

Cambridge University Press

978-0-521-89834-8 - Event Representation in Language and Cognition

Edited by Jurgen Bohnemeyer and Eric Pederson

Frontmatter

[More information](#)

Event Representation in Language and Cognition

Event Representation in Language and Cognition examines new research into how the mind deals with the experience of events. Empirical research into the cognitive processes involved when people view events and talk about them is still a young field. The chapters by leading experts draw on data from the description of events in spoken and signed languages, first and second language acquisition, co-speech gesture and eye movements during language production, and from non-linguistic categorization and other tasks. The book highlights newly found evidence for how perception, thought, and language constrain each other in the experience of events. It will be of particular interest to linguists, psychologists, and philosophers, as well as to anyone interested in the representation and processing of events.

JÜRGEN BOHNEMEYER is Associate Professor of Linguistics at the University at Buffalo, The State University of New York. He is the author of *The Grammar of Time Reference in Yukatek Maya* (2002).

ERIC PEDERSON is Associate Professor of Linguistics at the University of Oregon. He is the co-editor (with Jan Nuyts) of *Language and Conceptualization* (Cambridge, 1997) and *Perspectives on Language and Conceptualization* (1993).

Cambridge University Press

978-0-521-89834-8 - Event Representation in Language and Cognition

Edited by Jürgen Bohnemeyer and Eric Pederson

Frontmatter

[More information](#)

Language, culture and cognition

Editor

Stephen C. Levinson,

Max Planck Institute for Psycholinguistics

This series looks at the role of language in human cognition – language in both its universal, psychological aspects and its variable, cultural aspects. Studies focus on the relation between semantic and conceptual categories and processes, especially as these are illuminated by cross-linguistic and cross-cultural studies, the study of language acquisition and conceptual development, and the study of the relation of speech production and comprehension to other kinds of behaviour in a cultural context. Books come principally, though not exclusively, from research associated with the Max Planck Institute for Psycholinguistics in Nijmegen, and in particular the Language and Cognition Group.

- 1 Jan Nuyts and Eric Pederson (eds.) *Language and Conceptualization*
- 2 David McNeill (ed.) *Language and Gesture*
- 3 Melissa Bowerman and Stephen C. Levinson (eds.) *Language Acquisition and Conceptual Development*
- 4 Gunter Senft (ed.) *Systems of Nominal Classification*
- 5 Stephen C. Levinson *Space in Language and Cognition*
- 6 Stephen C. Levinson and David Wilkins (eds.) *Grammars of Space*
- 7 N. J. Enfield and Tanya Stivers (eds.) *Person Reference in Interaction: Linguistic, cultural and social perspectives*
- 8 N. J. Enfield *The Anatomy of Meaning: Speech, gesture, and composite utterances*
- 9 Giovanni Bennardo *Language, Space, and Social Relationships: A foundational cultural model in Polynesia*
- 10 Paul Kockelman *Language, Culture, and Mind: Natural constructions and social kinds*
- 11 Jürgen Bohnemeyer and Eric Pederson (eds.) *Event Representation in Language and Cognition*

Cambridge University Press

978-0-521-89834-8 - Event Representation in Language and Cognition

Edited by Jürgen Bohnemeyer and Eric Pederson

Frontmatter

[More information](#)

Event Representation in Language and Cognition

Edited by

Jürgen Bohnemeyer

University at Buffalo, The State University of New York

and

Eric Pederson

University of Oregon



CAMBRIDGE
UNIVERSITY PRESS

Cambridge University Press

978-0-521-89834-8 - Event Representation in Language and Cognition

Edited by Jürgen Bohnemeyer and Eric Pederson

Frontmatter

[More information](#)

CAMBRIDGE UNIVERSITY PRESS

Cambridge, New York, Melbourne, Madrid, Cape Town, Singapore,
São Paulo, Delhi, Dubai, Tokyo, Mexico City

Cambridge University Press

The Edinburgh Building, Cambridge CB2 8RU, UK

Published in the United States of America by Cambridge University Press, New York

www.cambridge.org

Information on this title: www.cambridge.org/9780521898348

© Cambridge University Press 2011

This publication is in copyright. Subject to statutory exception
and to the provisions of relevant collective licensing agreements,
no reproduction of any part may take place without the written
permission of Cambridge University Press.

First published 2011

Printed in the United Kingdom at the University Press, Cambridge

A catalogue record for this publication is available from the British Library

Library of Congress Cataloguing in Publication data

Event representation in language and cognition / edited by Jürgen Bohnemeyer and
Eric Pederson.

p. cm. – (Language, culture, and cognition)

Includes bibliographical references and index.

1. Semantics. 2. Grammar, Comparative and general – Syntax.

3. Events (Philosophy) I. Bohnemeyer, Jürgen, 1965– II. Pederson, Eric.

III. Title. IV. Series.

P325.E97 2010

401'.43 – dc22 2010041512

ISBN 978-0-521-89834-8 Hardback

Cambridge University Press has no responsibility for the persistence or
accuracy of URLs for external or third-party internet websites referred to
in this publication, and does not guarantee that any content on such
websites is, or will remain, accurate or appropriate.

Contents

<i>Figures</i>	<i>page</i> vii
<i>Contributors</i>	x
<i>Acknowledgments</i>	xii
1 On representing events – an introduction	1
ERIC PEDERSON AND JÜRGEN BOHNEMEYER	
2 Event representation in serial verb constructions	13
ANDREW PAWLEY	
3 The macro-event property: The segmentation of causal chains	43
JÜRGEN BOHNEMEYER, N. J. ENFIELD, JAMES ESSEGBEY, AND SOTARO KITA	
4 Event representation, time event relations, and clause structure: A crosslinguistic study of English and German	68
MARY CARROLL AND CHRISTIANE VON STUTTERHEIM	
5 Event representations in signed languages	84
ASLI ÖZYÜREK AND PAMELA PERNISS	
6 Linguistic and non-linguistic categorization of complex motion events	108
JEFF LOUCKS AND ERIC PEDERSON	
7 Putting things in places: Developmental consequences of linguistic typology	134
DAN I. SLOBIN, MELISSA BOWERMAN, PENELOPE BROWN, SONJA EISENBEIß, AND BHUVANA NARASIMHAN	
8 Language-specific encoding of placement events in gestures	166
MARIANNE GULLBERG	

Cambridge University Press
978-0-521-89834-8 - Event Representation in Language and Cognition
Edited by Jurgen Bohnemeyer and Eric Pederson
Frontmatter
[More information](#)

vi	Contents	
9	Visual encoding of coherent and non-coherent scenes CHRISTIAN DOBEL, REINHILD GLANEMANN, HELENE KREYSA, PIENIE ZWITSERLOOD, AND SONJA EISENBEIß	189
10	Talking about events BARBARA TVERSKY, JEFFREY M. ZACKS, JULIE BAUER MORRISON, AND BRIDGETTE MARTIN HARD	216
11	Absent causes, present effects: How omissions cause events PHILLIP WOLFF, MATTHEW HAUSKNECHT, AND KEVIN HOLMES	228
	<i>References</i>	253
	<i>Index</i>	278

Figures

3.1	Event segmentation – an introductory example	<i>page</i> 44
3.2	ECOM E7	50
3.3	Early and late frame of ECR 18	62
3.4	Early and late frame of ECR 5	63
3.5	Early and late frame of ECR 23	64
5.1	Different construction types of spatial and activity predicates observed in our data	93
5.2	The percentages of different event predicate types in the two sign languages	99
5.3	The percentages of perspective types across the two sign languages	100
5.4	The distribution of combinations of different event space projections (character, observer) with different types of classifier predicates (aligned, non-aligned) in the two sign languages	101
5.5	Schemas for different possible uses of predicate types and perspectives deployed in event space representations in signed narratives	106
6.1	Average proportion manner choices by language group in Experiment 1	120
6.2	Average proportion manner choices by language group in Experiment 2	123
6.3	Average proportion of manner and path false alarms by language group	124
7.1	English placement schema (satellite-framed)	135
7.2	Spanish placement schema (verb-framed)	136
7.3	German placement schema (satellite-framed)	137
7.4	Russian placement schema (satellite-framed)	137
7.5	Finnish placement schema (satellite-framed)	137
7.6	Hindi placement schema (verb-framed)	138
7.7	Turkish placement schema (verb-framed)	138
7.8	Tzeltal placement schema (verb-framed)	139

viii	Figures	
7.9	Scale of languages according to relative frequency of verbs at t1	147
7.10a	Spanish preposition	150
7.10b	Turkish case-marking	150
7.10c	Hindi case-marking	151
7.10d	Finnish case-marking	151
7.11a	English placement category	153
7.11b	German placement categories	153
7.11c	Tzeltal placement categories	154
7.12	English and German: Verb-of-placement constructions in caregiver speech	162
7.13	Verb-of-placement constructions in English and German child speech	163
7.14a	English verb-of-placement constructions: Naomi and her parents	163
7.14b	German verb-of-placement constructions: Simone and her parents	164
8.1	The task set-up with the Describer on the left and the Drawer on the right	175
8.2	Stimulus: placement of the bowl	178
8.3	Placement of bowl in Dutch with a posture placement verb, <i>zetten</i> , and a bi-manual gesture encoding object information in the hand shape	179
8.4	Placement of bowl in French with a general placement verb, <i>mettre</i> , and a gesture encoding simple-path, no object information	180
8.5	Placement in Dutch with a general placement verb, <i>doen</i> , ‘do, make,’ and a gesture encoding object information in the hand shape (right hand, grip around bananas)	182
8.6	Placement in Dutch with another specific placement verb, <i>duwen</i> , ‘push,’ and a gesture encoding object information in the hand shape (grip around chewing gum)	182
8.7	Placement in French with a specific placement verb, <i>coller</i> , ‘stick’, and a gesture encoding simple-path, with a flat hand, no object information	183
9.1	Examples of the naturalistic stimuli used in Experiments 2a, 2b and 3b, displaying events with one participant, two participants and three participants	201
9.2	Experiment 2a. Mean proportion of gaze time spent in different ROIs, depending on task (percent of time between picture onset and speech onset)	203
9.3	Experiments 3a and 4. Examples for coherent and non-coherent scenes (taken from Dobel <i>et al.</i> 2007)	206

Figures	ix
9.4 Examples for stimuli of actions involving two participants, used in Experiments 3c, 3d and 3f	209
11.1 Scene adapted from Freyd, Pantzer, and Cheng (1988) in which participants were asked to indicate whether the plant was located in the “same” position once a source of support was removed	236
11.2 Configurations of forces associated with CAUSE, HELP/ENABLE/ALLOW, and PREVENT; A = the affector force, P = the patient force, R = the resultant force; E = endstate vector, which is a position vector, not a force	241
11.3 On the left side, two CAUSE relations are combined using the resultant force from the first cause relation (BA) as the affector force in the second cause relation (B_{BA}). On the right side, a PREVENT relation is combined with another PREVENT relation using the resultant of the PREVENT relation in the second premises as the patient vector in the PREVENT relation in the first premise	243
11.4 The affector force in the conclusion, A, is the affector force in the first relation, A. The endstate in the conclusion is the endstate vector from the last premise. The patient force in the conclusion, C, is based on the vector addition of the patient forces, B and C in the premises	243
11.5 The composition of two PREVENT relations can either lead to a CAUSE or ALLOW conclusion	245
11.6 The configuration of forces in the top panel, which depicts a PREVENT ◦ PREVENT composition, was entered into a physics simulator to produce the movements of the cars in the animation depicted in the still frames in the bottom panel. First, car C attempts to cross the line but is prevented by car B, which approaches car C. Then, car A pulls car B away from car C with a rope, preventing car B from preventing car C. Finally, with car B out of the way, car C crosses the line	247

Contributors

- JULIE BAUER MORRISON Glendale Community College
- JÜRGEN BOHNEMEYER University at Buffalo, The State University of New York
- MELISSA BOWERMAN Max Planck Institute for Psycholinguistics
- PENELOPE BROWN Max Planck Institute for Psycholinguistics
- MARY CARROLL Ruprecht-Karls-Universität Heidelberg
- CHRISTIAN DOBEL Westfälische Wilhelmsuniversität Münster
- SONJA EISENBEIß University of Essex
- N. J. ENFIELD Max Planck Institute for Psycholinguistics
- JAMES ESSEGBEY University of Florida at Gainesville
- REINHILD GLANEMANN Westfälische Wilhelmsuniversität Münster
- MARIANNE GULLBERG Centre for Languages and Literature, Lund University
- MATTHEW HAUSKNECHT University of Texas at Austin
- KEVIN HOLMES Emory University
- SOTARO KITA University of Birmingham
- HELENE KREYSA Bielefeld University
- JEFF LOUCKS Institute for Learning and Brain Sciences, University of Washington
- BRIDGETTE MARTIN HARD Stanford University
- BHUVANA NARASIMHAN University of Colorado at Boulder
- ASLI ÖZYÜREK Radboud University Nijmegen and Max Planck Institute for Psycholinguistics

Cambridge University Press
978-0-521-89834-8 - Event Representation in Language and Cognition
Edited by Jurgen Bohnemeyer and Eric Pederson
Frontmatter
[More information](#)

Contributors xi

- ANDREW PAWLEY Australian National University
ERIC PEDERSON University of Oregon
PAMELA PERNISS Radboud University, Nijmegen, Max Planck Institute for
Psycholinguistics, and DCAL, University College London
DAN I. SLOBIN University of California, Berkeley
BARBARA TVERSKY Stanford University and Columbia Teachers College
CHRISTIANE VON STUTTERHEIM Ruprecht-Karls-Universität Heidelberg
PHILLIP WOLFF Emory University
JEFFREY M. ZACKS Washington University
PIENIE ZWITSERLOOD Westfälische Wilhelmsuniversität Münster

Cambridge University Press

978-0-521-89834-8 - Event Representation in Language and Cognition

Edited by Jurgen Bohnemeyer and Eric Pederson

Frontmatter

[More information](#)

Acknowledgments

The origins of this volume lie in the Event Representation project at the Max Planck Institute for Psycholinguistics. From 2000 to 2004, this project brought together researchers studying lesser documented languages in the field and scholars studying child language development to explore universals and variation in how events are described across languages. Several of the contributing authors were members or external collaborators of this project (Bohnemeyer and Bowerman jointly directed the project and Brown, Eisenbeiß, Enfield, Essegbey, Kita, Narasimhan, Pederson, and Slobin participated) or members of institute research projects on co-speech gesture, language production, multilingualism, and sign language who collaborated with Event Representation (Dobel, Gullberg, Özyürek, Perniss). The Max Planck Institute for Psycholinguistics is unique in the breadth of the different approaches to the interface between language and cognition its researchers are able to provide. The multifaceted perspective that is the result of this breadth is well reflected in the present collection. Moreover, the research presented in five of the ten chapters of the body of the book was wholly or in part funded by the Max Planck Society (Bohnemeyer *et al.*, Dobel *et al.*, Gullberg, Özyürek, and Perniss, Slobin *et al.*).

The Event Representation project was highlighted by two workshops dedicated to the topic of event encoding in language and mind. These workshops brought together participants of the project and some of the premier scholars of event representations in linguistics, psychology, and philosophy from outside the project. The first of these was organized by Bohnemeyer at the Max Planck Institute in Nijmegen in 1999; the second in 2004 was organized by Pederson and Russell S. Tomlin, of the University of Oregon, as well as by Bohnemeyer. This second symposium was sponsored by the University of Oregon Foundation, the University of Oregon College of Arts and Sciences, and the Department of Linguistics.

As for the current volume, the chapters by Bohnemeyer *et al.*, Dobel *et al.*, Loucks and Pederson, and Pawley all evolved out of presentations at the Eugene symposium. Carroll and von Stutterheim and Wolff likewise presented from their ongoing research on event representation in language and

Cambridge University Press

978-0-521-89834-8 - Event Representation in Language and Cognition

Edited by Jurgen Bohnemeyer and Eric Pederson

Frontmatter

[More information](#)

Acknowledgments

xiii

cognition in Eugene. Zacks and Tversky's joint research was presented on both occasions (by Tversky in Nijmegen and by Zacks in Eugene). It was during the Eugene symposium that the idea for this volume was conceived. It was clear from the beginning that the goal would be a record, not so much of the proceedings of the symposium, but rather of the state of the art in research on the relation between linguistic and cognitive event representations. Consistent with this, however much the current volume may trace a history back to this symposium, the chapters reflect a broad body of scholarship far beyond the original conference.

We would like to thank the contributors, the editors in charge of the project at Cambridge University Press, Helen Barton and Joanna Garbutt, and the series editor Steve Levinson. We should particularly thank Levinson, who in his capacity as Director of the Language and Cognition research group at the Max Planck Institute for Psycholinguistics instigated the Event Representation project, made it possible, and served as a source of ideas and advice throughout its development. We would also like to thank the two anonymous reviewers of the book proposal for their valuable suggestions for improvement, Carolyn O'Meara for compiling the bibliography, Randi Tucker for assistance during the proofreading process, and Linda Konnerth and Holly Lakey for producing the index, and Jill Lake for meticulous and impeccable copy-editing. In the end, this volume has been the product of the efforts of many individuals contributing in many different ways.