Coordination in syntax is an important part of the analysis of sentence structure. Niina Ning Zhang addresses the issues raised by coordinate pairings and the implications of these structures, looking in particular at examples within English and Chinese. The volume covers the major questions regarding coordinates in syntax, providing a fresh perspective to arguments raised within previous literature. She explains how such coordinate complexes are structured, how some coordinators can be combined with conjuncts of various parts of speech, the fixed nature of some of these pairings and what changes exist between the coordinate and non-coordinate constructions. The theories raised are backed up by a rich variety of examples as well as providing a crosslinguistic perspective, contextualizing these ideas within current syntactic research.

Niina Ning Zhang is Associate Professor and Director in the Graduate Institute of Linguistics at National Chung Cheng University. She previously co-edited *Ellipsis in Conjunction* (2000) and has written many journal articles on syntactic theory and practice.
118. Juan Uriagereka: Syntactic anchors: on semantic structuring
120. Leonard H. Babby: The syntax of argument structure
121. B. Elan Dresher: The contrastive hierarchy in phonology
122. David Adger, Daniel Harbour and Laurel J. Watkins: Mirrors and microparameters: phrase structure beyond free word order
123. Niina Ning Zhang: Coordination in syntax

Earlier issues not listed are also available
COORDINATION IN SYNTAX

NIINA NING ZHANG

National Chung Cheng University
This book is dedicated to my late parents
Zhang Guangbi 張光璧 and Fang Aiqi 方愛七.
## Contents

<table>
<thead>
<tr>
<th>Acknowledgments</th>
<th>Abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>page xvi</td>
<td>xviii</td>
</tr>
</tbody>
</table>

1 Introduction

### PART I NO SPECIAL SYNTACTIC CONFIGURATION

2 The complementation structure of coordinate complexes

2.1 Introduction

2.2 The binary-branching constituency of coordinate complexes

2.2.1 The asymmetry between conjuncts in binding

2.2.2 The asymmetry between conjuncts in possessee pronominalization

2.2.3 The asymmetry between conjuncts in hosting coordinators

2.2.4 The asymmetry between conjuncts in coordinator floating

2.2.5 Conclusion and Dik’s challenges

2.3 The complementation structure of coordinate complexes

2.3.1 The dubious status of agreement in the syntax of coordination

2.3.2 The impossibility for external conjuncts to be stranded

2.3.3 The possible interactions between coordinators and internal conjuncts

2.3.4 Extraction from both internal and external conjuncts

2.3.5 The syntactic relation between conjuncts: conclusions

2.4 The possible modifier function of conjuncts

2.5 The issue of so-called bar-level sharing

2.6 Chapter summary

### PART II NO SPECIAL SYNTACTIC CATEGORY

3 The categorial makeup of coordinate complexes

3.1 Introduction
## Contents

3.2 The categories of coordinators and conjuncts 44
  3.2.1 Coordinators without c-selection restrictions 45
  3.2.2 Coordinators with c-selection restrictions 46
  3.2.3 Representing the categorial dependency of coordinators on conjuncts 49

3.3 The categorial makeup of coordinate complexes 50
  3.3.1 Coordinate complexes headed by and-like coordinators 50
  3.3.2 Categorial features of coordinators that have c-selection restrictions 57
  3.3.3 Categorial unification in Spec-Head and Head-Compl relations 59

3.4 Against &P 60
  3.4.1 The distributions of coordinate complexes are covered by simplexes 61
  3.4.2 Neither closed classes nor case inflection argue for &P 63
  3.4.3 Retrospection 64

3.5 Against the Clausal Conjunct Hypothesis 65

3.6 The structure of coordinate complexes composed of more than two conjuncts 69
  3.6.1 The coordinator must be grouped with an edge conjunct 71
  3.6.2 The category decisiveness of non-final conjuncts in English 72
  3.6.3 Borsley’s arguments against the layered complementation in English 73

3.7 Chapter summary 75

## Part III No Special Syntactic Constraint 77

4 The Conjunct Constraint and the lexical properties of coordinators 79
  4.1 Introduction 79
    4.1.1 The CCi and CCe 79
    4.1.2 Previous approaches to the CC 81
    4.1.3 A new account of the CC 85
  4.2 The CCi and the asymmetry in conjunct drop 88
    4.2.1 Conjunction drop in right-branching coordinate complexes 88
    4.2.2 Conjunction drop in left-branching coordinate complexes 89
    4.2.3 Clause-final coordinator-like elements 90
  4.3 The CCe and the Chinese de constructions 92
    4.3.1 Two kinds of de constructions 93
    4.3.2 The various categories of kernel-final constructions 95
    4.3.3 De as the head of the whole complex 97
## Contents

4.3.4 The chameleon-like nature of *de* keeps the kernel elements *in situ* ..................................................... 105

4.4 The CCe and the *he/gen* comitative constructions in Chinese................................................................. 107

4.4.1 Introduction: *he/gen* constructions in Chinese ..................................................................................... 108

4.4.2 Coordinator properties of the comitative *he/gen* .................................................................................. 109

4.4.3 Violation of the CCe in non-distributive coordination .............................................................................. 114

4.5 Chapter summary ........................................................................................................................................ 122

5 The Element Constraint and the semantic relatedness of conjuncts ............................................................ 124

5.1 Introduction .................................................................................................................................................. 124

5.2 Asymmetrical coordination as a type of natural coordination ................................................................. 124

5.2.1 Natural coordination ............................................................................................................................ 124

5.2.2 Asymmetrical coordination ................................................................................................................ 127

5.2.3 Some formal contrasts between natural and accidental coordination ...................................................... 128

5.3 The EC violation in asymmetrical coordination ....................................................................................... 135

5.4 Chapter summary ....................................................................................................................................... 139

6 Three puzzles solved by rejecting the CSC ................................................................................................. 141

6.1 Introduction ................................................................................................................................................ 141

6.2 Deriving Split Argument Constructions by giving up the CC ............................................................... 141

6.2.1 The Split Argument Construction (SAC) ............................................................................................ 141

6.2.2 The two DPs of a SAC form a coordinate complex ............................................................................. 145

6.2.3 Deriving SACs by conjunct raising .................................................................................................... 145

6.2.4 Section summary .................................................................................................................................. 153

6.3 Deriving Modifier-Sharing Constructions by giving up the CC ............................................................ 154

6.3.1 The Modifier-Sharing Construction (MSC) ......................................................................................... 154

6.3.2 MSCs have coordinate antecedents .................................................................................................... 155

6.3.3 Deriving MSCs by sideward conjunct raising .................................................................................. 160

6.3.4 A comparison with the multiple dimensional analysis ..................................................................... 166

6.3.5 Section summary .................................................................................................................................. 167

6.4 Deriving Interwoven Dependency Constructions by giving up the EC ................................................. 168

6.4.1 The Interwoven Dependency Construction (IDC) .............................................................................. 169

6.4.2 Previous analyses ................................................................................................................................ 171

6.4.3 IDCs exhibit parallel movement dependencies .................................................................................. 172

6.4.4 Deriving IDCs by sideward extraction from conjuncts ..................................................................... 173

6.4.5 Section summary .................................................................................................................................. 175

6.5 Chapter summary ....................................................................................................................................... 176
# Contents

## 7 Relativized parallelism in syntactic complexes  
7.1 Introduction  
7.2 The Relativized Parallelism Requirement (RPR)  
7.2.1 The Coordination of Likes Constraint and other similar constraints  
7.2.2 The RPR: conjuncts must hold a coherence relation  
7.3 The components of the RPR  
7.3.1 Examples of the semantic relatedness between conjuncts  
7.3.2 Examples of the resemblance between conjuncts in semantic types  
7.3.3 The CLC: two further issues  
7.3.4 Examples of the resemblance between conjuncts in dependency chains  
7.4 The RPR in language processing  
7.4.1 The more tightly semantically connected, the easier to process  
7.4.2 The more parallel in merged structures, the easier to process  
7.4.3 The more parallel in dependency chains, the easier to process  
7.5 The nature of the RPR  
7.5.1 The RPR is a filter on representations of syntactic complexes  
7.5.2 The general economy motivation of the RPR  
7.6 Chapter summary and conclusions for Part III  

## 8 The derivation of coordinate clauses with identity adjectives  
8.1 Introduction  
8.2 The identity adjective *same*  
8.2.1 The general plural-α licensing of identity adjectives  
8.2.2 Major questions about the syntax of TLCs  
8.3 Building well-formed conjuncts of TLCs  
8.3.1 The existence of a silent nominal in the second conjunct  
8.3.2 The interpretation of the silent argument in the second conjunct  
8.3.3 The syntactic category of the silent argument in the second conjunct  
8.4 Extraction of SEs out of their licensing coordinate complexes  
8.4.1 The extraction of SEs out of first conjuncts  
8.4.2 Carlson’s constraint and the motivation for the SE extraction  
8.4.3 The silence of the pro-form in the second conjunct of a TLC  
8.5 Chapter summary

## PART IV NO SPECIAL SYNTACTIC OPERATION  

© in this web service Cambridge University Press  
www.cambridge.org
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Forming Across-the-Board constructions without forking movement</td>
<td>222</td>
</tr>
<tr>
<td>9.1</td>
<td>Introduction</td>
<td>222</td>
</tr>
<tr>
<td>9.2</td>
<td>ATB constructions as TLCs</td>
<td>222</td>
</tr>
<tr>
<td>9.2.1</td>
<td>The identity readings of ATB constructions</td>
<td>223</td>
</tr>
<tr>
<td>9.2.2</td>
<td>The syntactic reality of a silent argument in the second conjunct</td>
<td>225</td>
</tr>
<tr>
<td>9.2.3</td>
<td>The correspondence between extraction and identity readings</td>
<td>229</td>
</tr>
<tr>
<td>9.2.4</td>
<td>The compatibility between two types of wh-expressions</td>
<td>231</td>
</tr>
<tr>
<td>9.3</td>
<td>The respectively readings of certain ATB constructions</td>
<td>233</td>
</tr>
<tr>
<td>9.3.1</td>
<td>Munn’s respectively readings</td>
<td>233</td>
</tr>
<tr>
<td>9.3.2</td>
<td>The availability of respectively readings in modification constructions</td>
<td>234</td>
</tr>
<tr>
<td>9.4</td>
<td>A comparison with other approaches</td>
<td>236</td>
</tr>
<tr>
<td>9.4.1</td>
<td>The characteristics of our approach</td>
<td>237</td>
</tr>
<tr>
<td>9.4.2</td>
<td>The null operator approach</td>
<td>237</td>
</tr>
<tr>
<td>9.4.3</td>
<td>The multiple dimensional approach</td>
<td>238</td>
</tr>
<tr>
<td>9.4.4</td>
<td>The deletion approach</td>
<td>240</td>
</tr>
<tr>
<td>9.4.5</td>
<td>The sideward movement approach</td>
<td>240</td>
</tr>
<tr>
<td>9.5</td>
<td>Chapter summary and conclusions of Part IV</td>
<td>241</td>
</tr>
<tr>
<td>10</td>
<td>Conclusions</td>
<td>242</td>
</tr>
</tbody>
</table>

References 247
Index 267
Acknowledgments

It is more than nine years since I attended a summer school course called *The Syntax of Coordination* in Potsdam, 1999, taught by Chris Wilder. My interest in the topic started then. My initial work on coordination received help from Chris Wilder, of course, as well as other former colleagues at the Center for General Linguistics (Zentrum für Allgemeine Sprachwissenschaft, ZAS) and other linguists in Berlin, including Philippa Cook, Laura Downing, Werner Frey, Dieter Gasde, Hans-Martín Gärtner, Ljudmilla Geist, Andreas Haida, Silke Hamann, Daniel Hole, Manfred Krifka, Ewald Lang, André Meinunger, Kerstin Schwabe, Ben Shaer, and Arthur Stepanov. After I moved to Taiwan in the fall of 2003, the writing of this book has benefited from various kinds of help from the local linguistics community. I thank Henry Yungli Chang, Tzong-Hong Jonah Lin, Jowang Lin, Chen-Sheng Luther Liu, Miaoling Hsieh, Shuying Shyu, Chih-Chen Jane Tang, Tingchi Tang, Sze-Wing Tang, Jen Ting, and Wei-Tien Dylan Tsai. In the Linguistics Institute at National Chung Cheng University, I have been blessed with the kind support of my colleagues Jung-hsing Chang, Jim H. Y. Tai, Jane S. Tsay, and our administrative assistant Shu-Fen Hsu.

Early versions of most of the chapters have been presented at many conferences, including the 11th International Conference on Chinese Linguistics (Nagoya, Aug. 20–22, 2002), the 1st International Workshop on East Asian Linguistics (Kyoto, Aug. 23, 2002), the Conference on Null Subjects and Parametric Variation, Reykjavik (July 18–19, 2003), GLOW in Asia 4 (Seoul, Aug. 20–23, 2003), the 2nd Workshop on Formal Syntax and Semantics (Taipei, Sept. 27–29, 2003), the 16th North American Conference on Chinese Linguistics (Iowa, May 21–23, 2004), the 2nd International Workshop on Theoretical East Asian Linguistics (Hsinchu, June 12–13, 2004), GLOW in Asia 5 (New Delhi, Oct. 5–8, 2005), NELS 36 (Amherst, Oct. 28–30, 2005), GLOW 29 (Barcelona, April 5–8, 2006), the 4th Workshop on Formal Syntax and Semantics (Chiayi, April 14–15, 2006), the Symposium on Chinese Syntax and Semantics (Hong Kong, Aug. 18–20, 2007), and the 13th International Morphology Meeting.
Acknowledgments

(Vienna, Feb. 3–6, 2008). I am grateful to the audience members of these conferences and readers of various parts of the book manuscript for their suggestions, encouragement, and challenges, especially Mark Baltin, Lisa Lai Shen Cheng, Norbert Corver, Wayne Cowart, David Adger, Jingqi Fu, Yang Gu, Anders Holmberg, Cheng-teh James Huang, Richard Kayne, Paul Kiparsky, Paul Law, Thomas Lee, Yen-hui Audrey Li, Danqing Liu, Feng-his Liu, Jianming Lu, Norvin Richards, Mamoru Saito, Yang Shen, Dingxu Shi, Peter Svenonius, Satoshi Tomioka, Juan Uriakereka, Henk van Riemsdijk, Akira Watanabe, Dan Xu, Hang-Jin Yoon, James Yoon, and Bojiang Zhang. Special thanks go to Neal Whitman, who wrote fifteen pages of comments on the manuscript, which helped me with the final revision.

I also want to thank Elizabeth Cowper and Diane Massam for teaching me formal syntax, and Jinguo Ding, Yucun Qi, Yili Xu, Dechun Wang, and Liejiong Xu for inspiring me to work on the puzzles of language.


Since the end of 2003, the writing of this book has been supported by grants from the National Science Council in Taiwan. In preparing for the publication of this book, I have also received tremendous assistance from Andrew Winnard, the Senior Commissioning Editor of Cambridge Studies in Linguistics, and the editorial and production team of Cambridge University Press.

I owe extremely special thanks to my husband James Myers. Without his insightful academic discussions and psychological support, as well as his editing of the English in the whole manuscript, this book would be uninterpretable.
Abbreviations

AC  Asymmetrical Coordination
AP  Adjective Phrase
ATB  the Across-the-Board dependency
CC  Conjunct Constraint (the first part of CSC)
CCe  No movement of external conjuncts (part of CC)
CCI  No movement of internal conjuncts (part of CC)
CCC  Coordinate Constituent Constraint
CED  Condition on Extraction Domains
CCH  Clausal Conjunction Hypothesis
CHC  the Coordinate-Head RC Construction
CLC  Coordination of Likes Constraint
CLC\textsubscript{func}  CLC with respect to grammatical functions
CLC\textsubscript{sem}  CLC with respect to semantic types
CSC  Coordinate Structure Constraint
DP  Determiner Phrase
EC  Element Constraint (the second part of CSC)
FM  Focus Marker
IDC  the Interwoven Dependency Construction
ID  Identification feature
IP  Infl Phrase
LF  Logical Form
Mod  Modifier
ModP  Modifier Phrase
MSC  the Modifier-Sharing Construction
NCC  Null Conjunct Constraint
NP  Noun Phrase
Num  Number
PF  Phonological Form
PP  Preposition Phrase
PPC  the Paired Pronoun same Construction

xviii
### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PR</td>
<td>Parallelism Requirement</td>
</tr>
<tr>
<td>QR</td>
<td>Quantifier Raising</td>
</tr>
<tr>
<td>QT</td>
<td>quotative morpheme</td>
</tr>
<tr>
<td>RC</td>
<td>Relative Clause</td>
</tr>
<tr>
<td>RNR</td>
<td>Right Node Raising</td>
</tr>
<tr>
<td>RPR</td>
<td>Relativized PR</td>
</tr>
<tr>
<td>SAC</td>
<td>the Split Argument Construction</td>
</tr>
<tr>
<td>SE</td>
<td>Similarity Expression</td>
</tr>
<tr>
<td>TLC</td>
<td>the Thematic Licensing same Construction</td>
</tr>
<tr>
<td>TP</td>
<td>Tense Phrase</td>
</tr>
<tr>
<td>UTAH</td>
<td>Uniformity of Theta-Assignment Hypothesis</td>
</tr>
<tr>
<td>VP</td>
<td>Verb Phrase</td>
</tr>
<tr>
<td>&amp;P</td>
<td>Conjunction Phrase</td>
</tr>
</tbody>
</table>

### In the Chinese examples:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL</td>
<td>classifier</td>
</tr>
<tr>
<td>EXP</td>
<td>experiential aspect</td>
</tr>
<tr>
<td>INCH</td>
<td>inchoative aspect</td>
</tr>
<tr>
<td>PRF</td>
<td>perfect aspect</td>
</tr>
<tr>
<td>PRG</td>
<td>progressive aspect</td>
</tr>
<tr>
<td>PRT</td>
<td>sentence-final aspect particle</td>
</tr>
<tr>
<td>DE</td>
<td>associative particle</td>
</tr>
<tr>
<td>Q</td>
<td>sentence-final question particle</td>
</tr>
<tr>
<td>TOP</td>
<td>topic</td>
</tr>
</tbody>
</table>