Record Nr. UNINA9910807382103321 Perception beyond inference: the information content of visual **Titolo** processes / / edited by Liliana Albertazzi, Gert J. van Tonder, and Dhanraj Vishwanath Cambridge, Mass., : MIT Press, ©2010 Pubbl/distr/stampa **ISBN** 0-262-30932-7 1-283-11912-9 9786613119124 0-262-29555-5 Descrizione fisica 1 online resource (462 p.) Altri autori (Persone) AlbertazziLiliana Van TonderGert J. <1970-> VishwanathDhanraj <1967-> Disciplina 152.14 Soggetti Visual perception Cognitive neuroscience Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and indexes. Nota di contenuto Cover; Contents; Preface; Acknowledgments; Introduction; 1 Vision and Information; I Time and Dynamics; 2 Riddle of the Past, Puzzle for the Future: 3 Extending Pragnanz; 4 Informing through an Imperfect Retina; 5 Perceptual Organization in the Visual Cortex; II Color, Shape, and Space; 6 The Perception of Material Qualities and the Internal Semantics of the Perceptual System: 7 Visual Information in Surface and Depth Perception: 8 Good Continuation in Layers: 9 Illusory Contours and Neon Color Spreading Reconsidered in the Light of Petter's Rule; III Language and Perception 10 From Grouping to Visual Meanings11 The Perceptual Roots of Metaphor; IV Perception in Art, Design, and Computation; 12 Becoming Information: 13 Becoming: Contributors: Author Index: Subject Index: Insert Sommario/riassunto Proposing a new paradigm for perceptual science that goes beyond

standard information theory and digital computation. This book breaks with the conventional model of perception that views vision as a mere

inference to an objective reality on the basis of "inverse optics." The authors offer the alternative view that perception is an expressive and awareness-generating process. Perception creates semantic information in such a way as to enable the observer to deal efficaciously with the chaotic and meaningless structure present at the physical boundary between the body and its surroundings. Vision is intentional by its very nature; visual qualities are essential and real, providing an aesthetic and meaningful interface to the structures of physics and the state of the brain. This view brings perception firmly in line with ethology and modern evolutionary biology and suggests new approaches in all disciplines that study, or require an understanding of, the ontology of mind. The book is the joint effort of a multidisciplinary group of authors. Topics covered include the relationships among stimuli, neuronal processes, and visual awareness. After considering the mind-dependent growing of information, the book treats time and dynamics; color, shape, and space; language and perception; perception, art, and design.