M.Sc. "The Origins of the Mind"

MODULE PS5011 EMPIRICAL APPROACHES TO THE EVOLUTION OF COMMUNICATION

KLAUS ZUBERBÜHLER

1. Module Controller

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2. Timetable

| Week | Date | Morning session (9 – 12am) | Afternoon session (2 – 5pm) | Room |
|------|----------|----------------------------------------|----------------------------------------------|--------|
| 2 | 24.09.19 | Language: Brain evolution | Grant writing: Introduction | TBA |
| 4 | 7.10.19 | Language: Coding and inference | Grant writing: Literature review | TBA |
| 4 | 8.10.19 | Language: Cognition and acquisition | Grant writing: Hypotheses & Predictions | TBA |
| 4 | 9.10.19 | | Grant writing: Data collection & analyses | TBA |
| 4 | 11.10.19 | | Grant writing: Presentations | TBA |
| 5 | 01.11.19 | | Language: Exam (4-6pm) | online |
| 7 | 29.11.19 | | Grant writing: Report (2pm) | online |

3. Aims

The aim of this course is to gain an understanding of how evolution has shaped the behaviour and psychology of humans and how this can be investigated empirically. The focus will be on the evolution of human language based on the comparative study of communication and cognition in non-human species, especially non-human primates. The module will integrate evolutionary theory, behavioural ecology, ethology, linguistics and psychological theory to account for how and why humans have evolved their unique communication skills.

In a series of theory sessions, we will discuss current topics in the study of communication, and try to address questions, such as: How has human language evolved from its primate origins? What is unique about language and what are derived features that are also present in non-human primates? What are the biological foundations of flexible vocal control, of the ability to extract meaning, and of the capacity to others' perspective into account?

In a related series of practical sessions, we will focus on how to study evolutionary questions empirically and on the more practical side of being a researcher. The overall task will be to produce a grant application for a major funding body by addressing a major aspect of 'what it means to be human', the capacity for language. Topics are open and will depend on individual interest but should address questions in the realm of language evolution, including social cognition, brain evolution, vocal learning, syntax, meaning, recursion, common ground, or gestural communication.

4. Background Reading

Fitch, W. T. (2010). *The evolution of language*. Cambridge; New York: Cambridge University Press.

Shettleworth, S. J. 2013. Fundamentals of comparative cognition (1st ed.). New York: Oxford University Press.

Tomasello, M. (2014). *A natural history of human thinking*. Cambridge, Massachusetts: Harvard University Press.

5. Assessment

<u>Continuous assessment</u>: The final mark will be calculated from two components. The first component is a 2-hour exam, consisting of short answer questions based on the material discussed during the theory sessions (weighting 40%). The second component is a 2,000-word report, based on the work carried out during the practical sessions (weighting 60%).

<u>Deadlines:</u> The exam questions will be made available on 01 November 2019 at 2pm. The final document has to be submitted by 4pm on the same day. The final report is due on 29 November 2019 at 2pm. Specific instructions will be given during the lectures.