

Seminar IRH-ICUB

Consciousness and Cognition: An Interdisciplinary Approach

<https://irhunibuc.wordpress.com/2016/04/05/new-seminar-consciousness-in-philosophy-and-neuroscience/>

convenor Dr. Diana Stanciu

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Date: Tuesday, 5 March 2019, 17h

Place: IRH-ICUB (1 D. Brandza Str.), conference room

Prof. Maria-Luisa Flonta, University of Bucharest, Faculty of Biology

**Dr. Liviu Badea, Head of Artificial Intelligence and Bioinformatics Group
National Institute for Research and Development in Informatics**

**Dr. Diana Stanciu, Institute for Research in the Humanities, University of
Bucharest (IRH-ICUB)**

Prof. Maria-Luisa Flonta teaches Physiology and Neurobiology and is the director of the Masters' programme in Neurobiology at the Faculty of Biology of the University of Bucharest. She worked in the field of ionic transport through biological membranes, contributed to the discovery of thermosensible ionic channels in the neurons of the dorsal spinal ganglia and also to the clarification of the chronic pain mechanisms. As a Humboldt Fellow at the Institute for Diabetes Research in Munich, Prof. Flonta discovered the cell receptors for insuline. She is presently a corresponding member of the Romanian Academy.

Dr. Liviu Badea is a senior researcher in computer science and heads the Artificial Intelligence and Bioinformatics group of the National Institute for Research and Development in Informatics (ICI). His main areas of research include machine learning, bioinformatics (cancer genomics) and neuroinformatics (resting state fMRI data analysis, functional connectomics).

Dr. Diana Stanciu has been the convenor of the research seminar and series of lectures *Consciousness and Cognition: An Interdisciplinary Approach* at the University of Bucharest) (<https://irhunibuc.wordpress.com/2016/04/05/new-seminar-consciousness-in-philosophy-and-neuroscience/>) since April 2016. She is a senior researcher working on extended cognition, sense of agency and free will in moral decision-making at the interface of philosophy and neuroscience.

Sense of Agency and Perception of Free Will: An Interdisciplinary Approach

The nature of volition and especially of the so-called ‘free will’ is something that philosophers have debated for centuries. Likewise, the causal role of consciousness in action has been difficult to tackle especially due to the rather elusive understanding of consciousness itself. However, newly acquired knowledge in cognitive science and neuroscience on brain systems and their dynamics during decision-making generated major changes in the philosophical methodology for the study of human will, consciousness and agency in the last two decades. Neuroscientists are thus picking up the thread and are trying to identify new techniques and methods to address the neural mechanisms that underlie voluntary action as opposed to habits and reflexive movements. The latest research in neuroinformatics and machine learning also helps in a significant manner in this respect.

While taking into account the philosophical distinctions between freedom and free will and suggesting that body processes generating agency are not necessarily undermining the idea of free will, in this short workshop, we are trying to look at the perception of free will and the sense of agency that comes together with it as aspects that are more pliable to empiric investigation. Special attention will be granted to the difference between conscious agency and agency without conscious intention, which is often triggered by extended cognition rather than by computationalism – that is, by automatisms and habits established during social practice rather than by rationally construed mental representations. A mixed sense of agency: an ‘online’, basic one that does not require conscious intention, and an ‘offline’, post-act judgment that can sometimes be distorted or illusory, will be pointed out while discussing human will and agency. The question is, in fact, to what extent we are reason-responsive (at least in the first instance) when a decision is required/ advisable. We will also note that patients with certain brain lesions lack either the desire to act (volition) or the sense of responsibility of one’s actions (sense of agency). Surprisingly or not, lesions in widely different brain locations produce similar symptoms, requiring a network-based approach. We will thus review some recent progress in attempts to localize free will at the level of brain networks.