1. Record Nr. UNINA9910298083403321 Autore Hillert Dieter **Titolo** The Nature of Language: Evolution, Paradigms and Circuits / / by Dieter Hillert New York, NY:,: Springer New York:,: Imprint: Springer,, 2014 Pubbl/distr/stampa **ISBN** 1-4939-0609-7 Edizione [1st ed. 2014.] Descrizione fisica 1 online resource (205 p.) Disciplina 150 153 401.9 612.8 Soggetti Cognitive psychology **Psycholinguistics** Neuropsychology Cognitive Psychology Inglese Lingua di pubblicazione **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Preface -- Introduction -- PART I. Evolution. - Chapter 1: The Human Nota di contenuto Lineage -- 1.1 An Overview -- 1.2 Fossil Evidence -- Chapter 2. Protomusic and Speech -- 2.1 The Role of Protomusic -- 2.2 Evolutionary Milestones -- Chapter 3. Genetic Foundations -- 3.1 Language-Related Genes -- 3.2 The Role of the Basal Ganglia --Chapter 4. The Rise of Cognition -- 4.1 Comparative Studies -- 4.2 Proto-Cognition -- PART II. Paradigms -- Chapter 5. The Human Language System -- 5.1 Biological Disposition -- 5.2 Linguistic Wiring -- Chapter 6. Semantics and Syntax -- 6.1 Sentence Structures -- 6.2 Neural Nets -- Chapter 7. Lexical Concepts -- 7.1 Constructions -- 7.2 Mental Space -- Chapter 8. Figurative Language -- 8.1. Lexical Dark Matters -- 8.2 Idioms and Metaphors -- PART III. Circuits.-Chapter 9. Generating Sentences -- 9.1 Structural Complexity -- 9.2 The Role of Working Memory -- Chapter 10. Accessing Word Meanings -- 10.1

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## Sommario/riassunto

The book The Nature of Language addresses one of the most fundamental questions of mankind: how did language evolve, and what are the neurobiological and cognitive foundations of language processing? This monograph explores these questions from different perspectives to discuss the building blocks of language evolution and how they developed in the way they can be found in modern humans. Furthermore, primarily neural mapping methods of cognition presented in this research provide extremely valuable data about the neural circuitries that are involved in language processing. Thus, the book explores and illustrates cortical mapping in typical language patterns, but also cortical mapping in atypical populations that fail to process particular language aspects. In sum, an evolutionary stance is used to explore how language abilities of the Homo sapiens evolved to communicate for the purposes of conveying information, ideas, emotions, goals, humor, etc. This book presents an evolutionary language model that builds on the cognitive abilities of our evolutionary ancestors, and it allows readers to draw a variety of expansive conclusions from that, including the idea that human language as an interface system provides the basis for consciousness.