Table of contents

The European Workshop on Imagery and Cognition
Organization of the volume
Contributors

PART 1: Key issues in imagery research
Basic puzzles in imagery research (Allan Paivio)
A computational theory of the mental imagery medium (Steven Pinker)

PART 2: Imaginal coding and the processing of verbal information
Reading mental images (Jon M. Slack)
Mental imagery and perception: Modularity or functional equivalence? (Manuel de Vega)
Imagery and memory (Ornella Andreani)
Stroop and priming effects in naming and categorizing tasks using words and pictures (Juan Mayor, Javier Sainz, &
Javier Gonzalez-Marques)
Alternative coding of concepts (F. Alfonso Medina)
Images, predicates, and retrieval cues (Gregory V. Jones)
The importance of age of word acquisition for imageability in word processing (Anita van Loon-Vervoorn & Miep van
der Ham-van Koppen)
Frequency, imagery value and types of features in natural categories (Herminia Peraita & Pilar Ferrandiz)
Imagery and prose processing (Michel Denis)
Imagery and integrative processing (Werner Wippich)
Metamemory-memory connections and their development under imaginal encoding conditions (Silvia Mecklenbräuker)
Imagery, memory, and prose processing (Alain Desrochers)

PART 3: Imagery processes in adaptive behavior
Imagery and working memory (Alan Baddeley)
Interference effects in the visuo-spatial sketchpad (Gerard Quinn)
Visual working memory in the acquisition of complex cognitive skills (Robert H. Logie, Alan D. Baddeley, Amir Mane,
Emanuel Donchin, & Russel Sheptak)
The effects of central versus peripheral distraction on visual and verbal learning (Klaus Bischoff)
Generating and maintaining visual images: The incidence of individual and stimulus characteristics (Marguerite Cocude)
Processing of order with pictures (Alain Lieury)
Mental imagery and problem solving (Geir Kaufmann)
Imagery as a cognitive strategy (Tore Helstrup)
Mental practice: Image and mental rehearsal of motor action (Alain Savoyant)
Imagery and skill acquisition (John Annett)
Mediation in learning complex cyclical actions (Harold T. A. Whiting)
Empirical approaches to a functional analysis of imagery and cognition (Mark A. McDaniel)

PART 4: Imagery, action, and emotion. Imagery and the brain
Images and actions in verbal learning (Johannes Engelkamp)
On the distinction of memory codes: Image versus motor encoding (Walter J. Perrig)
Cognitive structure in thought and personality (Susan Aylwin)
Selective enhancement of imagery in anxiety (Maryanne Martin)

Images in autobiographical memory (Martin A. Conway)

Emotional imagery and cognitive representation of emotion: An attempt to validate Lang’s bio-informational model (Alberto Acosta, Jaime Vila, & Alfonso Palma)

Evidence for shared structures between imagery and perception (Franck Péronnet, Martha J. Farah, & Marie-Anne Gonon)

Pattern of regional cerebral blood flow related to visual and motor imagery: Results of Emission Computerized Tomography (Georg Goldenberg, Ivo Podreka, Margarete Steiner, Erhard Suess, Lüder Deucks, & Klaus Willmes)

Mental imagery and the effects of closed head injury (John T. E. Richardson)

A comparison of four mnemonic systems with brain damaged and non brain damaged people (Barbara Ann Wilson)

Hemineglect and mental representation (Edoardo Bisiach & Anna Berti)

Weaknesses of imagery without visual experience: The case of the total congenital blind using imaginal mnemonics (Cesare Comolli & Rossana De Berti)

The functional role of imagery in cognition? (Marc Marschark)

PART 5: Concluding remarks

European contributions to research on imagery and cognition (John T. E. Richardson, Michel Denis, & Johannes Engelkamp)

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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