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## **Cognitive and Neuropsychological Approaches to Mental Imagery**

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### **Presentation**

The volume "Cognitive and Neuropsychological Approaches to Mental Imagery" presents selected proceedings from the European Workshop on Imagery and Cognition (EWIC), which was held at the Université de Paris-Sud, Orsay, France, 24-26 September 1986.

The EWIC was designed to be a forum for the exploration of current issues in imagery research. It is fitting that Part 1 of this volume presents views on these issues by the two Keynote Speakers at the workshop, Allan Paivio and Steven Pinker.

The organization of the rest of the volume reflects to a great extent the way the EWIC was conceived. Parts 2, 3, and 4 correspond to the three days of the workshop. Clearly the fact that a chapter has been assigned to one part does not imply that it is unrelated to the issues dealt with in other parts. Each of the three parts is closed by a concluding chapter written by the Invited Discussant whose role was to highlight the major issues of the session.

Part 2 is devoted to papers dealing with contributions on the nature of imaginal coding, its connections with the representation of visual information in long-term memory, and in particular the ties between this form of coding and the processing of linguistic information. On a lexical level, the main issues are the definition of word imagery value, and the relationships between imagery in the processing and memorization of sentences and of texts.

Part 3 focuses more directly on imagery as a process. Imagery is first discussed for its role in the functioning of working memory, both as concerns the formation and the manipulation of visuo-spatial representations. Visual imagery is also examined in terms of its structural and functional components and its capacity to handle certain features of temporal information. This part of the volume also includes papers discussing the contribution of imagery-based strategies to problem solving, as well as the role of imagery in the acquisition of motor skills based on mental practice.

Part 4 first presents papers exploring the relationships between imaginal and motor representations in memory systems, and papers on emotional imagery in the framework of a cognitive approach. The second section of Part 4 is devoted to neuropsychological approaches to mental imagery, with papers oriented towards detailed characterizations of the neural substrate and mechanisms of visual imagery, and articles examining the incidence of brain damage and sensory handicaps on the elaboration and mnemonic use of visual imagery.

The Editors' Concluding Chapter (Part 5 of the volume) summarizes the final remarks presented at the closing session of the workshop.

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