

My poster will present the key ideas of a four-year research project entitled “Bio-Agency and Natural Freedom” that I will carry out at the University of Vienna from September 2019 together with an interdisciplinary team of collaborators, namely Björn Brembs (Biology, Regensburg, Germany), John Dupré (Philosophy of Science, Exeter, UK), Johannes Jaeger (Biology, Vienna, Austria), Josef Quitterer (Metaphysics, Innsbruck, Austria) and Helen Steward (Metaphysics, Leeds, UK). The project is funded with a € 341,176.50 research grant from the Austrian Science Fund and aims to defeat free will scepticism on a fresh metaphysical basis that is informed by insights from today’s biology, including neurobiology.

Biology has received strikingly little attention in metaphysical debates on free will. It is generally assumed that to give a naturalistic account of free will means to give an account that accords with physics – naturalism is equated with physicalist mechanism. Where biology is indeed considered, it is presented as just another version of mechanism in which organisms appear as “organic robots” (Dennett) that are subject to a variety of biological determinisms: genetic, environmental, evolutionary, neuronal etc. Recent research in biology, however, calls this picture radically into question.

The project proceeds from the diagnosis that the pervasive commitment to a mechanistic view of both nature in general and human nature in particular prevents from the outset a convincing naturalist account of free will. The therapy proposed in response is to take seriously in metaphysical terms cutting-edge findings in systems biology, neurobiology, behavioural biology and evolutionary biology which reveal the plasticity and fundamentally dynamic character of living systems at all levels. The core thesis is that human agency is a (sophisticated) case of bio-agency, and free will a natural means of survival and well-being for bio-agents, both being grounded in the processual constitution of living systems. Free will, far from being ruled out by our biological condition, is an integral part of human nature; and not only of the human. Humans, like many other organisms, are naturally free.

The poster will (i) outline the overall programme and structure of the project and (ii) explicate the particular relevance of recent work in neuroscience for an accurate understanding of biological plasticity and indeterminism as sought by the project. The promising hypothesis that free will is a biological trait located between chance and

necessity (Brembs) will be assessed against the background of latest research on prediction-based selection of behaviour, neural plasticity and top-down volitional mental operations (Clark, Lavazza, Heisenberg, Tse). Neuroscience, rather than proving free will to be an illusion (e.g. Wegner, Honderich, Harris, Pereboom), may hold the key to explaining its reality.