Record Nr. UNINA9910437958103321 **Titolo** Cognition beyond the brain: computation, interactivity and human artifice / / Stephen J. Cowley, Frederic Vallee-Tourangeau, editors Pubbl/distr/stampa London, : Springer, c2013 **ISBN** 1-4471-5125-9 Edizione [1st ed. 2013.] 1 online resource (viii, 292 pages): illustrations (some color) Descrizione fisica Collana Gale eBooks CowleyStephen J Altri autori (Persone) Vallee-TourangeauFrederic Disciplina 153 Soggetti Distributed cognition Computer science Consciousness Cognitive psychology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references at the end of each chapters and Nota di bibliografia indexes. Nota di contenuto Human Thinking beyond the Brain -- Human Agency and the Resources of Reason -- Judgement Aggregation and Distributed Thinking --Computer-Mediated Trust in Self-Interested Expert Recommendations -- Living as Languaging: Distributed Knowledge in Living Beings -- The Quick and the Dead: On Temporality and Human Agency -- You Want a Piece of Me? Paying Your Dues and Getting Your Due in a Distributed World -- Distributed Cognition at the Crime Scene -- Socially Distributed Cognition in Loosely Coupled Systems -- Thinking with External Representations -- Human Interactivity: Problem-solving, Solution-probing and Verbal Patterns in the Wild -- Interactivity and Embodied Cues in Problem Solving, Learning and Insight: Further Contributions to a "Theory of Hints" -- Naturalising Problem Solving --Systemic Cognition: Human Artifice in Life and Language -- Index. Cognition Beyond the Brain challenges neurocentrism by advocating a Sommario/riassunto systemic view of cognition based on investigating how action shapes the experience of thinking. The systemic view steers between extended functionalism and enactivism by stressing how living beings connect bodies, technologies, language and culture. Since human thinking

depends on a cultural ecology, people connect biologically-based powers with extended systems and, by so doing, they constitute cognitive systems that reach across the skin. Biological interpretation exploits extended functional systems. Illustrating distributed cognition, one set of chapters focus on computer mediated trust, work at a construction site, judgement aggregation and crime scene investigation. Turning to how bodies manufacture skills, the remaining chapters focus on interactivity or sense-saturated coordination. The feeling of doing is crucial to solving maths problems, learning about X rays, finding an invoice number, or launching a warhead in a film. People both participate in extended systems and exert individual responsibility. Brains manufacture a now to which selves are anchored: people can act automatically or, at times, vary habits and choose to author actions. In ontogenesis, a systemic view permits rationality to be seen as gaining mastery over world-wide resources. Much evidence and argument thus speaks for reconnecting the study of computation, interactivity and human artifice. Taken together, this can drive a networks revolution that gives due cognitive importance to the perceivable world that lies beyond the brain. Cognition Beyond the Brain is a valuable reference for researchers, practitioners and graduate students within the fields of Computer Science, Psychology, Linguistics and Cognitive Science.