CCNM17-CM-104: Human Ethology Course Description

Aim of the course

Aim of the course: Human ethology is an integral part of ethology, which is the biological study of animal behaviour. In this lecture the basic concepts of ethology are discussed in relation to human ethology. We also present an overview on the development of this field and explain how the interaction between ethology and psychology generated a novel discipline of studying human behaviour. We present an integrative approach to behaviour by discussing the importance of studying function, mechanism, development and evolution of behaviour in parallel.

Learning outcome, competences

knowledge:

- Basic concepts of ethology
- Relations of cognitive mechanisms and their malfunctioning attitude:
- Ability to understand and ask questions in relation to the field skills:
- Skills af applying main methods

Content of the course

Topics of the course

• 1. Introduction to ethology (animal/human behaviour)

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- 2. The study of human behaviour: Methods
 Methodological issues will be discussed as humanethology is based on the comparative study
 of humans and related animals (apes), on the study of human behavioural development in
 infants and children, and on intercultural studies. The ethological methods of describing the
 behavioural phenotype in humans will be discussed with regard to the challenges from
 neuroscience and behavioural genetics.
- 3. Comparative ethology of primates I.: Social behaviour
 One key factor in understanding human behaviour is the knowledge of the behaviour of our nearest relatives. In this lecture we introduce concepts of social behaviour in general, and also present a description of the social behaviour in apes (organisation of groups, sexual behaviour, aggression etc).
- 4. Comparative ethology of primates II.: Cognition
 Human cognition has its antecedents in animal cognition. In order to understand the problems
 of studying cognition, we present the latest knowledge on primate cognition both in the case
 of their physical and social understanding. Cognitive maps, understanding of simple physical
 laws, understanding of attention, representation of the other's mind (Theory of mind) will be
 discussed as key examples.
- 5. Human biological evolution

This lecture describes biological evolution after split from the "apes". Both physical and behavioural evolution will be outlined, in addition to evolutionary theories trying to explain why, how and when specific human behaviours emerged.

• 6. The Human behaviour complex

Here we present a different view on behavioural evolution in humans. Instead of arguing for a single important factor as a cause for the emergence of new human species, we suggest that there could be small multiple changes in a range of behaviours that resulted in a large overall behavioural difference. Faculties of sociality, behavioural synchronization and constructive abilities are emphasised as main categories of this behaviour complex.

• 7. Human sociality

A detailed picture is provided about the behavioural system of sociality. Concepts of attachment, xenophobia, intra and intergroup relationships will be discussed. Typical groups size and structure of humans is presented.

• 8. Human aggression

We introduce the ethological concept of aggression in animals, and draw a parallel with human agonistic behaviour. The specificity of human aggressive behaviour will be shown with regard to dominance/submissive relationship. We will contrast intra- and intergroup behaviour, and a detailed description is given of human aggressive behavioural and explanation of possible evolutionary ritualisation. The social/learnt effects on aggressive behaviour will be discussed.

- 9. Human mating systems, mate choice, sexual behaviour We will describe basic concepts of mating systems, and will show ways of understanding human mating systems as a function of ecological and cultural factors. Mate choice and sexual behaviour will be discussed in detail, as well as, more specific issues of human behaviour such as homosexuality, incest taboo and prostitution.
- 10. Behavioural synchronisation and cooperation Many of our complex behaviours appear to be executed in a synchronised way. Although to perform actions in parallel seems to be a general animal trait, in the case of humans very different aspects of behaviour seem to be affected. In addition we have many behavioural traits ensuring that activities within the group become synchronised. Such examples come from hypnosis, the sensitivity for dancing, music and accepting social rules.
- 11. Communication and language Human communication represents a unique organisation in living systems. After providing a biological basis of animal communication, we describe how language differs from other communication systems. Both the components and the structural rules of language will be discussed, and we reflect in what sense language is influenced by genetic factors. A possible scenario for language evolution will be presented.
- 12. Constructive abilities

Apart from language as a mental construction, the modification from objects is an important feature of human behaviour. Humans are not alone in using objects but in our case there is a significant increase in the complexity of the behaviour. We will compare animal and human use of objects as well as making of objects by physical modification, adding parts together ect. We will investigate how the notion of evolution can be applied to the technical word, and how this behaviour affects the niche in which humans are living in.

• 13. Cultural evolution

The transmission of learned information from one generation to the next is not exclusively a human trait, however human culture seems to have specific attributes. We will review theories about human culture, and present a comparison by showing that culture can be investigated from different aspects as behavioural manifestation, cognition, ecological function and products.

• 14. Mega-society

The effect of global changes in human behaviour. Processes of "runaway" evolution will be discussed along with issues of future challenges that might affect human social systems.

Learning activities, learning methods

Lectures and interactive discussions

Evaluation of outcomes

Learning requirements, mode of evaluation, criteria of evaluation: requirements

• attendance

mode of evaluation:

- examination, 1-5 grade criteria of evaluation:
- quality and quantity of knowledge encomppasing the course

Reading list

Compulsory reading list

- Barrett, L., Dunbar, I., & Lyatt, J. (2002). Human evolutionary psychology. Princeton, N.J: Princeton University Press.
- Laland, K. N., & Brown, G. (2002). Sence and Nonsence: Evolutionary perspectives on human behaviour. New York: Oxford University Press.

Recommended reading list

• If any, it shall be specified in the course description for each semester.