. Record Nr.	UNINA9910136403003321
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Titolo	How mobile robots can self-organise a vocabulary [[electronic resource] /] / Paul Vogt
Pubbl/distr/stampa	Language Science Press, 2015
	Berlin, Germany : , : Language Science Press, , 2015 ©2015
ISBN	3-946234-01-1
Descrizione fisica	1 online resource (xii, 270 pages) : illustrations; digital, PDF file(s)
Collana	Computational Models of Language Evolution ; ; volume 2
Disciplina	402.85
Soggetti	Symbol grounding
	Language acquisition - Data processing
	Artificial intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from OAPEN webpage (viewed on 23 November 2017).
	Originally presented as the author's thesis (doctoral)Vrije Universiteit Brussel, Belgium, 2000.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	PrefaceAcknowledgements1. Introduction2. The sensorimotor component3. Language games4. Experimental results5. Varying methods and parameters6. The optimal games7. DiscussionAppendix A: GlossaryAppendix B: PDL code Appendix C: Sensory data distributionAppendix D: Lexicon and ontologyReferencesIndexes.
Sommario/riassunto	One of the hardest problems in science is the symbol grounding problem, a question that has intrigued philosophers and linguists for more than a century. With the rise of artificial intelligence, the question has become very actual, especially within the field of robotics. The problem is that an agent, be it a robot or a human, perceives the world in analogue signals. Yet humans have the ability to categorise the world in symbols that they, for instance, may use for language. This book presents a series of experiments in which two robots try to solve the symbol grounding problem. The experiments are based on the language game paradigm, and involve real mobile robots that are able to develop a grounded lexicon about the objects that they can detect in

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their world. Crucially, neither the lexicon nor the ontology of the robots
has been preprogrammed, so the experiments demonstrate how a
population of embodied language users can develop their own
vocabularies from scratch.