11.20 – 11.40

**Situation body representation in schizophrenic persons using semantic judgement**

T. BELLON, F. LOWENTHAL, University of Strasbourg

Body representation and language are two fundamental concepts encountered by schizophrenic persons. Our notion of representation is based on a multidimensional modal where semantic, sensory and symbolic representations of body interact. We examined whether schizophrenic subjects can be distinguished from healthy ones in the way in which they semantically qualify people in pictures. Experimental design: 8 pictures were created, each with an identical character but in different situations. Two groups of subjects were elaborated: an experimental group of general schizophrenic patients paired to a control group. Each subject had to perform tasks for each picture: describe the character presented on the ad hoc grid, a semantic judgment of his appearance. Ten pictures out of 18 are discriminating schizophrenic subjects. A grid of semantic analysis shows that 16.19% of the schizophrenic's answers are "without opinion" while 43.16% are extremes. This discrepancy is reversed in the control group. The kinaesthetic and sensorial representations are the most discriminating dimensions. Discussion: the space of connotations specific to the body is appreciably different among schizophrenics compared to the non-schizophrenics.

11.40 – 12.00

**Are really impaired in schizophrenia?**

F. KALOGEROPOULOU, V. YVAS, P. WOODRUFF

South Eastern Research Centre

Colleges of the University of Sheffield

Previous research (e.g. Huey & Weder, 1994; Gouzoulis-Marchen et al., 2002) has shown that schizophrenia patients show reduced facilitation or/and lack of IOR when a single-cue procedure is employed. However, the absence or delayed onset of IOR could be due to increased facilitation (that masks the inhibitory effect), and not to a problem of the inhibitory process per se. In order to test the hypothesis that IOR masking, we employed a cue more intense than the target (e.g., a green circle), in order to induce sensory masking and hence eliminate facilitation. (Pratt et al., 2001). When the typical cue (a change of the box's outline) was employed, we replicated the lack of finding even at long SOAs, in the group of schizophrenic patients referred to the controls. The second experiment was identical to the first, but the cue (green circle) was more intense than the target (white square). Here we observed significant IOR effects for both the controls and the patients at short SOA values. These findings suggest that three effects, sensory masking, facilitation and IOR, overlap in time in these paradigms. The effects that are present in schizophrenic patients, are only detected when sensory masking is employed.

12.00 – 12.20

**Representation of survey and route spatial texts in children with verbal (visuospatial) learning disabilities**

C. CORNOLDI, M. MAMMARELLA, C. MENEGHETTI, F. PAZZAGLIA, University of Padua

This study aims to investigate the types of difficulties encountered by children with nonverbal (visuospatial) learning disabilities (NLD) during the processing of spatial information derived from descriptions. Two spatial texts - one in survey, one in route perspective - and one nonspatial text were orally presented to children aged 9-12 divided in three groups: (i) with NLD (N=12), with reading disability (RD) (N=11), and (iii) without learning disabilities who served as controls (N=16). Children performed two tasks: sentence verification and location. In the verification task, NLD performed worse in survey text than control and RD groups. Moreover, in the location task NLD were worse than controls in both survey and route texts, but significantly poorer than the RD group only in the survey text. The results are discussed considering their implications in the understanding the neuropsychological profile of NLD and the processes involved by different types of spatial text.

12.20 – 12.40

**Dissociation, memory ability and self-appraisal of memory**

R. POLCZYK, Jagiellonian University

Dissociation, defined as the disruption in the usually integrated functions of consciousness, memory, identity or perception of the environment (APA, 1994) and measured by the DES (Bernstein & Putnam, 1986) is believed to be positively related to memory errors (e.g. Eisen & Carlson, 1998). However, in some experiments dissociation was positively correlated with correct memory performance (Winograd, Peluso & Glover, 1998). We hypothesized that dissociation would correlate negatively with a self-ratings memory scale designed to assess failures of memory in everyday life, because dissociators tend to experience problems with memory in everyday life. On the other hand, dissociators should score higher than non-dissociators on tests measuring actual memory performance, because people prone to dissociative experiences are very motivated to prove themselves that their memory is good. As a consequence, they score higher on laboratory tests of memory performance. Both hypotheses were confirmed. The results give some insight into the relation between dissociation and various kinds of memory tests.

SESSION WORKING MEMORY II

11.00 – 12.40

Medium lecture hall B

Chaired by G. MORA

11.00 – 11.20

**A developmental investigation of maintenance mechanisms in working memory through the phonological similarity effect**

G. MORA, V. CAMOS, P. BARROULLET

1Université de Bourgogne

2Institut Universitaire de France

3University of Geneva

While in Baddeley's Working Memory model (Baddeley, 1986), the maintenance of verbal information depends on the availability of an articulatory rehearsal mechanism, within the Time-Based Resource-Sharing model (Barrouillet et al., 2007), it depends on an attentional refreshing mechanism, i.e. on the amount of attention available to refresh traces. The interplay of these two mechanisms, the articulatory rehearsal and the attentional refreshing, was investigated in two experiments, one in adults and one in 7-year-old children. In both experiments, within a complex span paradigm, the phonological similarity of the words to remember (similar vs dissimilar), the articulatory suppression (AS: no suppression vs suppression) and the attentional load of concurrent processing (no load vs location judgment task) were manipulated. Results replicated the classic effects of phonological similarity, AS, attentional load, and the interaction Similarity x AS. More interestingly, similarity and AS never interacted with attentional load. Such findings are in agreement with our claim of two independent mechanisms of maintenance for verbal information, namely articulatory rehearsal and attentional refreshing, which could be separately or jointly involved in maintenance depending on situations.

11.20 – 11.40

**Developmental differences in working memory: Where do they come from?**

V. GAILLARD, P. BARROULLET, C. JARROLD, V. CAMOS

1University of Geneva