Reviewing Linguistic Thought

Trends in Linguistics

Studies and Monographs 161

Editors

Walter Bisang
Hans Henrich Hock
(main editor for this volume)
Werner Winter

Mouton de Gruyter
Berlin · New York

Reviewing Linguistic Thought

Converging Trends for the 21st Century

Edited by

Sophia Marmaridou
Kiki Nikiforidou
Eleni Antonopoulou

With the assistance of

Angeliki Salamoura

Mouton de Gruyter
Berlin · New York

Mouton de Gruyter (formerly Mouton, The Hague)
is a Division of Walter de Gruyter GmbH & Co. KG, Berlin.

Library of Congress Cataloging-in-Publication Data

Reviewing linguistic thought : converging trends for the 21st century / edited by Sophia Marmaridou, Kiki Nikiforidou, Eleni Antonopoulou with the assistance of Angeliki Salamoura.
p. cm – (Trends in linguistics. Studies and monographs ; 161)
Includes bibliographical references and index.
ISBN 3-11-018364-1 (hardcover : alk. paper)
1. Linguistic analysis (Linguistics) 2. Linguistic – Methodology. I. Marmaridou, Sophia S. A. II. Nikiforidou, Kiki, 1961– III. Antonopoulou, Eleni, 1948– IV. Series.
P126.R48 2005
410–dc22
200501133

ISBN 3-11-018364-1

Bibliographic information published by Die Deutsche Bibliothek

Die Deutsche Bibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data is available in the Internet at <http://dnb.ddb.de>.

Cover design: Christopher Schneider, Berlin
Printed in Germany.

In memory of A.-F. Christidis

for his wise inquiries into the past
and insightful breakthroughs into the future
of linguistic thought

Acknowledgements

This volume was realized with the help of several people. First of all we would like to thank all authors for their contributions and cooperation, the editors of the series for making the whole project possible, and an anonymous reviewer for constructive criticism and comments. We would also like to acknowledge our debt to the following colleagues who have generously given of their time and expertise to review and comment upon the contributions anonymously: J. Cummins, B. Dendrinos, Th. Fretheim, R. Maldonado, A. Mozer, S. Pagoni, A. Panara, I. Philippaki-Warburton, G. Senft, M. Sifianou, I. Tsimpli, K. Turner, and J. Veloudis. We gratefully acknowledge the contribution of E. Ifantidou in the introduction to Part V, and of M. Sifianou for comments on the introduction to Part IV. Moreover, our thanks extend to M. Drossou for editorial assistance with the original manuscript. Finally, we would like to express our thanks to Anke Beck, Birgit Sievert and Monika Wendland of Mouton de Gruyter for their encouragement, cooperation, and expert editorial advice.

Contents

List of Contributors

Antonopoulou, Eleni	University of Athens, Greece echanton@enl.uoa.gr
†Christidis, Anastasios Phivos	University of Thessaloniki, Greece
Cornillie, Bert	KU Leuven, Belgium bert.conrillie@arts.kuleuven.ac.be
Enfield, Nick	Max Planck Institute for Psycholinguistics, Nijmegen, The Netherlands Nick.Enfield@mpi.nl
Georgiafentis, Michalis	University of Reading, UK m.georgiafentis@reading.ac.uk
Ifantidou, Elly	University of Athens, Greece ifelly@enl.uoa.gr
Jaszczolt, Katarzyna	University of Cambridge, UK kmj21@cam.ac.uk
Kallia, Alexandra	University of Tuebingen, Germany alexandra.kallia@uni-tuebingen
Kitis-Koutoupi, Eliza	University of Thessaloniki, Greece ekitis@enl.auth.gr
Kurteš, Svetlana	University of Cambridge Language Centre, UK sk253@yahoo.com
Lascaratou, Chryssoula	University of Athens, Greece chlascar@enl.uoa.gr
Leezenberg, Michiel	University of Amsterdam, The Netherlands leezenb@hum.uva.nl

Marmaridou, Sophia	University of Athens, Greece smarmari@enl.uoa.gr
Nikiforidou, Kiki	University of Athens, Greece vnikifor@enl.uoa.gr
Panther, Klaus-Uwe	Hamburg University, Germany panther@uni-hamburg.de
Salamoura, Angeliki	University of Cambridge, UK as350@cam.ac.uk
Sweetser, Eve	University of California at Berkeley, USA sweetser@cogsci.berkeley.edu
Terkourafi, Marina	The British School at Athens, Greece and University of Cambridge, UK mt217@cam.ac.uk
Thornburg, Linda	Hamburg University, Germany KUPanther@t-online.de
Tsangalidis, Anastasios	University of Ioannina, Greece atsangal@cc.uoi.gr, tasostsa@hotmail.com
Walters, Joel	Bar-Ilan University, Israel waltej@netvision.net.il
Wilson, Deirdre	University College London, UK d.wilson@linguistics.ucl.ac.uk

Introduction

Converging trends for 21st century linguistics: A theoretical background

In May 2002, an international linguistics conference was organized by the Faculty of English Studies of the University of Athens. The theme of the conference *Reviewing linguistic thought: Perspectives into the 21st century* was motivated by the widely acknowledged separation of twentieth century linguistics into different theoretical frameworks, very often incompatible and sometimes incommensurate, each pursuing distinct goals and focusing on different areas of language analysis. Such division, perhaps not so surprising for a discipline in its first century as an autonomous scientific endeavor, has characterized linguistics throughout and has led, more often than not, to a complete lack of feedback and interaction among the different approaches. In the last part of the past century, however, work originating in different parts of the academic community has in fact promoted interaction in different ways: Either by explicitly exploring overlapping areas of interest and common ground among the different theoretical perspectives, or by relaxing some of the strict dichotomies developed within the dominant theories, opening up venues of rapprochement and cross-talk with other approaches and with other disciplines. The aim of the conference was to provide a forum for this otherwise disparate work and bring forward some of the common directions that emerge.

In the second half of the twentieth century, the dominance of generative grammar in all its different forms (from *Aspects* (Chomsky 1965) to the *Minimalist Program* (Chomsky 1995)) is indisputable. In the words of Smith (foreword in Chomsky 2000: vi), "You may not agree with Chomsky's work, but it would be both short-sighted and unscholarly to ignore it." Equally indisputable is the fact that some of the central concepts of the generative theory have forged the discipline in significant ways. The competence – performance distinction and the insistence of generative grammarians on competence as the domain proper of linguistic analysis (Chomsky 1965; Chomsky and Lasnik 1993) have been stated in absolute terms that precluded any sort of integration. Regardless of whether the competence – performance dichotomy has been interpreted as excluding semantics (and certainly pragmatics) from competence (see Schank and Birnbaum

1984; Lakoff 1986 for such an interpretation),[1] or as drawing a sharp distinction between linguistic theory and language processing, it has in effect severed the lines of communication between linguistics and psycholinguistics as the study of language production and understanding, and between mainstream generative linguistics and other theories that take semantics and pragmatics to have an effect on syntactic analysis. The same result was effected by the explicit emphasis of generative linguistics on syntax, which was preserved in all the different forms that the theory has taken through the years. Coupled with the Fodorian view of the modularity of mind (Fodor 1983),[2] that considers syntax completely autonomous and inaccessible to semantics, the "syntactocentrism" of generative linguistics (see Jackendoff 2002: 107–111; Croft 1995) has strengthened further the dividing lines between mainstream linguistics and other approaches. At the same time, the Fregean tradition in the analysis of meaning, which was fully endorsed by generative theory, has drawn another sharp line between semantics and pragmatics as different levels of structure on the assumption that linguistic meaning on the one hand and contextualized meaning on the other are essentially distinct and always distinguishable.

It may be true that some of Chomsky's recent observations (Chomsky 2004a, 2004b) point to a different direction from that taken for granted so far. When he states, for example, that "we can seriously entertain the possibility that the means of generation of structured expressions might be reducible to language-independent principles, whether or not there are homologous elements in other domains and organisms", he seriously undermines the modularity thesis, as assumed till now. Similarly, the statement that "adoption of a Principles and Parameters framework overcomes a difficult conceptual barrier to shifting the burden of explanation from the factor 'genetic endowment' to the factor 'language-independent principles of data processing, structural architecture, and computational efficiency'..." imposes, if nothing else, a different reading of the P and P framework from that dominating the generative but also the non-generative literature. However, even if such statements produce an unexpected convergence with other theoretical frameworks, the fact remains that the theses and dichotomies discussed above, as representative of the generative paradigm, have dominated theoretical linguistics for a long time.

Already in the last part of the 20th century, these dichotomous views have been transcended in the context of non-mainstream frameworks, although alternative approaches have tended to remain more marginal. Such alternative approaches are roughly classifiable in two groups: those that explicitly reject the strict separation of components and the modular view

of language, according to which the output of one component is related to another component via linking rules, and those which, although maintaining the separation, have shifted the emphasis from the components to their interaction and to the study of the interfaces between them. Cognitive Linguistics and Construction Grammar (in its different forms) are representative of the first trend, while recent work by Ray Jackendoff (1997, 2002) within the generative tradition is representative of the second. Both of these lines of research can arguably contribute toward a greater unity within linguistics and a more substantial cross-talk with other disciplines.

The papers in this volume are in fact united in their exploration of alternative approaches as outlined above, and in overriding specific theoretical constraints imposed by the dominant generative paradigm. The alternative landscape, as represented in the present work, is inspired by recent work within different theoretical trends and frameworks which, despite its divergence, shares certain commitments and converges on new desiderata for linguistic theory. Highly influential in this regard has been recent work by Jackendoff who, although working close to the generative paradigm, seriously questions some of its prevalent assumptions. One such assumption is that the only source of combinatoriality in language is the syntactic component. In a line of work culminating in Jackendoff (2002) (see also Jackendoff 1992, 1994, 1997) it is instead argued that the language faculty should be described in terms of multiple generative components (semantics, syntax, phonology) which are aligned with each other by a collection of interface systems (Jackendoff 2002: ch.5). In this context, syntax has no longer priority over the other components as the only source of generativity. At the same time, the emphasis is now placed on the interface *components* (as opposed to simple interfaces) and their special kind of rules, which are qualitatively different from generative and derivational rules. The lexicon is viewed as an essential part of the interface components. This *parallel architecture* (see also Jackendoff 1997) leads to a greater integration within linguistics since it strives to make clear the interconnections among phonology, syntax, and semantics and eliminates the syntactocentrism of mainstream generative grammar which, as noted above, has had a dividing influence. As Jackendoff (2002: xii) observes, this framework allows one to see the virtues of other approaches to grammatical theory currently on the market and as such "offers the hope of restoring some degree of much needed unity to the field of linguistics".[3] Across disciplines as well, the parallel architecture model provides a connection with language processing since it can be translated directly into a processing model where the interface systems have a prominent role. The competence – performance

distinction is thus reduced to a "soft", or methodological, division (Jackendoff 2002: 34) as opposed to an ideological one, and cross-talk among a theory of competence, a theory of performance (i.e. language processing) and a theory of neural instantiation becomes feasible and should be welcome.[4] Finally, another relaxed boundary in Jackendoff's work is that between linguistic meaning (semantics) and conceptualization, one facet of which has been the strict separation of semantics and pragmatics. As argued in several of his works, both the *dictionary* vs. *encyclopedia* approach to lexical semantics (only the former being part of semantics proper) and the truth conditional vs. non-truth conditional division (the former being semantics, the latter pragmatics) are not always attainable.

Although Jackendoff's work has been perhaps more audible in mainstream approaches, some of the same objections toward the dominant framework have been raised early on within the framework of Cognitive Linguistics, already in the early 80's.[5] Cognitive Linguistics has been a substantial part of the alternative picture, placing into serious doubt some of the generativist views, and converging over the years, independently and in parallel, with Jackendoff's more mainstream views. Considering certain of the guiding assumptions in Langacker's Cognitive Grammar (Langacker 1987, 1991, 2000),[6] we can easily identify such converging points. Cognitive Grammar is, for instance, a usage-based model of linguistic analysis, in which "substantial importance is given to the actual use of the linguistic system and a speaker's knowledge of this use; the grammar is held responsible for a speaker's knowledge of the full range of linguistic conventions, regardless of whether these conventions can be subsumed under more general statements" (Langacker 2000: 91). Although motivated by different considerations from those of Jackendoff, the competence – performance distinction is thus overridden in the cognitive framework as well. Further, Cognitive Grammar is a symbolic system in which semantic structures are symbolized by phonological ones, thereby also forming a kind of parallel architecture. However, Langacker's version of linguistic analysis does not recognize a syntactic component, essentially claiming that morphology and syntax are symbolic in nature (that is, they consist of mappings between the semantic and phonological levels). Another dichotomy which is severely questioned in Cognitive Grammar (and, in fact, in all of Cognitive Linguistics) is that between the grammar and the lexicon. The constructional approach to language, according to which morphemes, lexical items, and more productive patterns are all treated as constructions (i.e. form-meaning pairings), imposes a view of language where the lexicon, morphology, and syntax form a continuum.[7] Finally, in line with the earlier work in frame

semantics (Fillmore 1976, 1977, 1985) the insights of which are explicitly incorporated into Cognitive Linguistics (see also "Part I: Relaxing level boundaries"), it is assumed that there can be no precise delimitation between semantics and pragmatics. The same conclusion, as noted before, is also reached by Jackendoff who, like cognitive linguists, recognizes that meaning should be identified with conceptual structure.

The conceptual view of linguistic meaning and the relationship of semantics to pragmatics that it implies has concerned certain theories which are otherwise considered formal semantic approaches. One such theory is Discourse Representation Theory (Kamp and Reyle 1993) and its development in the framework of Default Semantics (Jaszczolt 1999) – see also "Part II: Focusing on level interaction"). In the context of the present discussion, it is important to note that the flexibility of such approaches allows some cross-talk with theories which assume a conceptual basis for semantics. For example, there is a parallel to be found in the role played by the DRT notion of *discourse referents* and by Jackendoff's *indexical features* which figure in his account of reference and deixis (Jackendoff 2002: 310–314). Similarly, Jackendoff's theory of reference, being conceptual rather than objectivist in nature, shares a common basis with Fauconnier's theory of mental spaces developed within cognitive linguistics (Fauconnier 1997; Fauconnier and Turner 2002 – see also "Part I: Relaxing level boundaries"). Having rejected early on the constraints of the objectivist tradition, mental space theory is expectedly more developed, nevertheless there are obvious similarities motivated by the fact that in both approaches the conceptualization of the world by the speaker underlies any referential claims made by a sentence.

We may then conclude that the alternative landscape we are attempting to sketch is more productively served by theories and approaches which, to a higher or lesser degree, question the sharp theoretical distinctions of the generative paradigm and of formal semantics. And in such theories one can find explicit concern for other theoretical perspectives which may have converging interests or share underlying assumptions (see "Part III: Drawing on different theories"). The affinity of Cognitive Linguistics to functional linguistics is, for example, attested by many conferences and a great amount of literature which explores phenomena from a cognitive-functional perspective. Similarly, Jackendoff's recent work, as already shown, explicitly explores possible links and connections to other theories, both grammatical and semantic. It is also such approaches that open the way for an interdisciplinary perspective and form substantive links between linguistics, psycholinguistics and sociolinguistics. The psycholinguistic and cognitive

science connection has already been noted with respect to Jackendoff's work and it is of course evident in Cognitive Grammar, whose conceptual descriptions (i.e. the meaning pole of the meaning–sound pairs) are most often couched in psychological distinctions and terms. From the opposite direction, recent work in cognitive science (e.g. Edelman 1992; Damasio 1999) also urges toward a reconsideration of some of the basic assumptions in the generative tradition (see "Part IV: Exploring field interaction" and "Part V: Interdisciplinary perspectives on modularity"), strongly suggesting that input from cognitive science into linguistics is perhaps long overdue.

Finally, the social perspective (see "Part IV: Exploring field interaction") has been integrated in linguistic theory most prominently in the context of historical linguistics. Apart from earlier and more recent work by Labov (1972, 1994), we may also cite work by Croft (2000) suggesting that any linguistic theory must have as a starting point the triangle of form–meaning and the community in which the form-meaning pairing is conventional. Pervasive at all points of the triangle is variation, which unifies all facets of language and characterizes all levels of analysis (semantics, syntax, phonology, as well as the social pole). In this view, language universals are not absolute principles, but universals constraining variation. Importantly, even in theories which suggest that semantic representations and conceptual representations cannot be identical, or even homomorphic, it is still recognized that they cannot be extremely remote either; the concepts available in the vocabulary of conceptual representations should be intertranslatable with the concepts available in semantic representations (Levinson 1997, 2003). Preliminary results from detailed field-work indicate that there is a clear correlation between verbal description and non-verbal cognition (in particular memory and inferencing).

The preceding discussion does not by any means cover the part of linguistics that we may think of as non-generative; it simply sketches those trends that are most prominently represented in this volume. What we aimed at is to show that even in this limited scope, such apparently disparate theoretical perspectives are in fact united in their undermining of certain generative assumptions that have dominated 20th century linguistics. They are further united in their concern for a truly interdisciplinary perspective in linguistic analysis. This concern might, in turn, be taken as a natural correlate of their sidestepping the heavy inheritance of the generative paradigm and the sharp dichotomies it has promoted for a long time. In this, the work in this volume may be said to lay out some converging trends for linguistics in the new century.

The present volume is organized along the themes outlined above. "Part I: Relaxing level boundaries" includes work which, in questioning the feasibility of maintaining sharp boundaries between the traditional levels of analysis, represents the most radical departure from the generative paradigm. Since all papers here draw to a greater or lesser extent on the theoretical stands and findings of Cognitive Linguistics, the introduction to this Part includes a brief presentation of the basic tenets of this particular framework and the ways in which it relates to the different papers. "Part II: Focusing on level interaction" includes papers which explore the interaction of different levels, most prominently semantics and pragmatics, assuming however a clear delimitation of each level. Discourse Representation Theory, as an example of a framework which deals with the semantics – pragmatics interface par excellence, is outlined briefly alongside other approaches, such as Default Semantics, which also relate directly to the relationship of semantics to pragmatics. Links are further drawn from this theoretical background to the individual papers, highlighting points of convergence. "Part III: Drawing on different theories" features papers which draw explicitly on different theoretical frameworks in analyzing linguistic phenomena. As noted before, the feasibility of such an approach also rests on the relaxation of the sharp dichotomies in the mainstream models of linguistic analysis. In the papers in this Part, Gricean and Neo-Gricean pragmatics, Practice Theory, Halliday's functionalism and Cognitive Linguistics (central tenets of all of which are sketched briefly as background to this Part) converge and complement each other in explicating different sets of data.

"Part IV: Exploring field interaction" highlights the interdisciplinary perspective in this volume, bringing together papers which look simultaneously at psychological and social aspects of natural language phenomena. The private and the public sides of human language are explored in depth with respect to issues in the history of linguistics and data from linguistic change, bilingualism and politeness, illustrating one of the clearly emerging and solidifying trends in modern linguistics. Indeed, the realization that a thorough investigation of natural language phenomena requires recourse to different disciplines seems to be a clear consensus among different theoretical perspectives, as they were outlined in all of the preceding discussion. The same trend toward an interdisciplinary perspective is further evidenced in "Part V: Interdisciplinary perspectives on modularity". The contributions in this Part maintain a modular approach to language study, in particular to pragmatic study within the framework of Relevance Theory (Sperber and Wilson 1995), but at the same time acknowledge fully the need for input

from cognitive science and experimental psycholinguistics. The present work lays out specific suggestions and testable hypotheses in this direction, paving the way for a substantive interdisciplinary approach to linguistic research.

Notes

1. According to Jackendoff (2002: 33), this is a wrong interpretation of Chomsky's original intention, since semantics was not meant to be excluded from competence.
2. For an update of this view, which appears to constrain considerably the initial claim, see also Fodor (2000).
3. Jackendoff (2002: 194–195) discusses in fact some features shared by his approach and other theories such as HPSG (cf. Pollard and Sag 1994) and Construction Grammar (cf. Fillmore and Kay 1993 – see also Goldberg 1996 on the relation between Jackendoff's approach and Construction Grammar).
4. For an explicitly opposing view arguing for the maintenance of a strict competence – performance distinction, see Newmeyer (2003). See also Clark (2005), Laury and Ono (2005), and Meyer and Tao (2005) for a critical discussion of Newmeyer (2003).
5. Since several papers in this volume draw directly on the cognitive linguistic theory, it will be introduced in more detail in "Part I: Relaxing level boundaries".
6. Cognitive Grammar is only one approach within cognitive linguistics. However, for the purposes of the present discussion we may take it as representative of views, which are widely accepted in the cognitive paradigm.
7. Distinct but related versions of constructional approaches are also employed by Fillmore and Kay (Fillmore, Kay, and O'Connor 1988; Kay and Fillmore 1999) and Goldberg (1995). Jackendoff (2002: 178–182) suggests that while it is too soon to tell how this "consolidation program" will work out, it nevertheless sets "an interesting agenda for future research".

References

Chomsky, Noam

1965 *Aspects of the Theory of Syntax*. Cambridge, MA: MIT Press.

1995 *The Minimalist Program*. Cambridge, MA: MIT Press.

2000 *New Horizons in the Study of Language and Mind*. Cambridge: Cambridge University Press.

2004a Three factors in language design: Background and prospects. Lecture given at the LSA Annual Meeting, January 2004.
2004b Biolinguistics and the human capacity. Lecture given at the University of Athens, April 2004.

Chomsky, Noam, and Howard Lasnik
1993 The theory of principles and parameters. Reprinted in Chomsky 1995.

Clark, Brady
2005 On stochastic grammar. *Language* 81: 207–217.

Croft, William
1995 Autonomy and functionalist linguistics. *Language* 71: 490–532.
2000 *Explaining Language Change: An Evolutionary Approach*. Harlow, Essex: Longman.

Damasio, Antonio
1999 *The Feeling of What Happens: Body, Emotion and the Making of Consciousness*. London: Heinnemann.

Edelman, Gerald
1992 *Bright Air, Brilliant Fire: On the Matter of Mind*. London: Allen Lane Penguin Press.

Fauconnier, Gilles
1997 *Mappings in Thought and Language*. Cambridge/New York: Cambridge University Press.

Fauconnier, Gilles, and Mark Turner
2002 *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities*. New York: Basic Books.

Fillmore, Charles J.
1976 Frame semantics and the nature of language. In *Origins and Evolution of Language and Speech*, Stevan R. Harnad, Horst D. Steklis, and Jane Beckman Lancaster (eds.), 20–32. New York: New York Academy of Sciences.
1977 Scenes-and-frames semantics. In *Linguistic Structure Processing*. Antonio Zampolli, (ed.), 55–81. Amsterdam: North Holland.
1985 Frames and the semantics of understanding. *Quaderni di Semantica* 6: 222-253

Fillmore, Charles, and Paul Kay
1993 *Construction Grammar Coursebook*. Berkeley: Department of Linguistics, University of California.

Fillmore, Charles, Paul Kay, and Mary C. O'Connor
1988 Regularity and idiomaticity in grammatical constructions: The case of *let alone*. *Language* 64 (3): 501–538.

Fodor, Jerry
1983 *The Modularity of Mind*. Cambridge, MA: MIT Press.
2000 *The Mind doesn't Work that Way*. Cambridge, MA: MIT Press.

Goldberg, Adele E.
1995 *Constructions: A Construction Grammar Approach to Argument Structure*. Chicago: The University of Chicago Press.
1996 Jackendoff and construction-based grammar. *Cognitive Linguistics* 7 (1): 3–19.
Jackendoff, Ray
1992 *Languages of the Mind*. Cambridge, MA: MIT Press.
1994 *Patterns in the Mind: Language and Human Nature*. New York: Basic Books.
1997 *The Architecture of the Language Faculty*. Cambridge, MA: MIT Press.
2002 *Foundations of Language: Brain, Meaning, Grammar, Evolution*. Oxford: Oxford University Press.
Jaszczolt, Katarzyna M.
1999 *Discourse, Beliefs, and Intentions: Semantic Defaults and Propositional Attitude Ascription*. Oxford: Elsevier Science.
Kamp, Hans, and Uwe Reyle
1993 *From Discourse to Logic: Introduction to Modeltheoretic Semantics of Natural Language, Formal Logic and Discourse Representation Theory*. Dordrecht: Kluwer.
Kay, Paul, and Charles Fillmore
1999 Grammatical constructions and linguistic generalizations: The *What's X doing Y?* construction. *Language* 75 (1): 1–33.
Labov, William
1972 *Sociolinguistic Patterns*. Philadelphia: University of Pennsylvania Press.
1994 *Principles of Linguistic Variation, Vol. I: Internal Factors*. Oxford: Basil Blackwell.
Lakoff, George
1986 Frame semantic control of the coordinate structure constraint. *Chicago Linguistic Society, Papers from the 22nd Regional Meeting* 22: 152–167.
Langacker, Ronald W.
1987 *Foundations of Cognitive Grammar. Volume I: Theoretical Prerequisites*. Stanford, CA: Stanford University Press.
1991 *Foundations of Cognitive Grammar. Volume II: Descriptive Application*. Stanford, CA: Stanford University Press.
2000 *Grammar and Conceptualization*. Cognitive Linguistics Research 14. Berlin, New York: Mouton de Gruyter.
Laury, Ritva, and Tsuyoshi Ono
2005 Data is data and model is model: You don't discard the data that doesn't fit your model. *Language* 81: 218–225.

Levinson, Stephen C.
1997 From outer to inner space: Linguistic categories and non-linguistic thinking. In *Language and Conceptualization*, Eric Pederson and Jan Nuyts (eds.), 13–45. Cambridge: Cambridge University Press.
2003 *Space in Language and Cognition: Explorations in Cognitive Diversity*. Cambridge: Cambridge University Press.

Meyer, Charles F., and Hongyin Tao
2005 Response to Newmeyer's 'Grammar is grammar and usage is usage'. *Language* 81: 226–228.

Newmeyer, Frederick
2003 Grammar is grammar and usage is usage. *Language* 79: 682–707.

Pollard, Carl, and Ivan Sag
1994 *Head-Driven Phrase Structure Grammar*. Chicago: University of Chicago Press.

Schank, Roger, and Lawrence Birnbaum
1984 Memory, meaning and syntax. In *Talking Minds: The Study of Language in the Cognitive Sciences*, Thomas Bever, John M. Carroll, and Lance Miller (eds.), 209–251. Cambridge MA: MIT Press.

Sperber, Dan, and Deirdre Wilson
1995 *Relevance: Communication and Cognition*. 2nd edition. Oxford: Blackwell.

Part I

Relaxing level boundaries

A radical departure from the generative paradigm and its defining assumptions is evidenced in theoretical frameworks which, rather than simply focusing on level interaction and the relevant interfaces, question the feasibility of maintaining sharp boundaries between the different levels of analysis. Such frameworks include various functionalist approaches (for an overview see Croft 1995) as well as the various trends within the Cognitive Linguistics paradigm. The papers in Part I share in fact a commitment to basic tenets of Cognitive Linguistics, providing analyses which take full advantage of the blurring of level boundaries.

A marked difference between theories falling within the mainstream generative paradigm and other, more recently developed ones, which distance themselves from it, is the relation they assume to exist between the classical levels of linguistic analysis (phonological, syntactic, semantic) as well as with pragmatics and the context of the utterance. In particular, the generative paradigm treats such levels as autonomous, while opposing approaches relax the boundaries between them. An equally controversial point is the relation between grammar and lexicon, for which the generative tradition also postulates a sharp distinction (for a detailed review of these issues see Jackendoff 2002 and the Introduction to this volume). Cognitive Linguistics can be considered a prominent representative of the theories questioning the existence of strict boundaries between the levels of syntax, semantics, and pragmatics or, indeed, between lexicon and grammar.

Cognitive Linguistics is a cover term for a set of diverse approaches to linguistic analysis which emerged in the 1970s in reaction to the putative autonomy of syntax (as postulated by the mainstream generative model), and the necessary and sufficient conditions account of linguistic meaning, in accordance with truth conditional semantics (Croft and Cruse 2004). Evidence accumulating against the premises of the dominant theories of the time pushed in the direction of reconsidering the relation between language as a meaningful system and other manifestations of (human) structuring of information. Regardless of the framework they work in, all cognitive linguists attribute center stage to the analysis of meaning, fully acknowledging

its conceptual basis and the ability of speakers to construe a situation in alternative ways.

Despite the existence of different frameworks within Cognitive Linguistics, most theories falling within its domain can be therefore seen as sharing certain interrelated tenets and goals. For cognitive linguists in general, language is not an autonomous system, but an integral part of cognition which reflects the interaction of psychological, cultural, communicative and functional characteristics. It follows that cognitive linguists are more interested in what is known about human cognition and the psychological plausibility of attempted linguistic analyses and less in the formal representation of linguistic knowledge. Furthermore, linguistic phenomena are meaningful since, as noted above, they reflect conceptual structure. They are neither arbitrary nor strictly predictable (Janda 2000: 5; Croft 2000). The cognitive linguist is interested in accounting for their actual motivation (their grounding in experience and the human cognitive abilities of processing that experience) rather than in representing the phenomena through abstract, uninterpreted symbols and algorithmic processes. It is probably for this reason that Cognitive Linguistics is often seen as a theory of meaning, although cognitive analyses have been given to phenomena pertaining to all levels of linguistic analysis, from phonology to discourse.

In its attempt to explain meaning by studying the implied models human beings use to structure information (Oakley 1998: 321), Cognitive Linguistics has been heavily influenced by the pioneering work on human categorization of the cognitive psychologists E. Rosch and C.B. Mervis (Rosch 1975, 1977, 1978, 1981; Rosch and Mervis 1975; Mervis and Rosch 1981), and the philosophical tradition of *experientialism*, i.e. the view that linguistic meaning cannot be described independently of the nature and experience of the organisms doing the thinking (for a comprehensive discussion see Lakoff and Johnson 1999). The experientialist philosophical background motivates the claim that mental and linguistic categories are embodied, i.e. created on the basis of our shared human experience of bodily existence. With respect to human categorization, Cognitive Linguistics rejects the traditional Aristotelian account of categories as being discrete and definable on the basis of the co-presence of a specific set of properties. It accepts Rosch's account of categories as often having fuzzy boundaries and being radial, i.e. consisting of a prototypical, central member and peripheral, less salient ones related to the prototype via family resemblance (Wittgenstein 1953), rather than sharing with each other necessary and sufficient conditions. In other words, categories have internal structure and yield prototype effects resulting in the presence of more and less characteristic members.

This is in accordance with the results of empirical research in cognitive psychology and neurobiology and is also used to explain cross-linguistic differences: the contents and structure of categories vary from one language to the next and, therefore, distinct conventional categorizations may exist in each language reflecting different socio-cultural preferences.

In a broader perspective, Cognitive Linguistics accepts that linguistic phenomena are motivated by "everything we can be aware of, especially our own mental states, our bodies, our environment, and our physical and social interactions" (Lakoff and Johnson 1999: 103).[1] If meaning is embodied in this sense, it follows that language does not reflect any objective reality, but rather what our perceptual apparatus provides as input and what our general cognitive abilities make of this input; what language reflects is reality as a product of the human mind, not as an objective, disembodied truth. Emphasis is therefore given to linguistic meaning as construal: the same event can be differently construed by different speakers (or by the same speaker at different points in time). A variety of linguistic constructions is available in each language for the speaker to use in order to communicate her own physical and mental experience even of a single event.

In accordance with the above mentioned tenets, Cognitive Linguistics claims that all linguistic units "are abstracted from usage events, i.e. actual instances of language use" and that "each such event consists of a comprehensive conceptualization comprising an expression's full contextual understanding, paired with an elaborate vocalization, in all its phonetic detail" (Langacker 2001: 151). This usage-based view of language underlies all levels of linguistic analysis, which are seen as forming a continuum, rather than strictly separate, discrete components. In Langacker's (1987: 3) terms, lexicon, morphology and syntax form a "continuum of symbolic structures which differ along various parameters but can be divided into separate components only arbitrarily." At the same time, the full contextual understanding implies a view of linguistic semantics as being encyclopedic in scope. The lack of a precise delimitation between semantics and pragmatics represents in fact one of the major (and earlier) departures of Cognitive Linguistics from the formal semantics tradition, in accordance with other approaches that have more recently come to espouse explicitly the same view (Wierzbicka 1996; Jackendoff 2002).

The view of lexicon, morphology and syntax as forming a continuum is reflected in the recently revived concept of *grammatical construction*. While the term *Construction Grammar* was first used by Fillmore and Kay (Fillmore, Kay, and O'Connor 1988; Kay and Fillmore 1999; Fillmore, Kay, Michaelis, and Sag 2003; also Goldberg 1995), construction-based

accounts are given in several models of analysis within Cognitive Linguistics (e.g. Langacker 1987, 1991; Croft 2001). Construction grammarians often have differing views on the levels needed to characterize a construction and on the primacy of some levels with respect to others.[2] However, they all share the view that a construction is a conventional pairing of formal and semantic properties, which can be the size of a word or a morpheme (in the spirit of the Saussurean form-meaning pairs). Even more crucially, the construction can be a larger than the word unit onto which meaning is mapped directly. Even though the meaning of a construction as a whole may combine in rather predictable ways with the meanings of specific lexical items, it is not always the case that the constructional meaning can be compositionally attributed to the meanings of its component parts. Even if constructional meaning is fully predictable, construction grammarians still treat the relevant semasio-syntactic pattern as a unit, with an independent conceptual existence. In this view, the productive, syntactic rules of more traditional accounts correspond to the limiting case of constructions, that is, formal patterns associated with very abstract and general meanings.

The issue of meaning composition has been central to all frameworks in Cognitive Linguistics, which is known for its fine-grained semantic analyses. Most prominently, Mental Space Theory (Fauconnier 1985, 1997 – or, in its most recent version, Blending Theory (Fauconnier and Turner 2002)) has offered valuable insights into traditional problems pertaining to compositionality. Mental Space Theory seeks to provide a detailed model of meaning construction which relies simultaneously on the cues given by linguistic forms themselves, on context, on structured background knowledge, and possibly other pragmatic factors. The idea is that linguistic constructions, and expressions in general, act as prompts for setting up particular *mapping schemes* (modification constructions, for instance, set up a special scheme for the conceptual integration of their component parts). In contrast though to formal semantic approaches, mapping schemes are only the first step in the composition of meaning. Meanings are the "imaginative products of blending" (Fauconnier and Turner 2002: 147) and are not predictable from the forms used to evoke them. In other words, mental space theory has shifted the emphasis from logical sentence meaning to the cognitive constructs which sentences simply set up – constructs like metaphorical projection, frame organization, roles, metonymic pragmatic functions, cognitive schemas, and cultural models. One or more of these determine the final interpretation (or the final blend), making it obvious that only a very small part of the final interpretation is directly encoded in language, inde-

pendent of context. In this respect, Mental Space Theory is not unlike Discourse Representation Theory (see the Introduction to this volume and also "Part III: Drawing on different theories"), in attempting to overcome the limitations of formal semantics and adopting a dynamic view of meaning composition, informed by all kinds of cognitive and pragmatic constructs.

Drawing on Construction Grammar and Blending Theory insights, **Sweetser** addresses directly the semantics-pragmatics boundary. As a cognitive linguist and a construction grammarian, Sweetser espouses the view that the semantics of natural language go far beyond truth-conditions and logical form. In "Putting the 'same' meaning together from different pieces", she points out that, if nothing else, Gricean and neo-Gricean pragmatics, Relevance Theory and Mental Space Theory have in recent years shown how little of the message is directly encoded in the linguistic structure itself, out of context. Although approaches may vary, no contemporary semanticist, she claims, can afford to ignore such concerns. Sweetser looks first at the conditional interpretations of conjoined structures with *and* and *or*, alongside regular *if*-conditionals, showing how such constructions can give rise to very similar readings, building, however, on the entirely different contributions of their component parts and through different paths of semantic composition. In arguing that semantic compatibility cannot always be determined by looking at conventional form-meaning pairings associated with lexical or grammatical constructions, she then turns to a different set of data showing that the resolution of even a simple semantic paradox may require recourse to a highly complex class of pragmatic contexts: while *even if* and *then* do not normally co-occur in concessive conditionals because of semantic incompatibility (see also Dancygier and Sweetser 1997), there are few (corpus-extracted) cases where they actually occur together. Such occurrences are precisely licensed by the contextual interpretability of the conditional apodosis in two ways, directly expressing one content and implicitly expressing another. As Sweetser shows, both the expressed and the unexpressed consequent are equally relevant to achieving a coherent reading of a concessive conditional with *then*. Detailed analysis of such constructions, Sweetser argues, can be therefore used as a laboratory, so to speak, for studying the ways in which speakers put form and meaning together in parallel, and for paving the way to a cognitively realistic approach to compositionality.

Many of the pragmatic functions which enter into the construction of blends and affect the composition of meaning overlap with phenomena which in traditional, but also in Cognitive Linguistic models, have been discussed under the heading of metonymy. Both metonymy (see Lakoff

1987; Panther and Radden 1999; Lakoff and Johnson 1999; Panther and Thornburg 2003) and metaphor (see Lakoff 1987; Lakoff and Johnson 1999; Gibbs 1994) have received special attention in the cognitive linguistic literature and for several years have become almost synonymous with cognitive semantics. In the context of blending theory, metonymy and metaphor are seen as setting special, more complex, kinds of blends. This aspect is explored productively in **Panther and Thornburg's** "Motivation and convention in some speech act constructions: A Cognitive Linguistic approach", which combines metonymy and blending with elements of Gricean and Neo-Gricean theories in the analysis of certain speech-act constructions and the implicatures they generate. Invoking the notion of metonymic reasoning, they analyze such constructions by arguing for two layers of meaning, source meaning and target meaning, connected through metonymic and cross-space links. Although all approaches in the Gricean tradition assume a sharp distinction between linguistic (semantic) and pragmatic meaning, the authors show that Grice's conversational implicatures are cognitive operations similar to metonymic mappings, recasting the notion of *indirect speech act* in Cognitive Linguistic terms. In particular, metonymy (like metaphor) appears to have neurological analogues. It is typically understood as a process whereby a part of an entity, or something closely related to it, stands for the entity itself (e.g., *Can you reach Jacobson on the top shelf?*, where the name of the author stands for the book). In general, easily retrievable elements of a unit (as redundant) need not be present; hence the explicit part(s) of the unit stand for the unit as a whole. In this sense, a reasoning, inferential operation is at work in metonymy similar to that in implicatures. In "*if*-requests" (*If you will close this door*), for instance, the request to actually close the door is (strictly speaking) implicit. The proposed analysis of four speech-act constructions along these lines provides a conceptual framework which is explicit enough to lead to testable hypotheses in the areas of experimental psycholinguistics, discourse analysis, and language acquisition.

The issues of relatedness of constructions and the possibility of motivating constructional polysemy through metaphor are raised in **Cornillie's** "Subjectivity in Spanish *esperar*-based constructions". Cornillie provides a detailed analysis of a case of polysemy, which is one of the issues Cognitive Linguistics has extensively researched. He distinguishes between deontic/volitional and epistemic interpretations of *esperar*, roughly corresponding to the meanings 'expect', 'wait' and 'hope', and identifies specific syntactic features which tend to correlate with one interpretation as opposed to another. Semi-modal *esperar* constructions are, for example, associated

with the meaning 'hope', while the transitive construction yields either an 'expect' or a 'wait' reading. He further examines *esperar* with a passive infinitival complement, suggesting that the presence of an agentless passive, combined with a special resultative copula (perfective marker *estar*), contributes to a speaker-oriented, subjectivised interpretation of *esperar* constructions. Contrary to Sweetser (1990), who argues for a metaphorical connection between deontic and epistemic meanings, Cornillie concludes that the volitional and epistemic readings originate in different constructional environments, rather than in metaphorical mappings between domains. Nevertheless, focus on the formal features which contribute to interpretation can be easily accommodated in a Construction Grammar approach, where, as previously discussed, the unit status of the construction does not preclude a compositional interpretation.

All in all, relaxing the sharp dichotomy between semantics and pragmatics has been productively explored by the papers in Part I, yielding fine-grained, predictive analyses of meaning. Similarly, constructional approaches – drawing simultaneously on syntactic and semantic/pragmatic information – may apply to the investigation of phenomena like subjectivity in a way that recognizes explicitly the contribution of each level.

Notes

1. Conceptual and linguistic universals are consequently expected to arise from the fact that human organisms share similar properties, while language specificity is predicted to arise from the fact that different environments and sociocultural norms impose different conceptualizations of the world.
2. For Langacker, for example, constructions are symbolic units in which semantic structures are symbolized by phonological structures. In this view, syntax is largely epiphenomenal, a position which is not espoused by Fillmore, Kay and Goldberg.

References

Croft, William

1995 Autonomy and functionalist linguistics. *Language* 71: 490–532.

2000 *Explaining Language Change: An Evolutionary Approach*. Longman Linguistics Library. Harlow, London: Pearson Education.

2001 *Radical Construction Grammar: Syntactic Theory in Typological Perspective*. Oxford: Oxford University Press.

Croft, William, and Alan D. Cruse
2004 *Cognitive Linguistics*. Cambridge: Cambridge University Press.
Dancygier, Barbara, and Eve Sweetser
1997 *Then* in conditional constructions. *Cognitive Linguistics* 8 (2): 109–136.
Fauconnier, Gilles
1985 *Mental Spaces: Aspects of Meaning Construction in Natural Languages*. Cambridge, MA: The MIT Press. Reprinted in 1994.
1997 *Mappings in Thought and Language*. Cambridge: Cambridge University Press.
Fauconnier, Gilles, and Mark Turner
2002 *The Way we Think: Conceptual Blending and the Mind's Hidden Complexities*. New York: Basic Books.
Fillmore, Charles, Paul Kay, and Mary C. O'Connor
1988 Regularity and idiomaticity in grammatical constructions: The case of *let alone*. *Language* 64 (3): 501–38.
Fillmore, Charles, Paul Kay, Laura A. Michaelis, and Ivan Sag
2003 *Construction Grammar*. Stanford, CA: Centre for the Study of Language and Information (distributed by the University of Chicago Press).
Gibbs, Raymond W. Jr.
1994 *The Poetics of Mind: Figurative Thought, Language and Understanding*. Cambridge: Cambridge University Press.
Goldberg, Adele E.
1995 *Constructions: A Construction Grammar Approach to Argument Structure*. Chicago: The University of Chicago Press.
Jackendoff, Ray
2002 *Foundations of Language: Brain, Meaning, Grammar, Evolution*. Oxford: Oxford University Press.
Janda, Laura
2000 *Cognitive Linguistics*. SLING2K Workshop.
Kay, Paul, and Charles Fillmore
1999 Grammatical constructions and linguistic generalizations: The *What's X doing Y?* construction. *Language* 75 (1): 1–33.
Lakoff, George
1987 *Women, Fire, and Dangerous Things: What Categories Reveal about the Mind*. Chicago: University of Chicago Press.
Lakoff, George, and Mark Johnson
1999 *Philosophy in the Flesh*. New York: Basic Books.
Langacker, Ronald W.
1987 *Foundations of Cognitive Grammar, Vol. 1: Theoretical Prerequisites*. Stanford: Stanford University Press.

1991 *Foundations of Cognitive Grammar, Vol. 2: Descriptive Application*. Stanford: Stanford University Press.

2001 Discourse in Cognitive Grammar. *Cognitive Linguistics* 12 (2): 143–188.

Mervis, Carolyn, and Eleanor Rosch

1981 Categorization of natural objects. *Annual Review of Psychology* 32: 89–115.

Oakley, Todd V.

1998 Conceptual blending, narrative discourse, and rhetoric. *Cognitive Linguistics* 9 (4): 321–360.

Panther, Klaus-Uwe, and Günter Radden (eds.)

1999 *Metonymy in Language and Thought*. Amsterdam/Philadelphia: John Benjamins.

Panther, Klaus-Uwe, and Linda Thornburg

2003 Introduction: On the nature of conceptual metonymy. In *Metonymy and Pragmatic Inferencing*, Klaus-Uwe Panther and Linda Thornburg (eds.), 1-10. Pragmatics and Beyond New Series. Amsterdam /Philadelphia: John Benjamins.

Rosch, Eleanor H.

1975 Cognitive representations of semantic categories. *Journal of Experimental psychology: General* 104: 192–233.

1977 Human Categorization. In *Studies in Cross-Cultural Psychology. Vol. I.* Neil Warren (ed.), 1-49. London: Academic Press.

1978 Principles of categorization. In *Cognition and Categorization*, Eleanor H. Rosch and Barbara Lloyd (eds.), 27–48. Hillsdale, NJ: Lawrence Erlbaum Associates.

1981 Prototype classification and logical classification: The two systems. In *New Trends in Cognitive Representation: Challenges to Piaget's Theory*, E. Scholnick (ed.), 73–86. Hillsdale, NJ: Lawrence Erlbaum Associates.

Rosch, Eleanor H., and Carolyn B. Mervis

1975 Family Resemblances: Studies in the internal structure of categories. *Cognitive Psychology* 7: 573–605.

Sweetser, Eve

1990 *From Etymology to Pragmatics: Metaphorical and Cultural Aspects of Semantic Structure*. Cambridge: Cambridge University Press.

Wierzbicka, Anna

1996 *Semantics: Primes and Universals*. Oxford: Oxford University Press.

Wittgenstein, Ludwig

1953 *Philosophical Investigations*. New York: Macmillan.

Putting the "same" meaning together from different pieces

Eve Sweetser

Abstract

Any two different words or phrases are apparently bound to be somewhat different in meaning: "synonyms" seem inevitably to turn out to be subtly distinct in semantics; and translation of any text, however brief – and whether to another language or to a rephrasing in the same language – always seems to alter meaning as well. And yet it is equally surprising that words and phrases which are very different in meaning can sometimes make apparently very similar contributions to a larger sentential or utterance meaning. I begin this paper by presenting a comparison between English conditionals conjoined with *if, and*, and *or* – and whose meanings are remarkably similar despite the clearly divergent meanings of the three conjunctions.

Perhaps even more interesting is the fact that the composition of meaning is free to make use of pragmatically present, as well as lexically expressed, material; so the "same" meaning contribution may be made by varied sources. The core of this paper is an analysis of the relationship between concessive conditional constructions and conditional *then*. *Even if* and *then* are generally understood to be incompatible; *Even if he commits a crime, then they'll vote for him* is ungrammatical, although the removal of *then* will restore it to grammaticality. Dancygier and Sweetser (1997) have argued that this incompatibility falls out from a mental spaces analysis of English conditional constructions. However, I shall here present some attested exceptions to that recognized regularity – attested *even if* conditionals with *then* marking the consequent clause – and explain how those apparent exceptions in fact provide added support for our proposed analysis of the constructions. In particular, I argue that the demands of *even* and *then* can only be fulfilled simultaneously in cases where there is an added inferable consequent (Q2) distinct from the expressed consequent Q (the *then*-clause). The focus of *even* and the scope of *then* are thus distinct. Unless this is the case, *then* really is incompatible with *even if* conditionals.

A semantics based on Mental Spaces Theory, and a grammatical analysis in terms of meaningful constructional units, are necessary to explain this data effectively. Similar mental space structures may be prompted or built in quite different

ways; and although linguistic constructions are cues for space-building, they are not the only cues – and may serve space-building very similarly to contextual material, or very differently from it.

Introduction: Linguistic theory and constructional meaning

How is meaning assembled and composed? What role does grammar play in this assembly? These are basic questions of modern linguistics. The scare quotes in my title indicate my own assessment that one cannot in fact put exactly the same meaning together from different pieces. Phrases, like morphemes, are never fully synonymous. And yet I shall present some cases here where remarkably dissimilar pieces can be assembled to form quite similar overall meanings. To examine how this can happen, I will need to invoke the interaction of lexical and constructional meanings with each other and with contextual inference.

Why is constructional meaning so important? Compositionality has been a central issue for modern linguistics, and a problematic one. As Bolinger (1977) so percipiently remarked, early generative linguistic models gave rise to a plethora of random and unexamined assignments of multiple polysemy to both lexical and grammatical morphemes. Although we now have good reason to believe that polysemy is the norm for meaningful linguistic elements,[1] the reason for such proliferation was often not what we would now regard as evidence for polysemy; rather, analysts were assuming a simplistic model of compositionality, wherein only the semantics of individual morphemes counted as input. The division between grammar and lexicon is still a basic one to many analysts; this demands that for any larger unit whose meaning is not predictable from the parts, either that added meaning should be explained by pragmatic inferential processes, or the whole larger unit should be given its own lexical entry as an idiom.

Such a dichotomy would in principle demand that we give separate lexical entries not only to idiomatic phrases such as *kick the bucket* (whose idiomatic meaning 'die' is clearly not predictable from that of its parts), but also to literal and non-idiomatic examples of the same verb in different constructions. For example, *kick* in *She kicked the wall* seems to mean only 'X use foot to make impact on Y', while *kick* in *She kicked the ball off the field* seems to mean 'X use foot to move Y on Z path, by impact'. This isn't just a difference in pragmatics between *wall* and *ball*; in fact, simple *She kicked the ball* doesn't necessarily mean the ball moved, although we can

infer it. But *She sneezed the napkin off the table* (cf. Goldberg 1995) does necessarily and conventionally mean that the napkin was caused to move off the table, even though *sneeze* is normally an intransitive verb without a semantics of impact or caused motion. As Goldberg argues, the English Caused Motion Construction carries a meaning of 'X causes Y to move on Z path' – a meaning which combines productively with verbal semantics to allow us to understand a novel usage such as *sneeze the napkin off the table.*

It seems crucial, therefore, to assess degrees of linguistic compositionality with tools which include assignment of meaning to grammatical constructions themselves, as making a compositional contribution to the meaning of larger units, alongside the meanings of specific morphemes and fixed phrasal units. Cognitive Linguistics and Construction Grammar have directly addressed questions of partial compositionality, grammatical polysemy, and motivational relations between constructions.[2] It has developed models well qualified to deal with many of the problematic cases which are so difficult to assign to the categories of lexicon vs. syntax vs. pragmatics, or idiomatic vs. compositional. In the early 21st century, I see these traditional categories being broken down and giving way to a more complex understanding of how linguistic meaning is put together.

Mostly, this paper will be analyzing some specific constructions. I shall primarily examine the relationship of conditional *if*-constructions to the use of scalar *even*; along the way, I shall be comparing *if*-conditionals to *and*-constructions and *or*-constructions which are formally different, but functionally similar in context. It is generally accepted (cf. Iatridou 1994) that conditional *then* is not compatible with *even if* concessive conditionals; *Even if he commits a crime, then they'll vote for him* is ungrammatical, although the removal of *then* will restore it to grammaticality. I have elsewhere argued (Dancygier and Sweetser 1997) that this incompatibility falls out from a mental spaces analysis of English conditional constructions. However, I shall here present some exceptions to that recognized regularity – attested *even if* conditionals with *then* marking the consequent clause – and explain how those apparent exceptions in fact provide added support for our proposed analysis of the constructions. My overall goal is to use these constructions as a laboratory for my attempt to better understand the ways that speakers put form and meaning together in parallel – how compositional are these constructions and in what ways are they compositional? Part of my eventual conclusion will be that these data provide added reason to believe that semantic compatibility is not determinable by examining the conventional form-meaning mappings specific to lexical or grammatical

constructions, but is also determined by larger processes of meaning construction, as shaped by the broad context of interpretation.

Before I turn to that analysis, however, I would like to briefly assess its relationship to the theme of this volume, namely the field of Linguistics at the beginning of the 21st century. Why, at this moment, am I motivated to examine the relationship between these constructions, and to use the models I do (namely Construction Grammar and Mental Spaces Theory)?

Hindsight should be easier than foresight; but given the varied perspectives from which different participants see the last twenty-five or thirty years of Linguistics, it's still very hard to make claims about where we've arrived as a field, at the start of the twenty-first century. In the early 1970's, when I started to take undergraduate courses in Linguistics, my impression was of a field which was coming together around a new paradigm. But despite the very evident dominance of Chomskyan paradigms (using the term loosely, to describe the wide range of models developed from his work) and of various formal semantics paradigms during much of the intervening period, I don't think such a gathering ever really happened.

Today, we find ourselves – in my view, fortunately – in a more theoretically diverse field than the Linguistics of the 1970's. A number of research paradigms which were far less developed (or in some cases, nonexistent as recognized agendas) in 1970 have since come of age and have had their inevitable impact on the field at large: among them are sociolinguistics, discourse linguistics, corpus linguistics, L1 and L2 acquisition studies, psycholinguistics, neuroscience, computational linguistics, typology, and gesture studies. Vigorous questioning of traditional boundaries (the bounds of the syntax, semantics, and pragmatics modules, for example) was already happening in the 70's. But we now have coherent functionalist and cognitive linguistic approaches which no longer accept the existence of such modules, and which are practiced world-wide by large and varied scholarly communities.

Formal theorists have sometimes cast opposing approaches as steps backwards. The resurgence in popularity of the concept of *grammatical construction*, in both non-"formalist" and even some formalist circles, however, is in my view rather a recognition of the real need to talk about something which traditional descriptive grammarians also, in their way, needed to talk about. We need not, of course, mean exactly what they meant by it, any more than we need adhere precisely to their definitions of *Noun* or *Verb*; we can hope that we're actually refining the concept usefully, in our current technical understandings. Construction Grammar takes seriously the Saussurean form-meaning unit of the linguistic sign, but al-

lows meaning to be mapped directly onto larger units than single morphemes or words. Goldberg (1995), as mentioned above, has argued that the English Ditransitive Construction and Caused-Motion Construction have meanings as constructions, which are not attributable in a predictable way to the simple composition of their parts, although constructional meaning as a whole combines in a relatively predictable and compositional way with the meanings of specific lexical items.

Another general trend which I observe in our heterogeneous field at the start of the 21st century, is the increasing recognition by linguists of widely varying theoretical stances, that sentence-level compositional semantics is only the tip of the iceberg, relative to communicated meaning. The study of idiomaticity, and the examination of large corpora for recurring segments, has allowed us to realize (1) how much of our language is not necessarily composed on the spot, even if it is potentially compositionally interpretable in structure, and (2) how much of our language is not fully compositional, but must depend on form-meaning mappings of elements larger than lexical items. At the same time, pragmatics, Relevance Theory, Mental Spaces Theory, and other approaches have helped us to understand how little of the full message is encoded directly in the linguistic structure alone, independent of context. Reactions to these findings have been varied. But no semanticist can do her job now without taking such concerns into account.

A *mental space*, as defined by Fauconnier, is a coherent cognitive substructure, which can be connected and/or mapped to other such substructures. One subset of mental spaces are our conceptualizations of situations and states of affairs; Mental Spaces Theory deals with phenomena which earlier analysts labeled Possible Worlds. It allows us, for example, to contrast a Base Space (the thinker's idea of how things actually are in her world) with other situations which the speaker sees as non-actual, and to make mappings or correspondences between them.

Conditional constructions have the function of prompting the listener to set up a conditional mental space, as Fauconnier originally noted, and as several of us have argued at some length (Fauconnier: [1985] 1994, 1996, 1997; Dancygier and Sweetser 1996, 1997, 2000, 2003; Sweetser 1996). In saying *If I lived in New York, I'd go to the Matisse-Picasso show*, I construct a conditional space wherein I live I New York, and I contrast that situation with the Base Space wherein I live in Berkeley. I also in some way identify myself as the "same" person in Base Space and the *if*-space; similarly, New York (or Berkeley, or the art exhibit) is the "same" thing in the two spaces. Past situations, represented situations (paintings, etc.), and imagined or hoped situations can all be understood as having some similar

general cognitive relationships to each other and to a thinker's Base Space. And different linguistics forms (e.g. tense markers and temporal adverbs for past situations) are used to engage in setup of different kinds of spaces.

In this context, I here turn to the analysis of specific constructions. I shall be focusing on the ways that these constructions are compositional in form and in meaning, and on the ways that some contrasting constructions – with different formal compositional structure – compose meaning differently. These constructions are a laboratory for my attempt to better understand the ways that speakers put form and meaning together in parallel.

Whatever their degree of compositionality, however, I do not see these constructions as composing or setting up all of the meaning they end up conveying in context. As Fauconnier (1994, 1997) so eloquently points out, linguistic forms could never possibly conventionally encode all the meanings they convey. Like Fauconnier, I see linguistic forms as prompts to mental space construction, and of course also as partial reflections of the speaker's mental space structures. I shall be using the framework of Mental Spaces Theory to describe the meaning side of the constructions to be examined.

1. Conjunction and conditionality

We know that speakers can convey a given content in multiple ways. We also know that these ways are never precisely equivalent to each other; however close they come to conveying the "same" content, they still highlight different aspects of the same situation, or give different construals of it. What interests me here is, at the constructional level, the ways in which aspects of discourse processing and construal correlate with constructional choice.

Why, in context, may all three of the following examples convey such similar messages?

(1) ***If*** *you take another step, I'll shoot.*
(2) *(You) take another step,* ***and*** *I'll shoot.*
(3) *Don't take another step,* ***or*** *I'll shoot.*

At first glance, and indeed in most technical semantic treatments, *if*, *and* and *or* are very different from each other. Following Grice (1978) and R. Lakoff (1971), Sweetser (1990) proposed an initial treatment of the asym-

metric *and* and *or* of (2) and (3). This treatment is elaborated in Dancygier and Sweetser (2003). Basically, the story goes like this.

If explicitly labels a conditional relationship between the clause it marks and the conjoined main (or consequent) clause. Dancygier and Sweetser (1996, 1997) have discussed in some detail the space-building semantics of conditional constructions. These include the fact that *if*-clauses set up mental spaces within which the consequent clause holds; and the observation that *if*-clauses are explicitly marked as not being given the speaker's confirmation of *positive epistemic stance* (Fillmore 1990a, 1990b) –that is, the speaker is overtly abstaining, at least, from giving her actuality stamp to the content of the *if*-clause, and hence to its dependent consequent.[3] Further, we note (Dancygier and Sweetser 1997) that the future *will* in the consequent clause of (1) has real predictive future reference – although this is not predictive futurity relative to the Base Space, but rather relative to the *if*-marked space where the addressee has taken another step. Since *if* explicitly marks the direction of conditional dependence (of the shooting on the stepping, for example, rather than the other way around), it has a corresponding flexibility in clause order: although *if*-clauses do tend to precede their main clauses (cf. Haiman 1980, 1986; Ford 1993), they need not. The mental space construction involved in (1) is represented in Diagram 1.

And is not specifically in the business of building alternate, non-base spaces, much less of building some specific kind of alternate mental space. Basically, it puts two or more sets of conjoined meanings side by side in the same mental space, co-present. It does not specify much beyond that, but lets the addressee contextualize further: so the space in which these conjoined things co-exist is not specified. Other formal prompts may interact with *and*: for example, two *and*-conjoined clauses in a particular order may (given the right aspectual structure) invite the inference that the event or situation represented in the first clause preceded the event or situation described in the second clause. Given our understanding of relationships between sequence and causality, we may also sometimes infer from this that the temporally antecedent event caused the subsequent one. And sometimes (cf. Sweetser 1990) we infer that the causal relationship is specifically a conditional one. In (2), what brings this about is largely the verb forms in the two clauses: the *will*-future in the main clause, and the bare verb form (here apparently ambiguous with an imperative) in the conditional clause, are the same forms we see in the *if*-conditional (1). Once we have put together the clause order and the verb forms, (2) is almost inescapably interpreted as conditional. The mental space construction involved in (2) is presented in Diagram 2.

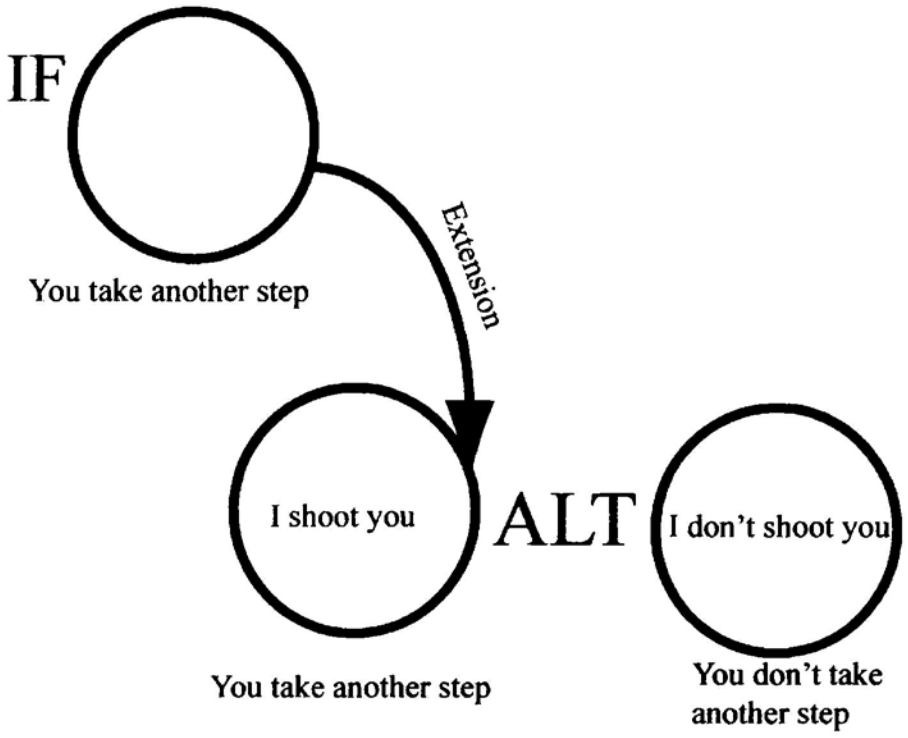

Diagram 1: IF-conditionals.

If you take another step, I'll shoot.

A single conditional space is built by P, and completed by Q; an inferred alternative space is also constructed implicitly, wherein ~P and ~Q hold instead.

Indeed, (2) seems in some ways to express a stronger, closer conditional relationship than (1). This seems partly due to the strength of the inexplicit. If the speaker can rely on the hearer to make the conditional connection without the explicit *if*-prompt, then she must be able to rely on a shared ground which brings them together in some relevant connection. Further, as Dancygier and Sweetser (2003) comment, the overlap with imperative constructions is real; one evidence of this is that such *and*-conditionals are overwhelmingly second-person in actual usage.[4] The result is that *and*-conditionals often seem to be more direct inducements and deterrents than *if*-conditionals. They don't primarily *create* shared ground about causal connections, they *exploit* it. Of course, that means that under the right circumstances (as usual with linguistic forms) they can also be used to create it.

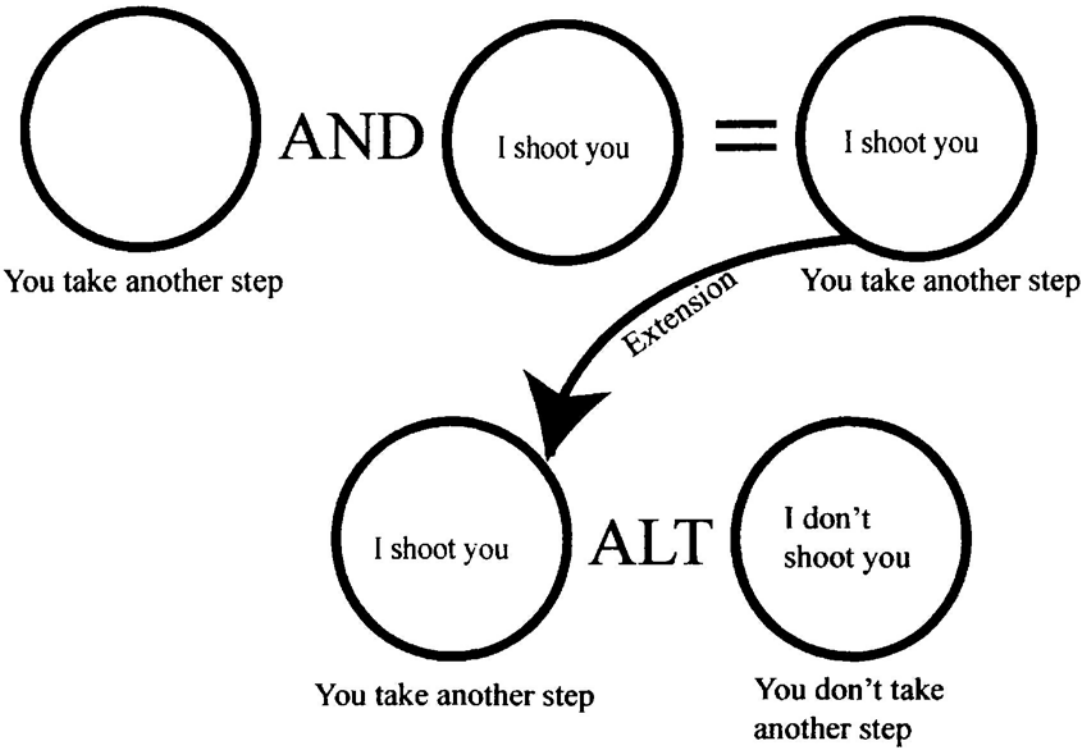

Diagram 2: AND-conditionals.

(You) take another step and I'll shoot you.

P and Q are combined in one space, which is then by inference construed as an alternative space to an unmentioned space wherein ~P, ~Q hold.

Or sets up *alternatives*. Again starting from Grice (1978), we can say that in general *or* means that at least one of the conjoined entities is true or present in some relevant space. As with *and*, *or* doesn't say much about which space, or what kind of space, that might be – other contextual material must tell us that. We can go a step further, remembering Grice's observation that saying *or* means that the speaker might have said *and* but didn't. From this the listener can normally infer that *and* is not true; so not all of the *or*-conjoined meanings are simultaneously holding in the relevant space. Dancygier and I (1997) use the technical term *alternatives* to refer to the relationship between mental spaces which are construed this way, as being incompatible fillers of the same slot in the same temporal and causal se-

quence. An important sub-class of conditionals involve such alternativity, we argue.

In conditionals such as (3), alternativity is precisely at stake (see Diagram 3). The alternatives are a space wherein the addressee doesn't take another step (and presumably does not get shot), and a space wherein (presumably because the addressee takes another step), the speaker will shoot. These two spaces are alternative, incompatible instantiations of the speaker and addressee's immediate future space. The difference between this *or*-conditional and *if*-conditionals like (1) is that the P- and Q-clauses of (1) presumably hold in the same one of the two alternative spaces; the conditional explicitly builds a P,Q space, and implicitly contrasts it with an un-

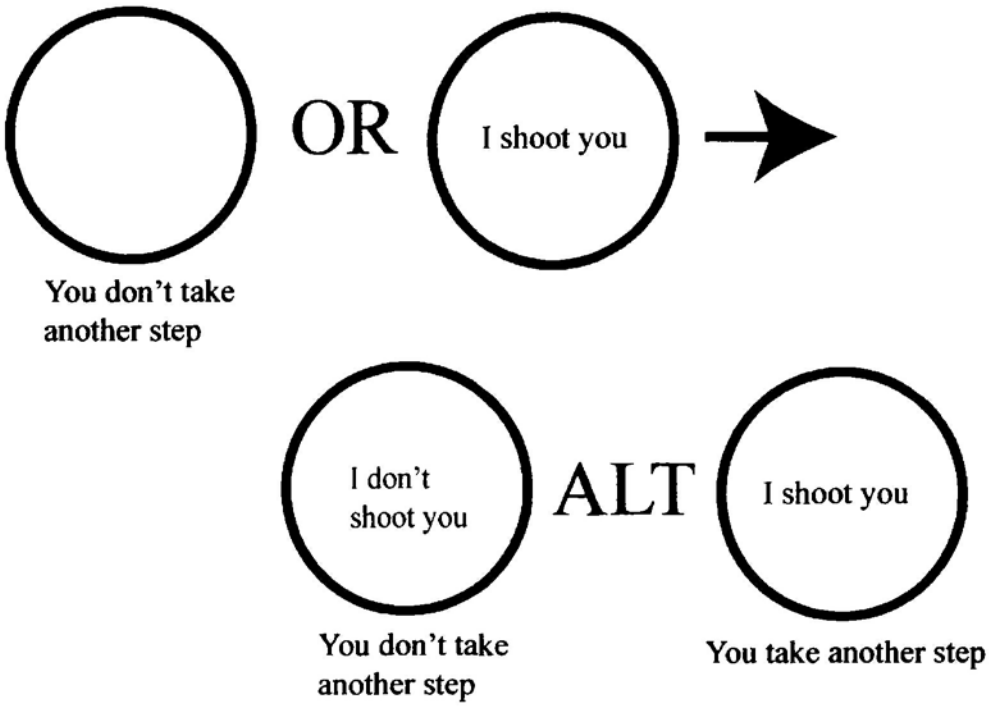

Diagram 3: OR-conditionals.

Don't take another step, or I'll shoot.

Two alternative spaces are built, one based on the expressed P and an inferred ~Q, the other on the expressed Q and an inferred ~P.

expressed alternative ~P, ~Q space. In *or*-conditionals like (3), however, the P-clause holds in one alternative space (where we implicitly understand that ~Q holds), while the Q-clause holds in the other alternative space (where we assume that ~P holds). In this regard, *or*-conditionals are like *unless*-conditionals.

In (1), conditional perfection (the IFF implicature that the speaker will not shoot if the addressee does not take another step) follows from the fact that *if P, Q* is construed as meaning that the speaker could not have said simply "Q" (i.e. that the statement of Q does not hold generally, but specifically as relevant within the space defined by P), and hence must mean that *if not P, not Q*. In (3), conditional perfection follows directly from the presence of *or*, which explicitly presents P and Q as taking place in alternative spaces.[5]

Like *and, or* is inexplicit about what the causal or conditional relations are that make the contents of the two connected clauses alternatives. And like *and*, it depends on asymmetric word order (and its temporal and causal interpretations) for this conditional interpretation; one cannot acceptably reverse the order of the clauses in (2) or (3), though the reverse order is grammatical in (1) and does not radically change the meaning. The result of this combination of strong alternativity and less explicit specification of the rest of the mental space relations is that *or*-threats seem extremely direct. In processing this compression of two different causal sequences into comparison of two alternative spaces, the speaker has to be calling up some (probably shared) contextual material which fills in the reasons why the two alternatives are incompatible, for example.

Any construction grammarian will note that more specific statements need to be made about the *and*- and *or*-conditional constructions; we will not be able simply to predict their characteristics entirely from their compositional parts in combination. For example, the strong second-person subject preference shown by both constructions is not an absolute formal grammatical requirement, but needs to be stated as a pragmatic constraint on their use. And the fact that even with distinctive conditional verb forms, it is impossible to reverse the order of the clauses in (2) seems motivated, but not fully predictable, from the basic observation that *He walked into the room and turned on the light* means that the actions were performed in the order of the conjuncts' production.

But what is particularly fascinating is that *if, and* and *or* make such different semantic contributions to the very similar plausible readings of (1)–(3) in many contexts. These similar readings are due in part to other related formal structures (clause order, verb forms). But the possibility of the *or*-