Record Nr. UNINA9910254824703321 Cognition Beyond the Brain: Computation, Interactivity and Human **Titolo** Artifice / / edited by Stephen J. Cowley, Frédéric Vallée-Tourangeau Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2017 **ISBN** 3-319-49115-6 Edizione [2nd ed. 2017.] Descrizione fisica 1 online resource (VIII, 342 p. 44 illus., 28 illus. in color.) 005.437 Disciplina 4.019 User interfaces (Computer systems) Soggetti Cognitive psychology Cognitive grammar User Interfaces and Human Computer Interaction Cognitive Psychology Cognitive Linguistics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto Introduction -- Socially Distributed Cognition in Loosely Coupled Systems -- Distributed Cognition at the Crime Scene -- Thinking with External Representations -- Human Interactivity: Problem-solving, Solution-probing and Verbal Patterns in the Wild -- Linden Ball and Damien Litchfield: Interactivity and Embodied Cues in Problem Solving, Learning and Insight: Further Contributions to a "Theory of Hints --Cognition beyond the Classical Information Processing Model: Cognitive Interactivity and the Systemic Thinking Model -- Time During Time: Multi-Scalar Temporal Cognition -- Human Agency and the Resources of Reason -- Living as Languaging: Distributed Knowledge in Living Beings -- Cognition in the City -- Computer-mediated Trust in Selfinterested Expert Recommendations -- The Cognitive Ecology of the Web -- Material Engagement Theory and Digital Culture --

Organisational Cognition: A Step too Close.

This book challenges neurocentrism by advocating a systemic view of

Sommario/riassunto

cognition based on investigating how action shapes the experience of thinking, placing interactivity at its heart. This systemic viewpoint makes three main claims. First, that many elaborate cognitive skills like language, problem solving and human-computer interaction (HCI) are based in sense-saturated coordination or interactivity. Second, interactivity produces a tightly woven scaffold of resources, some internal to the agent and others external, that elevates and transforms thinking. Third, human agents entwine brains, bodies and their surroundings as they manage multi-scalar dynamics. This new edition continues to demonstrate how a systemic perspective casts a productive light on thinking in applied domains such as crime scene analysis, the use of information technology in construction, and computer-meditated trusts and presents new studies on the cognitive ecology of the web, multi-scalar temporal and organisational cognition and the importance of interactive material engagement in digital architecture. Authors use various scales of the systemic viewpoint to illustrate how bodies and artefacts shape thinking, but in all cases the experience of materiality is meshed with activity that involves the world beyond the body. Cognition Beyond the Brain is a valuable reference for researchers, practitioners and graduate students within the fields of Computer Science, Psychology, Linguistics and Cognitive Sciences.