

1. Record Nr.	UNINA9910827276303321
Titolo	Symbol grounding // edited by Tony Belpaeme, Stephen J. Cowley, Karl F. MacDorman
Pubbl/distr/stampa	Philadelphia, PA, : John Benjamins Pub. Company, 2009
ISBN	1-282-44486-7 9786612444869 90-272-8874-7
Edizione	[1st ed.]
Descrizione fisica	167 p
Collana	Benjamins current topics, , 1874-0081 ; ; 21
Altri autori (Persone)	BelpaemeTony CowleyStephen J <1955-> (Stephen John) MacDormanKarl F
Disciplina	302.2/22
Soggetti	Symbol grounding Artificial intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Foreword: Extending symbol grounding / Tony Belpaeme and Stephen J. Cowley -- Grounding symbols in the physics of speech communication / Simon F. Worgan and Robert I. Damper -- Social symbol grounding and language evolution / Paul Vogt and Federico Divina -- How many words can my robot learn? An approach and experiments with one-class learning / Luis. Seabra Lopes and Aneesh Chauhan -- How human infants deal with symbol grounding / Stephen J. Cowley -- Semiotic symbols and the missing theory of thinking / Robert Clowes -- The acquired language of thought hypothesis: a theory of symbol grounding / Christopher Viger -- Afterword: Life after the symbol system metaphor / Karl F. MacDorman.
Sommario/riassunto	When explaining cognition one must explain how representations in the mind, or symbols, become meaningful by connecting to the external world. This process of connecting symbols with sensorimotor experiences is known as symbol grounding. The classical view of symbol grounding is that it is an individual process: a person or machine interacts with the environment and associates symbols with external experiences. This volume contains views from different

disciplines - ranging from psychology to robotics - on how this view can be extended by first extending symbol grounding to encompass semiotics and by showing how the classical view exaggerates the importance of written language: grounding does not necessarily involve written notations, but rather language is an external cognitive resource that allows us to acquire categories and concepts. Secondly, as symbol grounding relies on language to acquire and coordinate the process and language is a dynamical process rooted in both culture and biology, symbol grounding by extension is also sensitive to culture, emotion and embodiment. The contributions to this volume were previously published in *Interaction Studies* 8:1 (2007).

---