

## Comparative aesthetics: A novel approach to investigate multi-modal attractiveness in humans and animals

## **Abstract**

As a foundation for Comparative Aesthetics, we will study the origins and cognitive mechanisms of visual and auditory aesthetics in mate selection. We focus on two well-studied species: humans and ring doves. Our first goal is to adapt existing paradigms from behavioral biology and psychology for comparable experiments with both species. This involves research protocols and behavioral and neurophysiological measures of partner choice and preference. We will test and use these newly adapted methods to find common cross-species aesthetic principles. In particular, we will study audio-visual interaction in the perception of attractiveness of potential mates. Humans and doves complete similar test protocols, while we measure behaviour and attentive processes using eye tracking in humans and high-speed cameras in doves. We will also continue our pioneering work in measuring avian EEG, adding a human comparison. Additionally, the self-report possible in humans will be valuable for a better understanding of basal cognitive processes and aesthetic responses. Our main innovation is to apply established research approaches across the disciplines of psychology and animal behaviour. This is only possible via open, intensive, ongoing dialogue between researchers of both fields and requires new tools to deliver measures of the same underlying behaviour. We envisage that our methods can then be applied to other species, to fulfill our goal of providing paradigms for comparative aesthetics.

## Scientific disciplines:

106051 - Behavioural biology (30%) | 501001 - General psychology (30%) | 501030 - Cognitive science (40%)

Keywords:

comparative; aesthetics; attractiveness; EEG; human; bird; multi-modal signalling;

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Status: Ongoing (01.06.2019 - 30.06.2023) 49 months

Funding volume: EUR 515,000

Further links about the involved persons and regarding the project you can find at <a href="https://archiv.wwtf.at/programmes/cognitive\_sciences/CS18-021">https://archiv.wwtf.at/programmes/cognitive\_sciences/CS18-021</a>