

vetmeduni Veterinärmedizinische Universität Wien





## ALEX THORNTON, BUILDING SOCIAL WORLDS: HOW MINDS SHAPE SOCIETIES AND SOCIETIES SHAPE MINDS

## Monday, 14.10.2024, 13:15 PM, UBB Seminar Room 5.1 or via ZOOM



## ALEX THORNTON, BUILDING SOCIAL WORLDS: HOW MINDS SHAPE SOCIETIES AND SOCIETIES SHAPE MINDS

Do societies shape minds? Influential arguments suggest that the large brains and sophisticated cognitive abilities of humans and other social animals like primates, dolphins and corvids, evolved to deal with the challenges of living in complex social worlds. However, social structure is itself the product of individuals' decisions about who to interact with and how to behave. To understand social and cognitive evolution we must therefore consider both how societies shape minds and how minds give rise to societies. Here, we use automated experiments to test whether wild jackdaws benefit from tracking information within dynamic social environments and how strategic social decisions in turn influence social structure. For instance, in an experiment where juveniles became valuable sources of information, we found that adults learned to increase their tolerance of juveniles and reduce aggressive displacements, resulting in changes in social structure. This shows that jackdaws can adjust their information-use strategies to exploit new opportunities, in much the same way as the digital revolution has encouraged older people to learn from the youth. In a separate experiment, jackdaws also modified their dyadic associations to interact preferentially with individuals that provide greater social foraging benefits. However, individuals in stable, long-term relationships maintained their associations regardless of the short-term benefits of strategic re-adjustment. This highlights a vital trade-off: investing in longterm bonds comes at the cost of missing out on benefits of wider social plasticity. We argue that understanding how animals manage trade-offs associated with different relationships is crucial to understand how sociality and cognition co-evolve.

**Alex Thornton** is Professor of Cognitive Evolution at the Human Biological and Cultural Evolution group at the University of Exeter. His research group seeks to understand how the challenges faced by animals (including humans) in their natural environments shape their mental processes, how the ability to learn from others affects the behavior of individuals and groups, and how culture itself evolves.

The group incorporates approaches from evolutionary biology, psychology and anthropology and work on a range of different study systems. Their current work focuses on cognition and behavior in <u>wild jackdaws</u> and the cognitive requirements of cumulative culture in <u>humans</u>.

The Seminar takes place at University Vienna, UBB, Djerassiplatz 1, 1030 Vienna, at seminar room 5.1. (5<sup>th</sup> floor) or via Zoom. With the following link you can enter the Zoom meeting directly or use the Zoom-Client, Meeting-ID: 989 3919 0732, Kenncode: 033461