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0521831822 - Numbers, Language, and the Human Mind

Heike Wiese

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What constitutes our number concept? What makes it possible for us to employ numbers the way we do? Which mental faculties contribute to our grasp of numbers? What do we share with other species, and what is specific to humans? How does our language faculty come into the picture? This book addresses these questions and discusses the relationship between numerical thinking and the human language faculty, providing psychological, linguistic, and philosophical perspectives on number, its evolution, and its development in children. Heike Wiese argues that language as a human faculty plays a crucial role in the emergence of systematic numerical thinking. She characterises number sequences as powerful and highly flexible mental tools that are unique to humans and shows that it is language that enables us to go beyond the perception of numerosity and to develop such mental tools: language as a mental faculty not only lies at the heart of what makes us human, it is also the capacity that lays the ground for our concept of number.

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[More information](#)

*To my mother, Ilse Wiese, who shared her fascination for numbers
and numerical thinking and her enthusiasm for scientific inquiry*

Contents

<i>Acknowledgments</i>	<i>page</i> ix
Introduction	I
1 Numbers and objects	9
Cardinal number assignments: ‘3 pens’, ‘3 kg’, ‘3 °C’	18
Ordinal number assignments: ‘the third runner’	33
Nominal number assignments: ‘bus #3’, ‘football player #3’	37
Overview: how to use numbers	40
2 What does it mean to be a number?	43
The intersective analysis of numbers	44
The itemising approach to numbers	52
The relational view of numbers	57
A criteria-based view of numbers	60
3 Can words be numbers?	68
Counting words are special	70
Counting words are non-referential	79
Counting words are acquired differently	85
A cut with Occam’s razor	89
Counting words as numerical tools	91
4 The language legacy	94
Before language: quantitative capacities in infants and animals	95
Number sense and beyond	108
Symbolic reference and the evolution of language	113
Matching patterns in symbolic reference and number assignments	121
Language opens the way for numerical cognition: further support	124
A possible scenario for the emergence of numerical tools	131
Language and number as human faculties	143

viii	<i>Contents</i>	
5	Children’s route to number: from iconic representations to numerical thinking	151
	The acquisition of a counting sequence	153
	Pre-numerical props for number assignments	157
	Gateway to number	160
	Language and the emergence of counting and cardinality	174
6	The organisation of our cognitive number domain	180
	Representation of counting words as numerical tools	181
	Concepts of numerical quantity	182
	Abstract cardinalities	183
	Measure concepts	188
	Concepts of numerical rank	202
	Concepts of numerical label	209
	The architecture of the number domain	214
7	Non-verbal number systems	219
	Arabic numerals as a non-verbal number sequence	222
	The development of non-verbal numerals: from iconic representations to numerical tools	236
	Two alternative number sequences: the correlation between counting words and arabic numerals	241
8	Numbers in language: the grammatical integration of numerical tools	264
	Counting words and their referential cousins	265
	How to express numerical concepts: the organisation of number word constructions	270
	Referential number words are not outcasts	274
	The return of the counting words	288
	Appendix 1 Number assignments	297
	Appendix 2 The philosophical background	300
	Appendix 3 Numerical tools: possible sets N	304
	Appendix 4 Conceptualisation of number assignments	314
	Appendix 5 Semantic representations for number word constructions	319
	<i>References</i>	322
	<i>Index</i>	340

Cambridge University Press

0521831822 - Numbers, Language, and the Human Mind

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Frontmatter

[More information](#)

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0521831822 - Numbers, Language, and the Human Mind

Heike Wiese

Frontmatter

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x

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0521831822 - Numbers, Language, and the Human Mind

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Frontmatter

[More information](#)

Acknowledgments

xi

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