Charles University in Prague UNCE 204004, and by Center for Theoretical Study of the Charles University in Prague. Special thanks go to Jerry A. Hogan for proof reading of the text.

## **REFERENCES**

- Coimbra Jr, C. E., Flowers, N. M., Salzano, F. M., & Santos, R. V. (2004). *The Xavánte in transition: health, ecology, and bioanthropology in Central Brazil*. University of Michigan Press.
- Darwin, C. (1909/2010). *The voyage of the Beagle: Journal of researches into the natural history and geology of the countries visited during the voyage of HMS Beagle round the world*. Modern Library.

- Dávid-Barrett, T., Rotkirch, A., Carney, J., Behncke Izquierdo, I. (2015). Mating strategies in Mozart's Figaro. *Human Ethology Bulletin*, 30 (1), 82-97.
- Fernandez, A. M., Muñoz, J. A., Dufey, M., Pavez, P., Baeza, C. G., & Kinkead, P. (2015). Sex differences in jealousy are not explained by attachment style in men and women from Chile. *Human Ethology Bulletin*, 30(1), 138-150.
- Fisher, M. L. (2015). Women's competition for mates: Experimental findings leading to ethological studies. *Human Ethology Bulletin*, 30 (1), 52-69.
- Hogan, J. A., & Izar, P. (Eds.). (2014). Neotropical Behaviour [Special issue]. *Behavioural Processes*, 109, Part A, 1-100.
- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world?. *Behavioral and brain sciences*, 33(2-3), 61-83. doi: 10.1017/S0140525X0999152X
- Kohlhepp, G. (2006). Descobertas científicas da Expedição de Alexander von Humboldt na América Espanhola (1799-1804) sob ponto de vista geográfico. *Revista de Biologia e Ciências da Terra*, 6(1), 260-278.
- Köster, M., Schuhmacher, N., & Kärtner, J. (2015). A cultural perspective on prosocial development. *Human Ethology Bulletin*, , 30 (1), 70-81.
- Kruger, J. D., Fisher, M. L., De Backer, C., Kardum, I., Tetaz, M., & Tifferet, S. (2015). Human life history dimensions in reproductive strategies are intuitive across cultures. *Human Ethology Bulletin*, 30 (1), 108-119.
- McGrew, W. (2015). The cultured chimpanzee: nonsense or breakthrough? *Human Ethology Bulletin*, 30 (1), 40-51.
- Mendonça, J. S., Bussab, V. S. R., Lucci, T. K., & Kärtner, J. (2015). Father-child interactional synchrony in Brazilian families with maternal depression. *Human Ethology Bulletin*, 30 (1), 120-137.
- Ottoni, E. B. (2015). Tool use traditions in nonhuman primates: the case of tufted capuchin monkeys. *Human Ethology Bulletin*, 30 (1), 21-39.
- Seegerstrale, U. (2015). Science as adventure: The creative life of Bill Hamilton. *Human Ethology Bulletin*, 30 (1), 6-20.
- Wallace, A. R. (1889). *A narrative of travels on the Amazon and Rio Negro: with an account of the native tribes, and observations on the climate, geology, and natural history of the Amazon Valley*. Ward, Lock and Company.
- Wlodarski, R., & Dunbar, R. I. M. (2015). Are within-sex mating strategy phenotypes an evolutionary stable strategy? *Human Ethology Bulletin*, 30 (1), 98-107.