

9:30 – James R. Schmidt
HDR defense

13:15 – Reception/Coffee

13:30 – **Jan De Houwer** 

Department of Experimental Clinical and Health Psychology, Ghent University

Toward a new science of learning

Learning can be defined as ontogenetic adaptation, that is, the impact of regularities in the environment on behavior during the lifetime of an organism. Learning research is thus at the heart of psychology, just like research on phylogenetic adaptation is at the heart of biology.

Different types of learning can be defined in terms of the type of regularity that is involved (e.g., classical conditioning as the effects of regularities in the presence of two stimuli). In this talk, I introduce the concept of complex learning as referring to the joint impact of multiple regularities on behavior. This concept allows one to link the traditional literature on so-called low level forms of learning such as conditioning with the literature on so-called high-level forms of learning such learning via analogy. In fact, it could be argued that, at least in verbal humans, also simple forms of learning are instances of complex learning, an idea that could fundamentally alter face of learning research as we know it.

14:30 – **Céline Lemercier** 

Laboratoire Cognition, Langues, Langage, Ergonomie (CLLE) UMR 5263, Toulouse

Making the Stroop effect disappear with homogeneous color naming practice

The present study assesses the relative impact of heterogeneous versus homogeneous colour-naming practice sessions on the Stroop effect. Practice sessions were divided into 5 sub-sets. In the heterogeneous practice condition, all the 20 Stroop items were presented in each of the 5 practice sub-sets. In the homogeneous practice condition, Stroop items were divided into 5 sub-sets (congruent, neutral, and 3 incongruent sub-sets), such that colour words were associated with the same colour across each sub-set. Analyses revealed that in the heterogeneous practice condition, the response time decreased after the practice session, but the Stroop effect magnitude was unchanged. In the homogeneous practice condition, not only the response times decreases after practice but the Stroop effect disappeared too. Implications of these findings are then discussed regarding the hypothesis of incidental colored-word instance learning during color-naming task.

15:30 – Break

15:45 – **Maria Augustinova** 

Centre de Recherche sur les Fonctionnements et les Dysfonctionnements Psychologiques (EA 7475), Rouen

Further evidence in favor of the composite nature of Stroop interference

Since its conception, the Stroop task continuously provides a fertile ground for a study of human cognition. Yet, the processes underlying interference that is observed in this task are still subject to a considerable scientific debate. In this talk, I will present several experimental studies that attempted to address these still open issues directly instead of inferring them from changes in overall (i.e., standard) Stroop interference. To this end, some of these studies used the semantic Stroop paradigm, some others the 2-to-1 Stroop paradigm. The converging results from these two paradigms provide further evidence in favor of composite nature of Stroop interference. The somewhat obvious conclusion of this talk is that these processes are more successfully integrated within multi-stage accounts of Stroop interference than within the historically favored single-stage response competition accounts that still dominate current psychological research and practice.

16:45 – **Colin M. MacLeod** 

Memory, Attention and Cognition Lab (MACL), University of Waterloo

A distinct advantage: The production effect in memory

Producing information aloud leads to better memory than does simply silently encoding information, an advantage now known as *the production effect*. Indeed, the production advantage extends beyond speech to other forms of production as well, such as mouthing and typing. It is also a long-lasting advantage and applies to many types of materials, from words to pictures to text passages. I will review key findings in research on the production effect. I will also lay out the evidence for an account in terms of distinctive encoding and retrieval—that production increments distinctiveness at the time of encoding, and that this distinctiveness is then useful at the time of retrieval.

17:45 – End