



Multi-Verb Sequences in English: Their Classification and Functions

Matsumoto, Noriko

(Degree)

博士 (文学)

(Date of Degree)

2015-03-25

(Date of Publication)

2016-03-01

(Resource Type)

doctoral thesis

(Report Number)

甲第6361号

(URL)

<https://hdl.handle.net/20.500.14094/D1006361>

※ 当コンテンツは神戸大学の学術成果です。無断複製・不正使用等を禁じます。著作権法で認められている範囲内で、適切にご利用ください。



博士論文

平成27年3月25日提出

**Multi-Verb Sequences in English:
Their Classification and Functions**

(英語の複数動詞連鎖:分類と機能)

神戸大学大学院人文学研究科博士課程

後期課程社会動態専攻

松本 知子

(051L102L)

Multi-Verb Sequences in English:
Their Classification and Functions

A Dissertation
Submitted to
The Graduate School of Humanities
Kobe University

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

by
Noriko Matsumoto
(051L102L)

(Advisor: Prof. Yo Matsumoto)

March 25th, 2015

Table of Contents

| | |
|---|-----------|
| Acknowledgments | v |
| Abbreviations | vi |
| List of Figures | viii |
| List of Tables | ix |
| | |
| Chapter 1 Introduction | 1 |
| | |
| Chapter 2 Descriptive and Methodological Backgrounds | 8 |
| 2.1 Corpus Methodology | 8 |
| 2.2 Descriptive Terms | 10 |
| 2.2.1 The Definition of Catenative Complement | 11 |
| 2.2.2 Complements versus Adjuncts | 15 |
| 2.3 A General Classification Schema of Multi-Verb Sequences | 17 |
| 2.4 Some Properties of Components of Multi-Verb Sequences | 18 |
| 2.4.1 <i>To</i> -Infinitives and Gerund-Participials | 19 |
| 2.4.1.1 The Temporal Relations | 19 |
| 2.4.1.2 The Temporal Properties | 22 |
| 2.4.2 The Deictic Motion Verbs <i>Come</i> and <i>Go</i> | 23 |
| 2.4.2.1 The Motion Uses of <i>Come</i> and <i>Go</i> | 23 |
| 2.4.2.2 The Non-Literal Uses of <i>Come</i> and <i>Go</i> | 24 |
| 2.4.2.3 <i>Go</i> as a Marker of Evaluative Modality | 26 |
| | |
| Chapter 3 The <i>V-to-V</i> Sequence | 30 |
| 3.1 Some Earlier Proposals and Remaining Problems | 31 |
| 3.1.1 The Syntactic Studies | 31 |
| 3.1.2 The Semantic Studies | 33 |
| 3.1.3 Problems | 35 |
| 3.2 The Classification of <i>V-to-V</i> Sequences | 35 |
| 3.2.1 The Full-Syntactic-Structure Group | 36 |
| 3.2.1.1 The Catenative Complement Type: Lexical V1 | 36 |
| 3.2.1.2 The Catenative Complement Type: Attenuated V1 | 39 |
| 3.2.1.3 The Clausal Adjunct Type | 43 |

| | | |
|------------------|---|-----------|
| 3.2.2 | The Reduced-Structure Group | 44 |
| 3.2.2.1 | The Semi-Complement Type | 44 |
| 3.2.2.2 | The Adjunct/Oblique Type | 47 |
| 3.3 | The Relationship among <i>V-to-V</i> Sequences | 49 |
| 3.4 | Conclusion | 52 |
| | | |
| Chapter 4 | The <i>V-and-V</i> Sequence | 53 |
| 4.1 | Some Earlier Proposals and Remaining Problems | 54 |
| 4.1.1 | The Syntactic Studies | 54 |
| 4.1.1.1 | The Coordinate Structure Constraint | 54 |
| 4.1.1.2 | The Post-Coordinate Structure Constraint | 56 |
| 4.1.2 | The Semantic Studies | 59 |
| 4.1.2.1 | Semantic Accounts of Exceptions to the Coordinate Structure Constraint | 60 |
| 4.1.2.2 | Semantic Accounts of Specific <i>V-and-V</i> Sequences | 67 |
| 4.1.3 | Problems | 73 |
| 4.2 | The Classification of <i>V-and-V</i> Sequences | 74 |
| 4.2.1 | The Full-Syntactic-Structure Group | 74 |
| 4.2.2 | The Reduced-Structure Group | 76 |
| 4.2.2.1 | The Semi-Complement Type: Lexical V1 | 77 |
| 4.2.2.2 | The Semi-Complement Type: Attenuated V1 | 80 |
| 4.2.2.3 | The Adjunct/Oblique Type: Lexical V1 | 83 |
| 4.2.2.4 | The Adjunct/Oblique Type: Attenuated V1 | 85 |
| 4.3 | The Relationship among <i>V-and-V</i> Sequences | 87 |
| 4.4 | Conclusion | 91 |
| | | |
| Chapter 5 | The <i>V-V</i> Sequence | 92 |
| 5.1 | Some Earlier Proposals and Remaining Problems | 93 |
| 5.1.1 | The Semantic Studies in the Full-Syntactic-Structure Group | 93 |
| 5.1.2 | The Studies in the Reduced-Structure Group | 94 |
| 5.1.2.1 | The Syntactic Studies | 94 |
| 5.1.2.2 | The Semantic Studies | 97 |
| 5.1.3 | Problems | 100 |
| 5.2 | The Classification of <i>V-V</i> Sequences | 100 |
| 5.2.1 | The Full-Syntactic-Structure Group | 100 |
| 5.2.2 | The Reduced-Structure Group | 103 |
| 5.2.2.1 | The Semi-Complement Type | 104 |
| 5.2.2.2 | The Adjunct/Oblique Type: Lexical V1 | 105 |

| | | |
|------------------|---|------------|
| 5.2.2.3 | The Adjunct/Oblique Type: Attenuated V1 | 108 |
| 5.3 | The Relationship among <i>V-V</i> Sequences | 109 |
| 5.4 | Conclusion | 111 |
| | | |
| Chapter 6 | Functional Features and Historical Development in Present-Day English of Semantically Competing Multi-Verb Sequences | 113 |
| 6.1 | Functional Features | 114 |
| 6.1.1 | Three Hypotheses | 115 |
| 6.1.2 | The <i>Help-V</i> and the <i>Help-to-V</i> Sequences | 116 |
| 6.1.3 | The <i>Try-and-V</i> and the <i>Bare-Try-to-V</i> Sequences | 118 |
| 6.1.4 | The <i>Come-V</i> and the <i>Bare-Come-and-V</i> Sequences | 121 |
| 6.1.5 | The <i>Go-V</i> and the <i>Bare-Go-and-V</i> Sequences | 123 |
| 6.1.6 | Summary | 126 |
| 6.2 | Historical Development in Present-Day English | 126 |
| 6.2.1 | The <i>Help-V</i> and the <i>Help-to-V</i> Sequences | 127 |
| 6.2.2 | The <i>Try-and-V</i> and the <i>Bare-Try-to-V</i> Sequences | 128 |
| 6.2.3 | The <i>Come/Go-V</i> and the <i>Come/Go-comma-V</i> Sequences | 129 |
| 6.2.4 | The <i>Come/Go-V</i> and the <i>Bare-Come/Go-and-V</i> Sequences | 131 |
| 6.2.5 | Summary | 135 |
| 6.3 | Conclusion | 136 |
| | | |
| Chapter 7 | The <i>V-Ving</i> Sequence | 137 |
| 7.1 | Some Earlier Proposals and Remaining Problems | 138 |
| 7.1.1 | The Studies of the Expeditionary Type | 139 |
| 7.1.1.1 | The Syntactic Studies | 139 |
| 7.1.1.2 | The Semantic Studies | 140 |
| 7.1.2 | The Studies of the Non-Expeditionary Type | 144 |
| 7.1.3 | The Studies of the Modality Type | 147 |
| 7.1.4 | Problems | 148 |
| 7.2 | The Classification of <i>V-Ving</i> Sequences | 150 |
| 7.2.1 | The Full-Syntactic-Structure Group | 150 |
| 7.2.2 | The Reduced-Structure Group | 152 |
| 7.2.2.1 | The Semi-Complement Type | 152 |
| 7.2.2.2 | The Adjunct/Oblique Type: Lexical V1 | 153 |
| 7.3 | The Relationship among <i>V-Ving</i> Sequences | 159 |
| 7.4 | Historical Development and Semantic Change | 163 |
| 7.4 | Conclusion | 165 |

| | |
|--|------------|
| Chapter 8 An Overall Discussion of Multi-Verb Sequences | 166 |
| 8.1 Regularities and Irregularities | 166 |
| 8.2 Key Features of First Verbs in the Reduced-Structure Group | 169 |
| 8.2.1 <i>Go</i> as the First Verb | 171 |
| 8.2.2 <i>Come</i> as the First Verb | 173 |
| 8.2.3 <i>Run</i> as the First Verb | 174 |
| 8.2.4 <i>Sit</i> and <i>Stand</i> as the First Verb | 175 |
| 8.3 The Nature of the Reduced-Structure Group | 178 |
| 8.3.1 Temporality in the Reduced-Structure Group | 178 |
| 8.3.2 Distribution of Verbs in the Four Sequences | 179 |
| 8.4 Conclusion | 180 |
| | |
| Chapter 9 Concluding Remarks | 181 |
| 9.1 Summary | 181 |
| 9.2 Bolinger's Hypothesis | 182 |
| 9.3 The Last Word | 183 |
| | |
| References | 184 |

Acknowledgments

In the course of writing this dissertation, I have received a great deal of help from many people, direct and indirect. My grateful thanks go to all those who supported and encouraged me.

I was fortunate enough to meet the members of my dissertation committee, Yo Matsumoto, Hideki Kishimoto, Shin-ichi Tanaka, Richard Harrison, and Naoko Hayase. First and foremost, I would like to express my deepest gratitude to my advisor, Yo Matsumoto, who spent a great deal of time commenting on and criticizing earlier versions. His detailed and insightful comments and criticisms helped me clarify my ideas, find and/or solve potential problems, and make the many important revisions that produced the present form of this dissertation. He was always a demanding reader in terms of clarity and precision, but he knew exactly what I meant and what I intended to do. Conversations on various aspects of this dissertation with him made the most complex and difficult problems seem like enjoyable puzzles. Whatever there is of value in this dissertation is to a large extent a result of his guidance and patience.

I would like to express my sincere thanks to Hideki Kishimoto for his insightful advice, which was always given when I needed it most. His invaluable comments and suggestions kept me thinking about the interplay of ideas across different theoretical perspectives and the place of my research in a larger theoretical context. I owe a debt of gratitude to Shin-ichi Tanaka for his comments and suggestions in the development of the ideas contained in this dissertation. I am very grateful to Richard Harrison for his helpful comments and suggestions. He reminded me that language was indeed worth studying. I am deeply indebted to Naoko Hayase, my outside committee member, who was working in a closely related area. She offered me warm words of encouragement and gave me helpful comments and valuable ideas.

To all the friends who were supportive of me while I was writing this dissertation, and who did little things that made my life a great deal easier, I would like to express my warmest appreciation.

Finally, I would like to express my profound gratitude to my parents who supported me in every conceivable way.

Abbreviations

| | |
|---------|--|
| # | Semantically or pragmatically anomalous |
| ? | Of questionable grammaticality |
| * | Ungrammatical |
| BNC | The British National Corpus |
| CNN | Written texts of CNN Larry King Live |
| COCA | The Corpus of Contemporary American English |
| COHA | The Corpus of Historical American English |
| Collins | <i>Collins COBUILD English Dictionary for Advanced Learners</i> (2001) |
| CWO | The Collins Wordbanks Online |
| Longman | <i>Longman Exams Dictionary</i> (2006) |
| Oxford | <i>Oxford Advanced Learner's Dictionary, eighth edition</i> (2010) |
| OCAE | The Oxford Corpus of Academic English |
| OED | <i>Oxford English Dictionary, second edition</i> (1989) |
| TIME | The TIME magazine Corpus |

The British National Corpus (BNC) is a 100-million-word corpus of modern British English from the late 20th century. The written part accounts for 90% of the BNC and includes a wide range of sources, such as newspapers, journals, fiction, academic books, letter, and among many other kinds of text. The spoken part accounts for 10% of the BNC and includes a variety of sources, such as informal conversations, radio shows, phone-ins, and among many other kinds of spoken language.

Written texts of CNN Larry King Live, from January 1st, 2000 to December 25th, 2010, are downloaded from <http://edition.cnn.com/TRANSCRIPTS/lkl.html>. (December 8th, 2014)

The Corpus of Contemporary American English (COCA) was created by Mark Davies. It is the only large and balanced corpus of American English and contains more than 450 million words of texts. It is equally divided among spoken, fiction, popular magazines, newspapers, and academic texts.

The Corpus of Historical American English (COHA) was created by Mark Davies. It is a 400-million-word corpus of historical American English from 1810 to 2009, and it is subcategorized for each decade between fiction, popular magazines, newspapers, and academic works.

The Collins COBUILD English Dictionary for Advanced Learners (Collins) involves a corpus of 5 million words of texts extracted from the Bank of English. The Bank of English is a collection of English texts which totals 650 million running words.

The Collins Wordbanks Online (CWO) contains approximately 50 million words derived from a variety of sources from 1990 to 1998. CWO has 12 sub-corpora: two radio broadcasts (BBC World Service Radio broadcasts and US National Public Radio broadcasts), four newspapers (SUN, TIMES, TODAY, and Australian Newspaper), one UK magazine, two books (UK and US), two ephemera (UK and US), and one UK informal speech. This paper excludes one sub-corpus, Australian newspapers.

The Longman Exam Dictionary is based on the Longman Corpus Network and the Longman Web Corpus. The Longman Corpus Network is a database of 300 million words of written and spoken British and American English from books, newspapers, conversations, advertisements, and many other sources.

The Oxford Advanced Learner's Dictionary (OALD) is based on the world-famous Oxford English Corpus, a database of 2 billion words.

The Oxford Corpus of Academic English (OCAE) is a database of 85 million words of running English text, taken from undergraduate textbooks, scholarly monographs and handbooks, and academic journals.

The TIME magazine corpus (TIME) was created by Mark Davies. It is more than 100 million words of text of American English from 1923 to the present in TIME magazine.

List of Figures

| | | |
|-------------|--|-----|
| Figure 2.1 | Frequency of use in COHA of the <i>verb-unVed</i> sequences, <i>go-unVed</i> , <i>remain-unVed</i> , and <i>be-unVed</i> , per million words from 1810 to 2009 | 28 |
| Figure 3.1 | The auxiliary verb - main verb scale (see Quirk et al. 1985: 137) | 31 |
| Figure 6.1 | Frequencies use of the <i>help-V</i> and the <i>help-to-V</i> sequences in the full-syntactic-structure group per million words in six genres in CWO | 118 |
| Figure 6.2 | Frequencies of use of the <i>try-and-V</i> and the <i>bare-try-to-V</i> sequences per million words in six genres in CWO | 120 |
| Figure 6.3 | Frequencies of use of the <i>come-V</i> and the <i>bare-come-and-V</i> sequences per million words in six genres in CWO | 123 |
| Figure 6.4 | Frequencies of use of the <i>go-V</i> and the <i>bare-go-and-V</i> sequences per million words in six genres in CWO | 125 |
| Figure 6.5 | Frequency of use in COHA of the <i>help-V</i> and the <i>help-to-V</i> sequences per million words from 1810 to 2009 | 128 |
| Figure 6.6 | Frequency of use in COHA of the <i>try-and-V</i> and the <i>bare-try-to-V</i> sequences per million words from 1810 to 2009 | 129 |
| Figure 6.7 | Frequency of use in COHA of the <i>come-V</i> and the <i>come-comma-V</i> sequences per million words from 1810 to 2009 | 130 |
| Figure 6.8 | Frequency of use in COHA of the <i>go-V</i> and the <i>go-comma-V</i> sequences per million words from 1810 to 2009 | 131 |
| Figure 6.9 | Frequency of use in COHA of the <i>come-V</i> and the <i>bare-come-and-V</i> sequences per million words from 1810 to 2009 | 133 |
| Figure 6.10 | Frequency of use in COHA of the <i>go-V</i> and the <i>bare-go-and-V</i> sequences per million words from 1810 to 2009 | 133 |
| Figure 7.1 | Frequency of use in COHA of the <i>go-Ving</i> sequences per million words from 1810 to 2009 | 163 |
| Figure 7.2 | Frequency of use in COHA of the <i>not-go-Ving</i> sequences per million words from 1810 to 2009 | 164 |
| Figure 8.1 | Frequency of use in COHA of the <i>sit-and-V</i> sequences per million words from 1810 to 2009 | 177 |
| Figure 8.2 | Frequency of use in COHA of the <i>sit-Ving</i> sequences per million words from 1810 to 2009 | 177 |
| Figure 8.3 | Frequency of use in COHA of the <i>stand-Ving</i> sequences per million words from 1810 to 2009 | 178 |

List of Tables

| | | |
|-----------|--|-----|
| Table 2.1 | The syntactic distinction between complement and adjunct | 16 |
| Table 2.2 | A general classification schema of multi-verb sequences | 17 |
| Table 2.3 | Various meanings with respect to <i>to</i> -infinitive and gerund-participial clauses | 19 |
| Table 2.4 | Egan's semantic classification of catenative complements | 21 |
| Table 3.1 | The general classification of multi-verb sequences discussed so far | 50 |
| Table 3.2 | The integrity or inseparability of the sequence of the first and the second verbs discussed so far | 52 |
| Table 4.1 | Eight types of exceptions to the CSC based on four previous studies | 66 |
| Table 4.2 | Five types of exceptions to the CSC based on eight previous studies | 73 |
| Table 4.3 | The general classification of multi-verb sequences discussed so far | 88 |
| Table 4.4 | The integrity or inseparability of the sequence of the first and the second verb discussed so far | 89 |
| Table 4.5 | The relationship between the general classification and exceptions to the CSC | 90 |
| Table 5.1 | The <i>GoVP_{bare}</i> construction (Goldberg 2006: 54) | 99 |
| Table 5.2 | The general classification of multi-verb sequences discussed so far | 110 |
| Table 5.3 | The integrity or inseparability of the sequence of the first and the second verb discussed so far | 111 |
| Table 6.1 | The top ten second verb used most frequently in CWO in the <i>help-V</i> and the <i>help-to-V</i> sequences (frequency in parentheses) | 116 |
| Table 6.2 | The <i>help-V</i> and the <i>help-to-V</i> sequences across inflectional categories of the first verb in CWO (percentages in parentheses) | 117 |
| Table 6.3 | The token frequencies of the infinitive form and the non-infinitive form of the first verb in the <i>help-V</i> and the <i>help-to-V</i> sequences in CWO | 117 |
| Table 6.4 | The token frequencies of the present form and the non-present form of the first verb in the <i>help-V</i> and the <i>help-to-V</i> sequences in in CWO | 117 |
| Table 6.5 | The top ten second verbs used most frequently in CWO in the <i>try-and-V</i> and the <i>bare-try-to-V</i> sequences (frequency in parentheses) | 119 |
| Table 6.6 | The <i>try-and-V</i> and the <i>bare-try-to-V</i> sequences across inflectional categories of the first verb in CWO (percentages in parentheses) | 119 |
| Table 6.7 | The token frequencies of the infinitive form and the non-infinitive form of the first verb in the <i>try-and-V</i> and the <i>bare-try-to-V</i> sequences in CWO | 120 |
| Table 6.8 | The top ten second verb used most frequently in CWO in the <i>come-V</i> and the <i>bare-come-and-V</i> sequences (frequency in parentheses) | 121 |

| | | |
|------------|---|-----|
| Table 6.9 | The inflectional categories of the first verb in the <i>come-V</i> and the <i>bare-come-and-V</i> sequences in CWO (percentages in parentheses) | 122 |
| Table 6.10 | The token frequencies of the imperative form and the non-imperative form of the first verb in the <i>come-V</i> and the <i>bare-come-and-V</i> sequences in CWO | 122 |
| Table 6.11 | The top ten second verbs used most frequently in CWO in the <i>go-V</i> and the <i>bare-go-and-V</i> sequences (frequency in parentheses) | 124 |
| Table 6.12 | The inflectional categories of the first verb in the <i>go-V</i> and the <i>bare-go-and-V</i> sequences in CWO (percentages in parentheses) | 124 |
| Table 6.13 | The token frequencies of the imperative form and the non-imperative form of the first verb in the <i>go-V</i> and the <i>bare-go-and-V</i> sequences in CWO | 125 |
| Table 6.14 | Three features of semantically competing pairs of multi-verb sequences | 126 |
| Table 6.15 | Frequency of use in CWO of the <i>come/go-V</i> and the <i>come/go-comma-V</i> sequences per million words from 1990 to 1998 | 130 |
| Table 7.1 | The types covered by the previous studies | 139 |
| Table 7.2 | The VVingPP construction (Goldberg 2006: 52) | 145 |
| Table 7.3 | The <i>GoVingPP</i> construction (Goldberg 2006: 53) | 149 |
| Table 7.4 | The general classification of multi-verb sequences discussed so far | 160 |
| Table 7.5 | The token frequencies of the <i>come/go-N-Ving</i> sequences in COCA and COHA | 162 |
| Table 7.6 | The integrity or inseparability of the sequence of the first and the second verbs discussed so far | 162 |
| Table 8.1 | The integrity or inseparability of the sequence of the first and the second verbs with respect to four multi-verb sequences | 167 |
| Table 8.2 | The status of the subject with respect to four types of multi-verb sequences | 169 |
| Table 8.3 | The general classification of multi-verb sequences | 170 |
| Table 8.4 | The first verbs occurring in four types of multi-verb sequences in the reduced-structure group | 171 |
| Table 8.5 | The general classification of multi-verb sequences regarding the first verb <i>go</i> | 172 |
| Table 8.6 | The general classification of multi-verb sequences regarding the first verb <i>come</i> | 173 |
| Table 8.7 | The general classification of multi-verb sequences regarding the first verb <i>run</i> | 174 |
| Table 8.8 | The general classification of multi-verb sequences regarding the first verbs <i>sit</i> and <i>stand</i> | 175 |

| | | |
|-----------|--|-----|
| Table 8.9 | The general classification of multi-verb sequences in the reduced-structure group involving the variation of the temporal relationship | 179 |
|-----------|--|-----|

Chapter 1

Introduction

This dissertation is an empirical investigation into the nature of multi-verb sequences in English, fitting squarely in the realm of semantics. The notions ‘regularity’ and ‘irregularity’ play an important role in understanding the nature of multi-verb sequences in English. In the multi-verb sequences, regularities coexist with irregularities. Focusing on the multi-verb sequences which are generally regarded as irregular, this dissertation argues that irregularities are not peculiarities of the English language, but a normal part of the English language. Based on the assumption that the essence of language is its dynamics and plasticity, this dissertation also argues that irregularities stemming from regularities form new regularities. Our ultimate goal is to demonstrate that regularities are observed in irregularities by disentangling the intricate puzzle of multi-verb sequence. To fulfill our ultimate goal, we set two specific goals, to provide a general classification of multi-verb sequences and to identify the characteristics of individual multi-verb sequences.

In order to provide an appropriate context for the general classification of multi-verb sequences as one specific goal to be discussed in this dissertation, we briefly explain what a multi-verb sequence is. The term ‘multi-verb sequence’ in this dissertation is defined as follows. There are four types of multi-verb sequences in English, the *V-to-V*, the *V-Ving*, the *V-and-V*, and the *V-V* sequences, where the first slot is always a single verb and the second slot can be either a single verb or a verb in a verb phrase. The sentences in (1) are typical examples in this dissertation.

- (1) a. the *V-to-V* sequence: He went to see ‘Twelfth Night’.
 b. the *V-Ving* sequence: He went sobbing up the stairs. (Oxford)
 c. the *V-and-V* sequence: He went and bought one hundred eggs.
 d. the *V-V* sequence: Go wash your hands. (Longman)

The first verb and the second verb can be either intransitive or transitive. The multi-verb sequence always lacks an intervening noun phrase between the first verb and the second verb. Whether or not the multi-verb sequence lacks an adverbial between the first verb and the second verb is the significant part of our discussion on multi-verb sequences. We syntactically divide various uses of multi-verb sequences into two groups, and we call the two groups the full-syntactic-structure group and the reduced-structure group. In the full-syntactic-structure group, a particular multi-verb sequence involves two verb phrases, and in the reduced-structure group, a particular multi-verb sequence is a part of a single verb phrase.

It must be noted that irregularities tend to exist in the reduced-structure group at various levels ranging from morphology through pragmatics to historical development. For instance, the

second verb phrase *to see 'Twelfth Night'* in (1a) and the second verb phrase *sobbing up the stairs* in (1b) seem to be an adjunct, but in fact their adjunct status is unclear. Huddleston and Pullum (2002: 1223-1224) point out that in (1a) *in order* cannot be inserted, and that (1a) is not interpreted as answering the question *Why did he go?* They also point out that *sobbing up the stairs* cannot be omitted in (1b). (1c) does not represent full coordination, because it allows a violation of the Coordinate Structure Constraint (Ross 1967); extracting a noun phrase out of the second verb phrase of the coordinated structure is possible, as in *What did he go and buy?* The *V-V* sequence in (1d) is often regarded as a grammatical exception where the conjunction *and* is left out. It is clear that irregularities in syntax are, at first sight, observed in (1a), (1b), (1c), and (1d). In particular, many linguists have discussed theoretical problems of the Coordinate Structure Constraint in relation to sentences like (1c) (e.g., De Vos 2005, Deane 1991, 1992, Goldsmith 1985, Grosu 1973, Hofmeister and Sag 2010, Kehler 2002: Ch.5, Lakoff 1986, Na and Huck 1992, Postal 1998, Schmerling 1975, Zhang 2010). Specifically, they have discussed theoretical problems as to whether particular irregularities in syntax exist in coordinate structures. However, previous studies have paid little attention to the other three types of multi-verb sequences, shown in (1a), (1b), and (1d), where irregularities exist at the wide range of levels. In Chapters 3 through 7, we will thoroughly examine such irregularities existing at various levels ranging from morphology through pragmatics to historical development.

In marked contrast to the reduced-structure group, regularities in syntax tend to exist in the full-syntactic-structure group. If the first verb is a transitive verb, as in (2), the *to-V* in the *V-to-V* sequence, the *Ving* in the *V-Ving* sequence, and the second verb in the *V-V* sequence function as the head of a complement of the first verb.

- (2) a. I like to put lots of ketchup on my fries. (Longman)
 b. My father always enjoyed playing golf at weekends. (Longman)
 c. She was coming to help clean the machines. (Longman)

If the first verb is an intransitive verb, as in (3), the *to-V* in the *V-to-V* sequence and the *Ving* in the *V-Ving* sequence function as the head of an adjunct of the first verb, as in (3).

- (3) a. She walked to save money.
 b. His first wife died giving birth to their only son.

Regardless of whether the first verb is transitive or not, the *V-and-V* sequence can, in general, involve full coordination, as in (4).

- (4) a. You've illegally accessed and misused confidential security files. (Collins)
 b. The sun shone on the sea and the waves danced and sparkled. (Oxford)

Previous studies of multi-verb sequences in the full-syntactic-structure group are based on the premise that particular regularities in syntax exist in multi-verb sequences shown in (2), (3), and (4). The *V-to-V* and the *V-Ving* sequences involving complementation have been a prolific research area for many years (e.g., Boertian 1979, Bolinger 1968, Dirven 1989, Dixon 1991, Duffley 1992, 1994, 1999, 2000, 2004, 2006, Duffley and Tremblay 1994, Egan 2008, Freed 1979, Huddleston and Pullum 2002, Kempson and Quirk 1971, Kiparsky and Kiparsky 1970, Langacker 1991, Mair 1990, Quirk et al. 1985, Riddle 1975, Smith and Escobedo 2001, Taylor 1993, Verspoor 1996, 1999, 2000, Wierzbicka 1988, Wood 1956). Much attention has been paid to coordination, and many descriptive and theoretical issues of coordinate structures have been discussed (e.g., Borsley 1994, Cormack and Smith 2005, Culicover and Jackendoff 1997, Dougherty 1970, Gleitman 1965, Goodall 1987, Haspelmath 2004a, Lakoff and Peters 1969, R. Lakoff 1971, Langacker 2009: Ch.12, Progovac 1998a, 1998b, Sag et al. 1985, Schachter 1977, van Oirsouw 1987). The previous studies of multi-verb sequences concerning the full-syntactic-structure group are viewed as the foundation stones of our investigation of multi-verb sequences concerning the reduced-structure group. By comparing multi-verb sequences concerning the reduced-structure group with the ones concerning the full-syntactic-structure group, this dissertation will shed new light on many features of multi-verb sequences concerning the reduced-structure group at various levels ranging from morphology through pragmatics to historical development.

The other specific goal of this dissertation is to identify the characteristics of individual multi-verb sequences. To do so, we need to explicate the meanings associated with particular multi-verb sequences at least for two reasons. One reason is that the same surface structure does not always entail the same interpretation because of different grammatical constructions for a single surface structure. For instance, despite much discussion of theoretical problems of the Coordinate Structure Constraint in relation to sentence like (1c), two different interpretations of (1c) have rarely been discussed. One interpretation is that he needs to have bought one hundred eggs at the particular store referred to in the first conjunct, and the other interpretation is that the speaker is surprised or annoyed by what he has done something stupid, that is to say, what he has bought one hundred eggs. In much the same vein, two different interpretations are possible for (5).

(5) He went looking for a gas leak with a lighted match. (Salkie 2010: 182)

One interpretation is that he went somewhere for the purpose of finding a gas leak, and the other interpretation is that he went somewhere while looking for a gas leak. The two different interpretations in (1c) and (5), respectively, may, at first sight, be considered as irregular. The different interpretations come from the differences in internal structures. We will show that the differences in internal structures and interpretations involve regularities and irregularities in syntax and semantics in Chapters 3 through 5 and 7.

The other reason is that we need to test Bolinger's (1968: 127) hypothesis that 'a difference

in syntactic form always spells a difference in meaning'. This hypothesis will be adopted in this dissertation as a working hypothesis. It has long been recognized that differences in form are associated with differences in meaning (e.g., Anderson 1971, Bolinger 1971, 1977, Borkin 1973, 1984, Dirven 1989, Dixon 1984, 1991, Fillmore 1968, Givón 1993, Goldberg 1995, Green 1973, 1974, Kirsner and Thompson 1976, Langacker 1985, 1991, Oehrle 1976, Partee 1965, Spears 1977, Verspoor 2000, Wierzbicka 1988). For instance, Fillmore (1968: 49fn) points out that (6a) and (6b) differ in meaning.

- (6) a. The garden is swarming with bees.
 b. Bees are swarming in the garden. (Fillmore 1968: 49fn)

In (6a) the whole garden is full of bees, but in (6b) only a part of the garden can be full of bees. Kirsner and Thompson (1976: 215) provide the contrast in (7) and (8).

- (7) a. I saw her drown.
 b. I saw her drowning.
 (8) a. *I saw her drown, but I rescued her.
 b. I saw her drowning, but I rescued her. (Kirsner and Thompson 1976: 215)

(7a) means that she drowned, and (7b) means that she was in the course of drowning. In (7a) the event of drowning is ended, but in (7b) the one is not ended. Due to the context added to a sentence which contradicts a perfective reading, (8a) is not acceptable. Borkin (1984: 79) also provides the differences in (9).

- (9) a. I find that this chair is uncomfortable.
 b. I find this chair to be uncomfortable.
 c. I find this chair uncomfortable. (Borkin 1984: 79)

Each sentence in (9) has the same proposition. However, Borkin (1984: 79) argues that the differences in (9) are closely related to 'whether or not a complement represents a fact based on experience or, rather, describes the experience itself'. The proposition in (9a) is viewed as based on evidence, whereas the one in (9c) as the report of an experience. (9a) might be used for a judgment based on indirect evidence through asking people or learning the results of consumer reaction tests, but (9c) implies that 'I' myself actually sit on the chair and directly experience the discomfort. By contrast, (9b) might be used in either circumstance.

We observe four pairs of multi-verb sequences in the sentences through (10) to (13), the *try-to-V* and the *try-and-V* sequences in (10), the *help-V* and the *help-to-V* sequences in (11), the *go-and-V* and the *go-V* sequences in (12), and the *come-and-V* and the *come-V* sequences in (13).

- (10) a. I'll try to get you a new one tomorrow.
 b. I'll try and get you a new one tomorrow.
- (11) a. She helped organize the party.
 b. She helped to organize the party.
- (12) a. She'll go and see it when she can.
 b. She'll go see it when she can. (Bolinger 1983: 163)
- (13) a. The truck come and pick up the garbage every Monday.
 b. The truck come pick up the garbage every Monday. (Shopen 1971: 259)

The members of such a pair are very similar in meaning. In this dissertation, we call a member of the pair 'semantically competing multi-verb sequence.' Previous studies which place emphasis on either syntax or semantics do not explain fully why such semantically competing multi-verb sequences exist (e.g., Carden and Pesetsky 1977, Duffley 1992, Kjellmer 1985, Lind 1983a, 1983b, Newman and Rice 2008, Shopen 1971, Zwicky 1969). To closely scrutinize differences between semantically competing multi-verb sequences, any conventional approach, regardless of whether it is based on syntax or semantics, is not adequate. Based on our approach to investigating multi-verb sequences proposed in this dissertation, we will try to explain in Chapters 3 through 6 why such semantically competing multi-verb sequences coexist. Our approach will also show in Chapter 6 that the semantically competing multi-verb sequences often exhibit differences in functional and historical terms.

This dissertation belongs in the realm of semantics. To capture the nature of meaning, any single approach is completely inadequate. In particular, to capture the mismatch between form and meaning or apparent irregularities in multi-verb sequences in English, we must investigate them from different angles. We call this approach a multi-angled approach on the basis of semantics. In this dissertation, we will take four different angles to multi-verb sequences in English, ranging from a syntactic angle to semantic, functional, and then historical angles. The reason why we need a syntactic angle is that we need to understand the structures of multi-verb sequences in a systematic way. The syntactic angle is the first step in examining regularities and irregularities in multi-verb sequences. The reason why we need a semantic angle is that our investigation into multi-verb sequences in English constitutes the challenge to generative grammar. We argue that the syntax of multi-verb sequences cannot be satisfactorily accounted for without semantics. Stated another way, we argue that the syntax of multi-verb sequences is semantically motivated.

The reason why a functional angle is essential for this dissertation is that we emphasize the importance of linguistic function in the interpretation of quantitative analyses of multi-verb sequences. We assume that form and function are inseparable and interdependent, and that form is semantically motivated. There is also an emerging research area in English linguistics which is related to current changes, that is to say, changes in the English language that have taken place over relatively short spans of time, over decades rather than centuries (e.g., Aarts et al. 2013, Denison 1998, 2004, Krug 2000, Leech 2003, 2004, Leech and Smith 2006, 2009, Leech

et al. 2009, Mair 1995, 1997, Mair and Leech 2006, Smith 2002, 2003). This research area requires a historical angle. The reason why we take account of historical development of multi-verb sequences is that there is a possibility that particular multi-verb sequences are currently undergoing change (Aarts et al. 2013). Semantic approaches taken by previous studies are not in many ways similar to our multi-angled approach on the basis of semantics in this dissertation (e.g., Boas 2003, Bolinger 1977, Borkin 1984, Bybee 2010, Deignan 2005, Dixon 1991, Duffley 1992, 2006, Egan 2008, Faulhaber 2011, Fillmore 2003, Goldberg 1995, Gries and Stefanowitsch 2006, Hasselgård 2010, Patten 2012, Radden et al. 2007, Tyler and Evans 2003, Wierzbicka 1988). By taking the multi-angled approach on the basis of semantics, this dissertation makes clear the value of our approach to multi-verb sequences.

It must be emphasized here that linguistics as well as any other discipline builds on the past, not only by challenging and refuting previous studies, but also by developing and reformulating them. There are previous studies dealing adequately with irregularities in syntax (e.g., Durie and Ross 1996, Fillmore et al. 1988, Jackendoff 1975, Lakoff 1970, Maiden 1992). However, such previous studies have not discussed multi-verb sequences. At this point, it is reasonable to state that linguists have paid little attention to multi-verb sequences which are related to the notion ‘irregularity’ to be discussed in this dissertation. In a similar vein, a number of linguists have studied basic verbs which include perception verbs (Sweetser 1990: Ch.2), *come* and *go* (e.g., Clark 1974, Fillmore 1971, Radden 1996), *eat* and *drink* (Newman 1997), *give* (Newman 1996), *take* (Norvig and Lakoff 1987), *have* (Wierzbicka 1982), and *sit*, *stand*, and *lie* (Newman 2002, Newman and Rice 2004, 2009). The verbs occurring in the first verb slot in multi-verb sequences in the reduced-structure group are, in most cases, basic verbs. This means that studies of basic verbs can impact on the exploration of multi-verb sequences. However, the previous studies of basic verbs have hardly discussed verbs occurring in the first verb slot in multi-verb sequences as an object of study in its own right. In this respect, it is fair to state that linguists have paid little attention to verbs occurring in the first verb slot in multi-verb sequences. Little attention to multi-verb sequences does not mean that there are no previous studies which affect the exploration of multi-verb sequences. Many recent studies on linguistics, including this dissertation, must stress the continuity of studies from the early days to the present day, because we have to develop future intellectual pursuits by understanding and building on the studies created by linguists of the past. Therefore, we must not only examine each of previous studies, but also establish the hidden or heretofore unknown connections between the individual studies in the past, in the following chapters, exploring the nature of four types of multi-verb sequences. Each chapter of Chapters 3 through 5 and Chapter 7 provides a thumbnail sketch of the previous studies of each type of multi-verb sequences.

This dissertation is organized as follows. Chapter 2 provides a firm foundation for the study of multi-verb sequences. We present three things, our corpus methodology, our definition of catenative complements as one defining characteristics of some multi-verb sequences, and some properties of components of multi-verb sequences. We also provide a general classification schema of multi-verb sequences, which is vital to the exploration of the multi-verb sequences.

Based on the general classification schema of multi-verb sequences, Chapters 3 through 5 examine the *V-to-V*, the *V-and-V*, and the *V-V* sequence, respectively. The three chapters take the semantic and the syntactic angles, and they necessitate using one notion, the integrity or inseparability of the sequences of the first and the second verbs. In Chapter 3, the grammatical term ‘raising verb’ and the verb *come* where motion is not expressed play an important role in exploring the nature of the *V-to-V* sequence. In Chapter 4, exploring the nature of *V-and-V* sequence, we reexamine the Coordinate Structure Constraint (Ross 1967). We demonstrate that there are two types of exceptions to the Coordinate Structure Constraint, genuine exceptions and apparent exceptions. In Chapter 5, the inflection condition plays a major role in exploring the nature of the *V-V* sequence. In Chapter 6, we turn our attention to the interpretation of the quantitative data of multi-verb sequences, by using two corpora, Collins Wordbanks Online (CWO) as a synchronic corpus and the Corpus of Historical American English (COHA) as a diachronic one. The functional and the historical angles play a vital part in differentiating between semantically competing multi-verb sequences where there is no satisfactory explanation from a semantic standpoint in Chapters 3 through 5. We have four pairs of semantically competing multi-verb sequences, the *try-to-V* vs. the *try-and-V* sequences, the *help-V* vs. the *help-to-V* sequences, the *come-V* vs. the *come-and-V* sequences, and the *go-V* vs. the *go-and-V* sequences. To provide an overall picture of multi-verb sequences, Chapter 7 explores the nature of another sequence, that is to say, the *V-Ving* sequence, from a syntactic angle, a semantic angle, and a historical angle. The *V-Ving* sequence is markedly different from the other three types of multi-verb sequences. We show that the *V-Ving* sequence retains more special characteristics than any other multi-verb sequence. Presenting an overall picture of multi-verb sequences, Chapter 8 clearly demonstrates what the general classification of multi-verb sequences signifies, and that there are some constraints imposed on the reduced-structure group. In particular, Chapter 8 describes distinctive features of the reduced-structure group. Observing regularities and irregularities in four types of multi-verb sequences in the reduced-structure group, we demonstrate that irregularities found are in fact regularities. Chapter 9 discusses Bolinger’s hypothesis mentioned above, after summarizing main findings. Lastly, it offers some concluding remarks.

Chapter 2

Descriptive and Methodological Backgrounds

The aim of this chapter is to provide descriptive and methodological backgrounds for the analysis of multi-verb sequences. This chapter is structured as follows. Section 2.1 provides a brief outline of our corpus methodology. Section 2.2 introduces descriptive terms used in our study, focusing on ‘catenative complements’ as one defining characteristics of many multi-verb sequences. Section 2.3 provides a general classification schema of multi-verb sequences, which is vital to the exploration of the multi-verb sequences. Section 2.4 introduces some properties of components of multi-verb sequences.

2.1 Corpus Methodology

In this dissertation, we use corpora as a source of data. We mainly employ two corpora of two different types, Collins Wordbanks Online (CWO) as synchronic corpus and the Corpus of Historical American English (COHA) as a diachronic corpus. The interpretation of data obtained from the two corpora plays a supporting role in investigating the nature of multi-verb sequences. In this section, we provide a brief outline of our corpus methodology.

Our use of corpus methodology is twofold, synchronic and diachronic. With regard to a synchronic use, the distinction between corpus-based linguistics and corpus-driven linguistics was introduced by Tognini-Bonelli (2001). In corpus-based linguistics, corpus data is typically used in order to explore a theory or hypothesis, with the aim of validating it, refuting it, and refining it (e.g., Aijmer 2002, Biber et al 1999, Collins 1991, Gries and Stefanowitsch 2006, Mair 1990, Meyer 1992, Stefanowitsch and Gries 2006). The definition of corpus linguistics as a method underpins this corpus-based linguistics. Corpus-driven linguistics rejects the characterization of corpus linguistics as a method (e.g., Baker et al. 1993, Hunston and Francis 2000, McEnery et al. 2006, Mahlberg 2005, Partington 1998, Römer 2005, Sinclair 1991, Stubbs 2001). Instead, it claims that the corpus itself should be the sole source of our hypotheses about language. It is thus claimed that the corpus itself embodies a theory of language. Tognini-Bonelli’s distinction is widely used. However, McEnery and Hardie (2011) point out that it is not always fixed in practice, as often happen with such a dichotomy. The implication of corpus-based versus corpus-driven is that the primary difference between the two is the degree to which empirical data from a corpus is relied on. All corpus linguistics can be reasonably described as corpus-based.

Tummers et al. (2005) proposes a distinction between corpus-based linguistics and corpus-illustrated linguistics, presenting an overview of the methodological techniques of cognitive linguistics that propose a usage-based model of grammar (Langacker 1988, 2000). We

call the terms corpus-based linguistics and corpus-illustrated linguistics the corpus-based technique and the corpus-illustrated technique. It is necessary to differentiate their distinction between the corpus-based and the corpus-illustrated techniques from Tognini-Bonelli's distinction between corpus-driven and corpus-based linguistics. The corpus-based technique is a strongly data-driven approach, relying on quantitative analysis applied to a whole corpus, whereas the corpus-illustrated technique uses a corpus as a source of examples. In this regard, the corpus-based and the corpus-illustrated techniques roughly correspond to Tognini-Bonelli's corpus-driven and corpus-based linguistics, respectively. However, there is a crucial difference between the corpus-based technique and Tognini-Bonelli's corpus-driven linguistics in that the corpus-based technique focuses on combining quantitative corpus analysis with explanatory notions from cognitive linguistics. Tummers et al. (2005) point out that the distinction involves a continuum rather than constituting a dichotomy. The corpus-based and the corpus-illustrated techniques define the endpoints of the continuum. A lot of studies based on corpus data occupy an intermediary position between both endpoints (e.g., Deignan 2005, Glynn and Fischer 2010, Gries and Stefanowitsch 2006, Rohdenburg and Mandorf 2003, Stefanowitsch and Gries 2006). In this dissertation, we do not take Tognini-Bonelli's corpus-driven linguistics.

We propose one additional technique, the corpus-corroborated technique in which previous analyses based on corpus data or the findings of previous studies based on linguists' introspection are examined to see if they are supported by using another corpus or corpora. Chiefly using two of these three techniques, the corpus-illustrated and the corpus-corroborated techniques, the synchronic approach based on corpus data which is employed here has two important aspects. One is to examine whether or not the findings of the previous studies based on corpus data or of the previous studies based on linguists' introspection can be supported by sufficient data from CWO. The other is to provide a means of identifying characteristics underlying a given linguistic structure, which might otherwise remain unexplained.

As for a diachronic use, an approach based on corpus data places a great deal of stress on the corpus-based technique (e.g., Aarts et al 2013, Brinton 2008, Hoffmann 2005, Leech et al. 2009, Lindquist and Mair 2004, Mair 2006, Rudanko 2011, Schlüter 2005). The diachronic approach seems to have considerable common ground with the study of the historical development of a given linguistic structure. There are three reasons (see Leech and Smith 2009, Mair 2004). First, both place a high priority on the study of utterances within their appropriate contexts. Second, both consider transitions between grammatical categories as gradual rather than abrupt. Third, both emphasize the importance of frequency data and statistics. In particular, the diachronic approach based on corpus data which is employed here allows us to make two important contributions. One is to study the incipient or ongoing processes of historical development that have not yet been detected by linguists, and the other is to illuminate important theoretical issues (Fillmore 1992).

In this dissertation, our synchronic approach usually involves a combination of the two techniques, the corpus-illustrated and the corpus-corroborated techniques. Where appropriate,

we take the diachronic approach with the corpus-based technique.¹ Our corpus methodology is considered as a hybrid of the three techniques (see Matsumoto 2013).

2.2 Descriptive Terms

This section introduces grammatical notions used in this dissertation. In particular, it focuses on the notion ‘catenative complement’ used in the descriptions of the multi-verb sequences, based on Huddleston and Pullum (2002).

Non-finite clauses are clauses that do not contain a tensed verb. We distinguish four form-types of non-finite verbal clauses in English, that is to say, *to*-infinitive clauses, bare infinitive clauses, gerund-participial clauses, and past participial clauses, exemplified in (1).²

- (1) a. *to*-infinitive
I just wanted to know if everything was all right. (Oxford)
- b. bare-infinitive
She helped him choose some new clothes. (Longman)
- c. gerund participial
My father always enjoyed playing golf at weekends. (Longman)
- d. past participial
Mullins had his nose broken in a fight. (Longman)

Non-finite clauses occur in a wide range of grammatical functions. Generally speaking, non-finite clauses are divided into two groups. Based on the grammatical function, the major distinction that we draw is between non-finites in complement function and those in non-complement function such as modifiers. For instance, (2) and (3) are the examples illustrating complement *to*-infinitive and non-complement *to*-infinitive, respectively.

- (2) a. His aim was to intimidate us. [complement in clause structure]
- b. She is [keen to regain control]. [complement in adjective phrase structure]
- c. I’ve missed [the opportunity to have my say]. [complement in noun phrase structure]
- d. She left at six [in order to catch the early train]. [complement in prepositional phrase structure]

¹ With respect to research on linguistic variation based on corpus data, Gries (2003: 185) points out that univariate analysis methods may be unable to uncover significant effects, and that they are likely to fail in adequately describing, comprehensively explaining, and successfully predicting linguistic variation. Some studies have shown that variation phenomena are best described by carrying out multifactorial research (e.g., Bresnan et al. 2007, Gries 2003, Gries and Hilpert 2010, Hinrichs and Szmrecsanyi 2007, Lohmann 2011).

² In this dissertation, we use gerund-participle and past participle for the verb-forms, and gerund-participial and past-participial for the clauses.

- (3) a. She left at six to catch the early train. [modifier in clause structure]
 b. He's a charlatan, to put it bluntly. [loosely attached modifier]
 c. I've found [a box to keep the takes in]. [modifier in noun phrase structure]
- (Huddleston and Pullum 2002 : 1176)

Huddleston and Pullum (2002) point out that although they are non-finite clauses, catenative complements are different from non-finite complement clauses shown in (2). Following Huddleston and Pullum (2002), we will state briefly what the catenative complement is and discuss the semantic status of the subject with respect to the verb taking the catenative complement in Section 2.2.1. We will also discuss the distinction between a complement and an adjunct in Section 2.2.2.

2.2.1 The Definition of Catenative Complement

The term catenative comes from Latin *catena*, a chain. Huddleston and Pullum (2002) apply the term catenative both to the non-finite complement and to the verb that licensed it.³ A catenative verb is a verb which takes a non-finite clause as its complement. The term catenative also alludes to the possibility of a recursive chain of such catenative verbs, since the verb in the complement of the previous catenative verb can itself be a catenative verb with a non-finite complement, as in (4).

- (4) She intends to try to persuade him to help her redecorate her flat.
 (Huddleston and Pullum 2002: 65)

In (4), there are four catenative verbs and four catenative complements in a chain of five verbs, *intend*, *try*, *persuade*, *help*, and *redecorate*, as shown in (5).

- | (5) catenative verb | catenative complement |
|---------------------|--|
| a. intend | to try to persuade him to help her redecorate her flat |
| b. try | to persuade him to help her redecorate her flat |
| c. persuade | to help her redecorate her flat |
| d. help | redecorate her flat |

³ The approach to catenative complement that Huddleston and Pullum (2002) take owes much to Palmer (1987: Ch.9). The definition of catenative varies slightly from linguist to linguist. For instance, Twaddell (1968) uses the term catenative to refer to verbs in such constructions as *be going to*, *be about to*, *be bound to*, *be supposed to*, *be to*, *get+-ing*, *keep (on)+-ing*, *want to*, *dare to*, *have to*, *need to*, *ought to*, and *used to*. Brinton (1980) applies the term catenative to aspectual verbs occurring with *to*-infinitives or gerunds. Quirk et al. (1985: 146) apply the term catenative to verbs in such constructions as *appear to*, *come to*, *fail to*, *get to*, *happen to*, *manage to*, *seem to*, *tend to*, and *turn out to* which are followed by the *to*-infinitive.

Huddleston and Pullum divide catenative complements into two types on the basis of form. One is a simple catenative construction, which lacks an intervening noun phrase between the catenative verb and the verb in the complement, as in (5a), and (5b). The other is a complex catenative construction, as in (5c) and (5d), where a catenative verb takes a noun phrase complement as an object in addition to the catenative complement. In this dissertation, we treat only simple catenative constructions.

Huddleston and Pullum (2002) draw attention to catenative complement as one type of non-finite clauses, which functions differently from other non-finite clauses. Non-finite clauses occur in a wide range of grammatical functions, as shown in (6).

- | | |
|----------------------------|---|
| (6) a. subject: | To underestimate her would be foolish. |
| b. object: | I found talking to her quite helpful. |
| c. predicative complement: | I call that taking liberties. |
| d. extraposed subject: | It was natural to be worried. |
| e. extraposed object: | I found it distressing to see her so ill. |
| f. catenative complement: | i. She wants to leave the country. |
| | ii. She seems to like them. |
| | iii. She hopes to hear from them soon. |

(Huddleston and Pullum 2002: 1176)

In cases other than catenative complements, non-finite clauses bear the same grammatical function as other syntactic categories. The non-finite clauses in (6a), (6b), and (6c) are used in place of the noun phrases in (7a), (7b), and (7c) as subject, object, or predicative complement. The non-finite clauses in (6d) and (6e) are used in place of the finite clauses as extraposed subject or object in (7d) and (7e).

- | | |
|----------------------------|---|
| (7) a. subject: | Such behavior would be foolish. |
| b. object: | I found the discussion quite helpful. |
| c. predicative complement: | I call that an outrage. |
| d. extraposed subject: | It was natural that they should be worried. |
| e. extraposed object: | I found it distressing that she was so ill. |

(Huddleston and Pullum 2002: 1176)

However, the catenative complements in (6f) cannot be satisfactorily subsumed under the grammatical functions of objects or predicative complements within verb phrase structures. The catenative complements do not share the distribution of object, predicative complement, or complement of prepositional verb, when all of the examples of *want*, *seem*, and *hope* in (8), (9), and (10) are considered.

- (8) a. object: She wants a holiday.
 b. predicative complement: *She wants that an outrage.
 c. complement of prepositional verb: *She wants for a holiday.
- (9) a. object: *She seems a nice person.
 b. predicative complement: She seems fond of them.
 c. complement of prepositional verb: *She seems for a nice person.
- (10) a. object: *She hopes an early reply.
 b. predicative complement: *She hopes that an outrage.
 c. complement of prepositional verb: She hopes for an early reply.

As shown in (8), the verb *want* can take an object, but it cannot take a predicative complement or a complement of prepositional verb. As shown in (9), the verb *seem* can take a predicative complement, but it cannot take an object or a complement of prepositional verb. Given that *a nice person* in (9a) is an object, (9a) is ungrammatical. As shown in (10), the verb *hope* can take a complement of prepositional verb, but it cannot take an object or a predicative complement. Therefore, (8), (9), and (10) show that the catenative complements in (6f) do not correspond to any of the three grammatical functions. Huddleston and Pullum (2002) analyze the catenative complements in (6f) as examples of a distinct type of complement realized exclusively by non-finite clauses.

Now we discuss the semantic status of the subject with respect to the verb taking the catenative complement, based on Huddleston and Pullum (2002). Most non-finite clauses have no subject, but the interpretation requires that an understood subject be found. Typically, the verb phrase represents a semantic predicate, and it is necessary to find the argument that it is predicated of. There are two types of interpretation of the missing subject in the catenative complement. Simply stated, there are two kinds of subject with respect to the catenative verb, a controlling subject and a raised subject (see Chomsky 1973).⁴ The semantic difference between them can be illustrated with the verbs *hope* and *seem*, as shown in (11).

- (11) a. Lucy hoped to convince them.
 b. Lucy seemed to convince them.

In (11a) *Lucy* is a controlling subject in that it is an argument of the verb *hope*. In (11a) *hope* denotes Lucy's psychological attitude to the potential situation where she convinces them. The missing subject is controlled by the matrix subject. By contrast, in (11b) *Lucy* is not an argument of the verb *seem*. The meaning that (11b) conveys is something like 'Seemingly, Lucy convinced them', where *seem* has a modal meaning. Syntactically *Lucy* is the subject of *seem*, but semantically *Lucy* is related only to the subordinate *convince* clause. *Lucy* in (11b) is a raised subject where the verb that *Lucy* is related to syntactically is higher in the constituent

⁴ Huddleston and Pullum (2002) use the term ordinary subject instead of controlling subject.

structure than the one that it is related to semantically. It is fair to state that the missing subject of the non-finite clause has a controlled interpretation in (11a) and a raised interpretation in (11b). In this dissertation, verbs like *hope* which take a controlled complement are called control verbs, and verbs like *seem* which take a raised complement raising verbs.⁵

The distinction between controlling and raised subjects applies to gerund-participial complements, too, as shown in (12).

- (12) a. Lucy enjoyed heckling Charlie.
 b. Lucy kept heckling Charlie.

In (12a) *Lucy* is a controlling subject in that it is an argument of the verb *enjoy*, with the semantic role of experiencer. However, in (12b) *Lucy* is a raised subject. There is no direct semantic relation between *Lucy* and *keep*. The meaning that (12b) conveys is simply that the situation where Lucy heckled Charlie recurred over and over again. The parallel with infinitival complements is made clearer by the fact that there are both control and raising catenative verbs that take either infinitival or gerund-participial complements. The verb *begin* in (13) is a raising catenative verb and the verb *like* in (14) is a control catenative verb.

- (13) a. It began to rain.
 b. It began raining.
 (14) a. My mother likes to work in her vegetable garden.
 b. My mother likes working in her vegetable garden.

The difference between control verbs and raising verbs is based on three distinguishing properties in early transformational grammar, the Standard Theory (Chomsky 1965). First, with respect to the voice of the non-finite complement, the raising verbs such as *seem* and *keep* are neutral (see Rosenbaum 1967: 59-61). As in (15) and (16), it is possible to change the subject without affecting the overall propositional meaning.

- (15) a. Lucy seemed to convince them.
 b. They seemed to be convinced by Lucy.
 (16) a. Lucy kept heckling Charlie.
 b. Charlie kept being heckled by Lucy,

By contrast, the control verbs such as *hope* and *enjoy* are voice-sensitive. As changing the subject changes the meaning, (17a) and (17b) or (18a) and (18b) differ sharply in meaning.

⁵ Huddleston and Pullum (2002) use the term non-raising verb instead of control verb.

- (17) a. Lucy hoped to convince them.
 b. They hoped to be convinced by Lucy.
- (18) a. Lucy enjoyed heckling Charlie.
 b. Charlie enjoyed being heckled by Lucy.

Second, a control verb imposes selection restriction on its subject, as in (19a) and (20a), because the subject must have the semantic role of experiencer. However, a raising verb imposes no selection restriction on its subject, as in (19b) and (20b).

- (19) a. #This news hoped to convince them.
 b. This news seems to convince them. (Huddleston and Pullum 2002: 1195)
- (20) a. #My paper enjoyed blowing away.
 b. My paper kept blowing away. (Huddleston and Pullum 2002: 1198)

Third, raising verbs allow the dummy subject *there*, as in (21), but control verbs do not, as in (22).

- (21) a. There seemed to be enough food available. (Huddleston and Pullum 2002: 1195)
 b. There kept being problems with the radio. (Huddleston and Pullum 2002: 1198)
- (22) a. *There hoped to be enough food available. (Huddleston and Pullum 2002: 1195)
 b. *There enjoyed being problems with the radio.
 (Huddleston and Pullum 2002: 1198)

The distinction between control and raising verbs plays an important role in describing features of *V-to-V* sequences in Chapter 3.

2.2.2 Complements versus Adjuncts

We have shown in Section 2.2.1 that catenative complements function as complements of the predicator. In this subsection, based on Huddleston and Pullum (2002), we review three key factors involved in the distinction between a complement and an adjunct: licensing, obligatoriness, and position.

The most important property of complements in clause structure is that they require the presence of an appropriate verb that licenses them. In (23a), the verb *mention* licenses an object, *the letter*, but the verb *allude* does not.

- (23) a. She mentioned the letter.
 b. *She alluded the letter. (Huddleston and Pullum 2002: 219)

By contrast, an adjunct, as shown in (24), is not restricted to occurrence with a particular kind of verb.

- (24) a. She mentioned the letter {for this reason/at that time/, however}.
 b. She alluded {for this reason/at that time/, however}.

A second important property of complements is that they are sometimes obligatory, whereas adjuncts are always optional, as in (25), (26), and (27).

- (25) obligatory complement
 a. She perused the report.
 b. *She perused.
 (26) optional complement
 a. She read the report.
 b. She read.
 (27) optional adjunct
 a. She left because she was ill.
 b. She left.

(Huddleston and Pullum 2002: 221)

According to Huddleston and Pullum (2002), obligatoriness is stronger than licensing. Licensing is a factor of a verb allowing a certain pattern of complementation, whereas obligatoriness is a factor of a verb requiring a certain pattern of complementation. With respect to what positions complements can occupy in the clause, complements are more restricted than adjuncts. For instance, complements in (23a) and (25a) must occupy subject and object respectively. On the other hand, adjuncts generally have greater mobility. For instance, they can be moved to front position or middle position, as in (28) and (29).

- (28) a. She mentioned the letter at that time.
 b. At that time she mentioned the letter.
 (29) a. She mentioned the letter, however.
 b. However, she mentioned the letter.
 c. She, however, mentioned the letter.

The syntactic distinction between a complement and an adjunct in terms of these three factors is summarized in Table 2.1.

| factor \ element of clause structure | complement | adjunct |
|--------------------------------------|------------|--------------|
| licensing | required | not required |
| obligatoriness | obligatory | optional |
| position | not mobile | mobile |

Table 2.1. The syntactic distinction between complement and adjunct

This syntactic distinction plays a crucial role in describing features of multi-verb sequences in Chapters 3 through 5 and Chapter 7.

2.3 A General Classification Schema of Multi-Verb Sequences

Given the in-depth analysis of membership in four types of multi-verb sequences, the *V-to-V*, the *V-and-V*, the *V-V*, and the *V-Ving* sequence, an overall picture of multi-verb sequences must be provided. To do so, an integrated approach to the four types of multi-verb sequences is absolutely vital. We propose a general classification schema of multi-verb sequences, shown in Table 2.2.

| group | sequence after V1 | semantic subtype | sequence | | <i>V-to-V</i> sequence | | <i>V-and-V</i> sequence | | <i>V-V</i> sequence | | <i>V-Ving</i> sequence | |
|--------------------------|-----------------------|------------------|----------------------|------------------|------------------------|------------|-------------------------|------------|---------------------|------------|------------------------|------------|
| | | | semantic types of V1 | | lexical | attenuated | lexical | attenuated | lexical | attenuated | lexical | attenuated |
| | | | grammatical | function of word | V1 | V1 | V1 | V1 | V1 | V1 | V1 | V1 |
| full-syntactic-structure | coordinated clause | | | | | | | | | | | |
| | clausal adjunct | | | | | | | | | | | |
| | catenative complement | | | | | | | | | | | |
| reduced-structure | semi-complement | | | | | | | | | | | |
| | adjunct/oblique | | | | | | | | | | | |

Table 2.2. A general classification schema of multi-verb sequences

A general classification schema of multi-verb sequences will prove useful in answering two key questions in this dissertation in (30).

- (30) a. What are the semantic and syntactic relationships between the first and the second verbs in each of the four types of multi-verb sequences?
- b. What is the relationship among various types of multi-verb sequences which are related to each other?

Now we provide a brief outline of the general classification schema of multi-verb sequences. From a syntactic point of view, various uses of the four types of multi-verb sequences can be categorized into two groups: ‘the full-syntactic-structure group,’ which involves two verb phrases, and ‘the reduced-structure group,’ which is part of a single verb phrase. The full-syntactic structure group can be divided into three types: the coordinated clause type, the clausal adjunct type, and the catenative complement type. It is easy to distinguish the

coordinated clause type from the catenative complement and the clausal adjunct types because of the nature of the conjunction *and*. In order to draw a syntactic distinction between the catenative complement type and the clausal adjunct type, we are required to use three key factors shown in Section 2.2.2. The reduced-structure group can fall into two types: the semi-complement type and the adjunct/oblique type. In the semi-complement type, the word sequence after the first verb behaves like a non-finite complement of the first verb, and it is in the semantic scope of the first verb. The sequence is virtually obligatory. In the adjunct/oblique type, the word sequence after the first verb is not in the semantic scope of the first verb, but it is semantically either like an adjunct of the first verb (e.g., manner adverbial) or like an oblique argument of the first verb (e.g., goal argument). From a semantic point of view, there are two types of verbs that occur as the first verb in multi-verb sequences: lexical V1, where the first verb is used in its basic meaning, and attenuated V1, where the first verb is used in its non-basic meaning. Each of the three types of the full-syntactic-structure group and each of the two types of the reduced-structure group can be further subcategorized into different semantic subtypes, respectively.

The details of the general classification of multi-verb sequences will be discussed in great depth in Chapters 3 through 5 and Chapter 7. In our discussion, the adverb test in (31) is pivotal to differentiate the full-syntactic-structure group from the reduced-structure group.

(31) the adverb test:

If both the first and the second verbs can independently take adverbs (or adverb phrases) which provide the same information (e.g., one temporal phrase for each verb), then the two verbs belong to different verb phrases in a full syntactic structure. If not, the two verbs are a part of a single verb phrase.

We will see that the full-syntactic-structure and the reduced-structure groups are also crucially different in terms of the integrity or inseparability of the sequence of the first and the second verb phrases. The general classification schema of multi-verb sequences, needless to say, will play a vital role in exploring the nature of multi-verb sequences in Chapters 3 through 5 and Chapter 7.

2.4 Some Properties of Components of Multi-Verb Sequences

This section introduces some properties of components of multi-verb sequences. In Section 2.4.1, we will show the characteristics of infinitives and gerund-participials, which are important components of the multi-verb sequences. In Section 2.4.2, we will show the characteristics of the deictic motion verbs *come* and *go*, which are used as the first verb in many of the multi-verb sequences.

2.4.1 *To*-Infinitives and Gerund-Participials

This subsection reviews the temporal properties of *to*-infinitive and gerund-participial based on previous studies of the *to*-infinitive and gerund-participial clauses. Most previous studies attach great importance to the semantic differences between *to*-infinitive and gerund-participial clauses, because they treat the *to*-infinitive and the gerund-participial clauses equally, especially as to which verbs can occur with the same predicates. The semantic differences are summarized in Table 2.3.

| work \ clause | <i>to</i> -infinitive | gerund-participial |
|-----------------------------|---|---|
| Wood (1956) | specific | general |
| Bolinger (1968) | hypothesis or potentiality | reification |
| Kiparsky & Kiparsky (1970) | non-factive | factive |
| Kempson & Quirk (1971) | non-fulfilment | fulfilment |
| Quirk et al. (1985) | potentiality | performance |
| Dixon (1991) | potentiality | activity extended in time |
| Wierzbicka (1985) | vague futurity | vague simultaneity |
| Duffley (1992) | future | interior |
| Dirven (1989) | a separate occurrence | an unbounded and non-individualized phenomena |
| Langacker (1991) | holistic construal | immediate scope |
| Taylor (1993) | a specific instance of a situation | a kind of situation |
| Verspoor (1996, 1999, 2000) | indirect interaction between conceptualizer and object | direct interaction between conceptualizer and object |
| Smith & Escobedo (2001) | conceptual distance between the main verb and the <i>to</i> -infinitive | conceptual overlap between the main verb and the <i>-ing</i> form |
| Egan (2008) | complement situation profiled as a unitary whole | complement situation profiled as extended |

Table 2.3. Various meanings with respect to *to*-infinitive and gerund-participial clauses

The semantically oriented studies in Table 2.3 have offered explanations which are too fragmentary to allow a synthesis. However, it seems that there are certain general temporal properties of *to*-infinitive and gerund-participial. In Section 2.4.1.1, we will show the temporal relationship between the catenative verb and the catenative complement on the basis of Egan's (2008) semantic classification of catenative complements. In Section 2.4.1.2, we describe the temporal properties of *to*-infinitive and gerund-participial which cover a broad range of *to*-infinitives and gerund-participials.

2.4.1.1 The Temporal Relations

Egan (2008) shows the semantic classification of catenative complements. On the basis of the semantic relationship between the catenative verb and the catenative complement, he divides catenative complements into six types. The first type is called the same-time type in the situation where what the second clause expresses is described as occurring simultaneously with the main verb, as in (32).

(32) I enjoyed playing tennis and squash. (Oxford)

Only the *V-Ving* sequence belongs to the same-time type. The second type is called the contemplation type in the situation where what the second clause expresses is described as occurring in some ‘domain’, as in (33).

(33) I have never contemplated living abroad. (Oxford)

Only the *V-Ving* sequence belongs to the contemplation type. The third type is called the backward-looking type in the situation where what the second clause expresses is described as occurring before the time of the main verb, as in (34).

(34) We couldn’t stop laughing. (Longman)

Again, only the *V-Ving* sequence belongs to the backward-looking type. The fourth type is called the forward-looking type in the situation where what the second clause expresses is described as expected to occur after the time of the main verb, as in (35).

(35) a. Don’t hesitate to contact me if you need any more information. (Longman)
 b. You should avoid mentioning his divorce. (Oxford)

Both the *V-to-V* and the *V-Ving* sequences belong to the forward-looking type. The fifth type is called the general type in the situation where what the second clause expresses is described as likely to occur on a more or less regular basis, as in (36).

(36) We all love to talk about ourselves. (Longman)

Only the *V-to-V* sequence belongs to the general type. The sixth type is called the judgment type in the situation where what the second clause expresses is hypothesized to be true, as in (37).

(37) She pretended to be ill and took a day off work. (Longman)

Only the *V-to-V* sequence belongs to the judgment type. Egan’s classification is summarized in Table 2.4.

| Egan's type \ sequence | <i>V-to-V</i> sequence | <i>V-Ving</i> sequence |
|------------------------|------------------------|------------------------|
| same-time | n/a (not applicable) | applicable |
| contemplation | n/a | applicable |
| backward-looking | n/a | applicable |
| forward-looking | applicable | applicable |
| general | applicable | n/a |
| judgment | applicable | n/a |

Table 2.4. Egan's semantic classification of catenative complements

Table 2.4 shows that the semantic types where *to*-infinitives belong are significantly different from the ones where gerund-participials belong, with the exception of the forward-looking type. Egan's classification shows that the semantic differences between *to*-infinitive and gerund-participial complements shown in Table 2.3 are of limited importance. All of the meanings in Table 2.3 account satisfactorily for some of Egan's semantic types of *to*-infinitives and gerund-participials, but few of them do so for all types. For instance, with respect to *to*-infinitives, the meaning of futurity is compatible to the forward-looking type, whereas it is not compatible with the judgment and the general types. With respect to gerund-participials, the meaning of overlapping covers the backward-looking, the contemplation, and the same-time types, with the exception of the forward-looking type.

Egan's classification is only partly effective in differentiating the *V-to-V* sequence from the *V-Ving* sequence, because it is not effective in cases where both the *V-to-V* and the *V-Ving* sequences belong to the same type in Egan's classification. Consider (38), (39), and (40).

- (38) a. I remembered to fill out the form.
 b. I remembered filling out the form.
- (39) a. As a child, I loved to watch the train go by.
 b. As a child, I loved watching the train go by. (Dirven 1989: 115)
- (40) a. She started to sneeze but then she didn't sneeze.
 b.*She started sneezing but then she didn't sneeze. (Tobin 1993: 167)

Egan's classification accounts for the semantic differences in (38) and (39). In (38a), *remember*, which means 'to take care not to forget', takes the *to*-infinitive, and it refers to a future act. (38a) belongs to the forward-looking type. In (38b), *remember*, which means 'to keep something such as people and events from the past in one's memory', takes the gerund-participial, and it refers to something which actually happened. (38b) belongs to the backward-looking type. According to Dirven (1989: 115), in (39a), the proposition with the *to*-infinitive is 'each single occurrence of the process of watching and consequently also the series of individual occurrences'. (39a) belongs to the general type. In (39b), the proposition with the gerund-participial is 'no longer the individual occurrences of watching the trains, but rather the unspecified and unbounded duration of the some phenomenon, here watching trains'

which means ‘some vague extension of the process of watching’. (39b) belongs to the same-time type. However, both sentences in (40) belong to the forward-looking type. Egan’s classification cannot distinguish (40a) from (40b).

To distinguish (40a) from (40b), we need to see Egan’s semantic classification shown in Table 2.4 as the temporal relation between the catenative verb and the catenative complement. Based on the temporal relation, we will describe the temporal properties of *to*-infinitive and gerund-participial which cover a broad range of *to*-infinitives and gerund-participials, in Section 2.4.1.2.

2.4.1.2 The Temporal Properties

In general, the great merit of the temporal relationship between the catenative verb and the catenative complement is to provide explanations for the *V-to-V* and the *V-Ving* sequences. In terms of the temporal relationship, in the *V-to-V* sequence there is a certain time lag between the first verb and the second verb phrase. By contrast, in the *V-Ving* sequence there is no certain time lag between the first verb and the second verb phrase.

Now we need to distinguish (40a) and (40b). Based on Freed (1979), we can say the following. In (40a) where there is a certain time lag between two situations ‘starting’ and ‘sneezing’, it was not implied that the two situations were, without doubt, realized. From (40a), it may follow that the activity expressed by *to*-infinitive, that is to say, sneezing, was not initiated, but that only the onset of the activity has taken place. By contrast, in (40b) where there is no time lag between two situations ‘starting’ and ‘sneezing’, the two situations were, without doubt, realized. Similarly, the temporal properties of *to*-infinitive and gerund-participial show the contrast between (41) and (42).

- (41) a. ?When the bell rings, ignore it and continue to read.
 b. When the bell rings, ignore it and continue reading.
- (42) a. Why don’t you continue to read for another few minutes?
 b. ?Why don’t you continue reading for another few minutes? (Freed 1979: 95)

In a classroom situation where a student is reading a report, everyone knows that at a given time a bell will ring indicating the end of the class. The teacher wants the student to continue past the bell. Before the bell rings, the teacher says (41b). In this situation, it is obvious that the activity expressed by gerund-participial, that is to say, the reading activity, represents an already-started situation. On the other hand, a situation in (42a) is subtly different from the one in (41b). When the bell rings, the student would probably stop, and the teacher might then say (42a). In such a situation, it seems to follow that the reading activity expressed by *to*-infinitive comes to a temporary halt and resume after the temporary halt. This means that the reading activity in (41a) represents a bounded situation where there is a starting point.

In this section, we have discussed one feature of catenative complements, the temporal properties, which play an important role in exploring the nature of the *V-to-V* sequence in

Chapter 3 and the nature of the *V-Ving* sequence in Chapter 7.

2.4.2 The Deictic Motion Verbs *Come* and *Go*

In this subsection, we will discuss the characteristics of the deictic verbs *come* and *go* briefly. We deal with the motion uses of *come* and *go* in Section 2.4.2.1 and the non-literal uses of *come* and *go* in Section 2.4.2.2. In the general classification schema of multi-verb sequences, the motion uses are seen as equivalent to lexical V1, as shown in (43), and the non-literal uses are seen as equivalent to attenuated V1, as in (44) and (45).

- (43) a. Come here!
 b. Come and see us soon!
- (44) a. The handle came loose. (Oxford)
 b. In time she came to love him. (Oxford)
- (45) a. Police are worried that many crimes go unreported. (Oxford)
 b. You've really gone and done it now! (Oxford)
 (= You've done something very stupid now!)

In particular, Section 2.4.2.3 focuses on the verb *go* as a marker of evaluative modality, which is a member of the non-literal use of *go*, as shown in (45).

2.4.2.1 The Motion Uses of *Come* and *Go*

In English the verbs *come* and *go* are the most typical verbs of motion. As Miller and Johnson-Laird (1976: 529) point out, 'verbs that describe movement are first learned, most frequently used and conceptually dominant.' Stated another way, our understanding of motion is, without doubt, related to the earliest and most basic physical experiences. Motion plays an important role both in our perceptual system and in our conceptualization of reality through the use of language. It is, therefore, not surprising that the directed motion verbs *come* and *go* have many non-literal uses where they do not express motion. Typical instances include the *come*-adjective and *go*-adjective phrases (e.g., *come true*, *go mad*; see Clark 1974, Radden 1996).

The verbs *come* and *go* are not just the most typical verbs of motion, but are also the deictic verbs of motion. With respect to the deictic verbs *come* and *go*, a major breakthrough in terms of a semantic approach was made by Fillmore (1971). Fillmore (1971) argues that the primary difference between *come* and *go* lies in the goal of the motion. In specifying directional motion, *come* basically requires that the deictic center itself be the goal of directional motion at either the time of utterance or the time referred to in it. *Go* represents motion towards a goal as a place where the speaker is not located at the time of the utterance. Another difference that Fillmore notes concerns the difference between goal-oriented and source-oriented reflected in the interpretation of temporal adverbs. In brief, *come* and *go* are goal-oriented and source-oriented, respectively. (46) and (47) express Tom's movement from unnamed location to the shop.

(46) Tom came to the shop around noon.

(47) Tom went to the shop around noon.

(46) implies that the speaker was in the shop, and the time reference *around noon* is understood as referring to the time of Tom's arrival at the shop. (47) implies that the speaker was not in the shop. The time reference *around noon* is understood as referring to the moment of Tom's departure from the presupposed location where his movement began or as referring to the moment of Tom's arrival at the shop. The uses of *come* and *go* are asymmetric with respect to the goal place as the deictic center. *Come* is used only when the mover moves toward the goal as the deictic center. *Go* is used only when the speaker is not at the goal. Fillmore's findings remain the cornerstone for the study of the deictic verbs *come* and *go*.

2.4.2.2 The Non-Literal Uses of *Come* and *Go*

On the basis of Fillmore (1971), Clark (1974) explores non-literal uses where *come* and *go* refer to change of state rather than actual motion. In such non-literal uses, the normal state of being serves as the deictic center. The normal state as the deictic center should always be the destination of *come* and the source of *go*. Because the motion *come* always refers to the deictic center as its destination, non-literal uses of *come* should always indicate entry into a normal state, as in (48) and (49).

(48) a. Tom came out of the coma yesterday.

b. *Tom came into a coma yesterday.

(49) a. All her hopes came true.

b. *He came mad.

Because the destination of the motion *go* is specified as somewhere other than at the deictic center, non-literal uses with *go* should occur only to indicate departure from the normal state, as in (50) and (51).

(50) a. Tom went into a coma yesterday.

b. *Tom went out of the coma yesterday.

(51) a. Tom went mad.

b. *The motor went alive again.

Clark also observes what she calls evaluative uses of *come* and *go*. Evaluative uses are closely related to the normal-state uses and the motion uses. The evaluative uses represent another form of deixis. When it is considered as a favorable viewpoint or generally acceptable attitude, the destination of *come* evokes a positive evaluation. In contrast, the evaluative use of *go* defines its destination as somewhere other than the speaker's location at the time of the utterance. The destination of *go* evokes a neutral or negative evaluation. Although (52a) seems

to be uttered by the grower or by anyone who includes themselves as a participant in the growing of tomatoes and observes approvingly someone's growing tomatoes, (52b) seems more indicative of the speaker who acts as a neutral observer, rather than a participant, and is uncommitted as to the merits and demerits of tomato-growing.

- (52) a. The tomatoes are coming along nicely this year.
 b. The tomatoes are going along nicely this year. (Clark 1974: 327)

(53a) definitely suggests an airplane crash, but (53b) further indicates a more positive outcome.

- (53) a. The plane went down near the lake.
 b. The plane came down near the lake. (Clark 1974: 327)

This is confirmed by the fact that (54b) can be modified by the adverb *safely*, but this change cannot be applied to (54a).

- (54) a. *The plane went down safely near the lake.
 b. The plane came down safely near the lake. (Clark 1974: 328)

Clark concludes that the contrast between evaluative *come* and *go* is a reflection of the speaker's viewpoint. Clark's findings have become the touchstone for the study of non-motion *come* and *go*.

People experience motion in the real world. In a similar way, people mentally simulate motion along a path for the purpose of calculating the configuration or the location of a particular entity. People ultimately recognize that mentally-simulated motion results from our direct experience with motion. This phenomenon was originally demonstrated by Talmy (1983), and has been discussed extensively in cognitive linguistics literature. It was described as fictive motion by Talmy (1983), abstract motion by Langacker (1986), and subjective motion by Y. Matsumoto (1996). Matlock (2004) refers to fictive motion as mentally simulated motion in more general terms. In this dissertation, we define this phenomenon as subjective motion, following Y. Matsumoto (1996). (55) is typical of this use.

- (55) The road goes from San Francisco to Los Angeles.

The verb *go* also conveys a sense of continuation, as in (56), which is different from subjective motion.

- (56) He went on working until he was 91. (Longman)

(55) and (56) reflect the saliency of motion over stasis in our perceptual system. In the

non-literal use of *go* in (55) and (56), the source-oriented conception of motion *go* is preserved in the directionality that Langacker (1987) refers to as the conceptualizer's mental scanning.

The non-literal, static uses of *go* described in (57) and (58) reflect subtle difference from (55) and (56).

(57) No one is allowed to go hungry. (Longman)

(58) He celebrated his ninetieth birthday this month and is still going strong. (Longman)

(57) and (58) express a particular state leading away from a normal, expected situation. *Go hungry* in (57) means that people do not have enough food to eat. The state expressed by *go hungry* is highly undesirable. *Go strong*, which is usually used in the form *be still going strong*, as in (58), means that something or someone is still alive, in good condition, or popular after a long time. (58) implies that it is not common for everyone to live to be ninety years old, and that it is lucky that he has lived to be ninety years old. As a result, the state expressed by *go strong* is highly desirable. The state expressed in the static use of *go* is not always undesirable, but it is neutral. In this sense, *go* in (57) and (58) does not inherit the characteristics of what Clark (1974) calls the negative-evaluative uses of *go* on the basis of the source-oriented conception of motion *go*.

In a similar fashion, the verb *come* expresses subjective motion, as shown in (59).

(59) The road comes into the garden.

Unlike the verb *go*, the verb *come* does not convey a sense of continuation. Each sentence in (60) describes the non-literal, static uses of *come*, which express 'to be in a particular position in an order, a series, or a list'.

(60) a. P comes before Q in the alphabet. (Longman)

b. His family comes first.

c. She came second in the exam.

(60a), in fact, indicates a normal state. However, whether or not the state that (60b) and (60c) express is normal depends on the circumstances. Also, each sentence in (60) is not always considered as representing favorable viewpoint or generally acceptable attitude. In this sense, *come* in (60) does not inherit the characteristics of what Clark (1974) calls the positive-evaluative uses of *come* on the basis of the goal-oriented conception of motion *come*.

2.4.2.3 *Go* as a Marker of Evaluative Modality

The verb *go* is used as a marker of evaluative modality in the *go-unVed* sequence which is not considered in this dissertation. The *go-unVed* sequence, exemplified in (61), not only has the static use, but also functions as a marker of evaluative modality that *come* cannot fulfill.

- (61) a. She could not allow such a claim to go unchallenged. (Oxford)
 b. The disease often goes undetected for many years. (Oxford)

Bourdin (2003) shows that the *go-unVed* sequence expresses an abnormal and unexpected state leading away from a normal and expected course of events, and that *go* in the *go-unVed* sequence functions as a marker of evaluative modality, which signals a speaker's attitude towards a situation that the speaker specifically views as deviating from his or her own personal assumptions or expectations about what is right or desirable. Simply stated, the evaluative marker *go* signals the modal notion of counter-normativity. In a detailed and exact way, the *go-unVed* sequence shows what Bourdin calls the impersonal quality. The impersonal quality is equivalent to a speaker's negative judgment on behalf of society, because the norm being violated tends to be perceived as deviation or dissonance from standard, rule, principle, or convention that is considered to be fundamentally right. In this regard, *go* emphasizes undesirability in the eyes of the speaker. Bourdin concludes that the *go-unVed* sequence allows only the modal interpretation.

Matsumoto (2013) states that the modal marker *go* in the *go-unVed* sequence inherits the characteristics of what Clark (1974) calls the negative-evaluative use of *go* on the basis of a source-oriented conception of motion *go*.⁶ (61a) implies that such a claim needs to be accepted. (61b) implies that hard work and talent need to be paid off. These instances illustrate that the function of *go* in the *go-unVed* sequence is unmistakably modal. Whether or not the *go-unVed* sequence is acceptable depends on our conventional cultural understanding of the world. The sentences in (62) are not acceptable because the speaker does not have to make a negative judgment on behalf of society about the situations expressed by each sentence in (62).

- (62) a. ?Tchaikovsky's Symphony No.6 went unfinished.
 b. ?His beard went unshaved.

In (62a), we expect the orchestra to finish playing Symphony No.6, but we do not expect this on behalf of society. If the speaker is in a particular society where men must shave their beards, (62b) could be acceptable. *Go*'s nearest functional equivalent would be the verb *remain*, because both the modal marker *go* and the verb *remain* convey a sense of continuation.

⁶ Schönefeld (2012, 2013) points out that the *go-unVed* sequence has two types of readings, a depictive reading and an attributive reading illustrated in (i) and (ii), respectively.
 (i) He went unnoticed through Swiss immigration. (BNC, Schönefeld 2013: 19)
 (ii) There are over 55,000 reported case of food poisoning each year, but because many cases go unreported, experts believe ... (BNC, Schönefeld2013: 13)
 Diachronic data from the OED suggest that the attributive reading in (ii) derived from the depictive reading in (i) by shifting animate subjects to inanimate subjects. In (ii), the motion sense of *go* got weakened and the state sense of *go* appeared. Schönefeld (2012, 2013) argues that the attributive use in (ii) develops from the depictive use in (i) by grammaticalization, and that the *go-unVed* sequence is thus polysemous.

However, the verb *remain* does not involve a negative judgment. The sentence (62) would be appropriate if the verb *remain* were used, as in (63).

- (63) a. Tchaikovsky's Symphony No.6 remained unfinished.
b. His beard remained unshaved.

The sentences in (63) may also be expressed by the verb *be*, as in (64). Unlike *go*, the verb *be* does not convey a sense of continuation, as in (64).

- (64) a. Tchaikovsky's Symphony No.6 was unfinished.
b. His beard was unshaved. (Bourdin 2003: 112)

Rather than expressing the evaluative modality on the basis of the cultural assumption, (63) and (64) offer objective reports.

Matsumoto (2013) also demonstrates that the *go-unVed* sequence has one important feature with respect to historical development. Figure 2.1 shows instances of the *go-unVed*, the *be-unVed*, and the *remain-unVed* sequences, respectively, per million words in the Corpus of Historical American English (COHA).

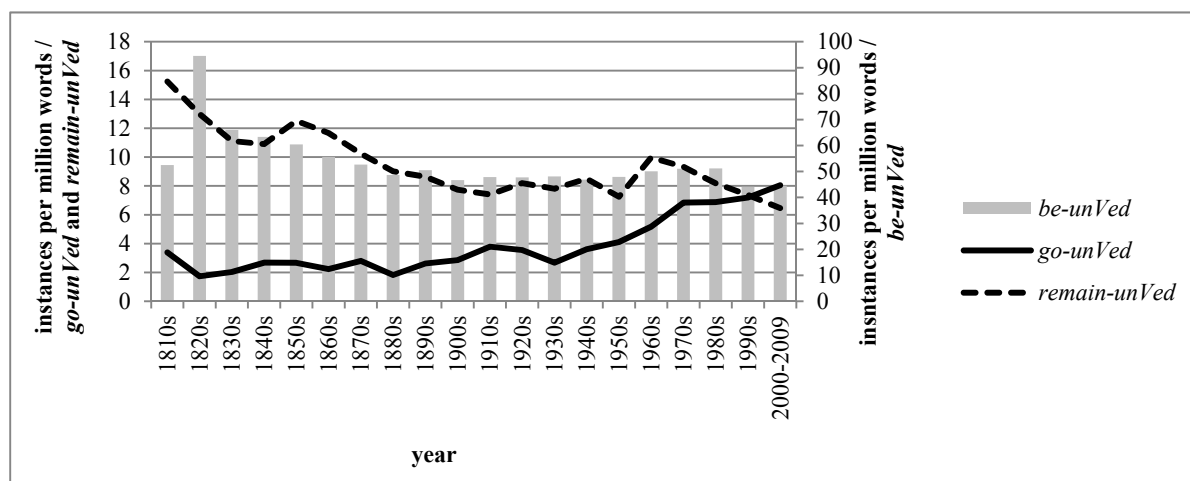


Figure 2.1. Frequency of use in COHA of the *verb-unVed* sequences, *go-unVed*, *remain-unVed*, and *be-unVed*, per million words from 1810 to 2009

Figure 2.1 shows a continuous increase in the frequency of the *go-unVed* sequence from the 1930s onwards and a gradual decrease in the frequency of the *remain-unVed* sequence from the 1960s. There has been little change since the 1900s in the frequency of the *be-unVed* sequence. Their quantitative use patterns are substantially different. Figure 2.1 also suggests a plausible explanation in that the *remain-unVed* sequence is replaced by the *go-unVed* sequence. It is

plausible that *go* in the *go-unVed* sequence represents the continuation of ongoing historical development.

In this subsection, we have discussed three characteristics of the verbs *come* and *go* in brief. Both *come* and *go* have the deictic-motion and the non-literal uses, and only *go* functions as a marker of evaluative modality. In Chapters 3 through 5 and in Chapter 7, the three characteristics play an important role in exploring the nature of multi-verb sequences. Just as Figure 2.1 has shown that *go* in the *go-unVed* sequence represents the continuation of ongoing historical development, the diachronic approach with the corpus-based technique employed in this dissertation will also identify characteristics underlying multi-verb sequences, which might otherwise remain unexplained. We will discuss historical development in more detail in Chapters 6 through 8.

Chapter 3

The *V-to-V* Sequence

The aim of this chapter is to explore the nature of the *V-to-V* sequence. Examples that count as *V-to-V* sequences range from (1) to (3).

- (1) a. I want to ask a favor of you. (Collins)
- b. John then unlocked the front door and I started to follow him up the stairs. (Collins)
- c. My sister tried to cheer me up. (Collins)
- (2) a. I came to believe that he was innocent after all. (Longman)
- b. Consumers have grown to trust the information provided. (OCAE)
- c. What do firms think they stand to gain by merging? (Longman)
- (3) a. There are too many factors that go to make up a great marathon runner. (CWO)
- b. This just goes to show that the world is open-minded and liberated. (CWO)
- c. When you go to buy cosmetics, the salesperson often suggests that you buy several products from the same line. (CWO)

The *V-to-V* sequences, shown in (1), have been a prolific research area for many years (e.g., Boertian 1979, Bolinger 1968, Dirven 1989, Dixon 1991, Duffley 1992, 1994, 1999, 2000, 2004, 2006, Duffley and Tremblay 1994, Egan 2008, Freed 1979, Huddleston and Pullum 2002, Kempson and Quirk 1971, Kiparsky and Kiparsky 1970, Langacker 1991, Mair 1990, Quirk et al. 1985, Riddle 1975, Smith and Escobedo 2001, Taylor 1993, Verspoor 1999, 2000, Wierzbicka 1985, Wood 1956). By contrast, the *V-to-V* sequences, shown in (2) and (3), have received little attention previously. Despite their superficial similarities, the examples in (1), the ones in (2), and the ones in (3) are in fact very different. Simply stated, the *to*-infinitives in the *V-to-V* sequences in (3) do not function as catenative complements. However, not only the differences between the catenative complements in (1) and (2), but also the differences between (1) or (2) and (3), have rarely been discussed in great detail in previous studies. In this chapter, we will show the characteristics of the *V-to-V* sequences by clarifying the differences among those sequences. In particular, we will focus on the characteristics of the *V-to-V* sequence shown in (2) and (3).

This chapter is structured as follows. Section 3.1 reviews some earlier proposals of the non-motional *come-to-V* sequence where the verb *come* does not express motion, shown in (2a), and it shows that there are two problems that still remain to be treated with respect to an overall picture of the *V-to-V* sequence. Section 3.2 provides the classification of the *V-to-V* sequence on the basis of the general classification schema of multi-verb sequences shown in Section 2.3 in Chapter 2. Section 3.3 suggests that there are two features which deserve further consideration, demonstrating the relationship among various types of the *V-to-V* sequences which are related

to each other. Section 3.4 offers a conclusion.

3.1 Some Earlier Proposals and Remaining Problems

Section 3.1 examines some previous studies of the non-motional *come-to-V* sequence where the verb *come* does not express motion, as in (2a). Section 3.1.1 reviews two types of syntactic studies on the basis of the notion ‘catenative’, Huddleston and Pullum (2002) and Quirk et al. (1985). Section 3.1.2 reviews two types of semantic studies, the study from a metaphorical point of view by Radden (1996) on the basis of Fillmore (1971) and Clark (1972) mentioned in Section 2.4.2 in Chapter 2, and the demodalization-based study by Bourdin (2009). Section 3.1.3 shows that there are two remaining problems that must be treated with respect to an overall picture of the *V-to-V* sequences. Previous studies of the *V-to-V* sequences other than the non-motional *come-to-V* sequence will be discussed in Section 3.2.

3.1.1. The Syntactic Studies

From a syntactic point of view, there are two major studies, Huddleston and Pullum (2002) and Quirk et al. (1985). Both studies interpret the meaning of the notion catenative in different ways. We have described in Section 2.2 in Chapter 2 how Huddleston and Pullum (2002) define the term catenative. Huddleston and Pullum (2002: 1228) state that each *V-to-V* sequence in (1) and (2) is regarded as a catenative complement, and that first verbs in (2) are raising verbs.

Quirk et al. (1985: 136) use the term differently. They state that there are verbs of intermediate function between auxiliaries and main verbs. The verbs form a set of categories which are roughly placed on a gradient scale between modal auxiliaries at one end, and full verbs which take a non-finite clause as direct object at the other, as shown in Figure 3.1.

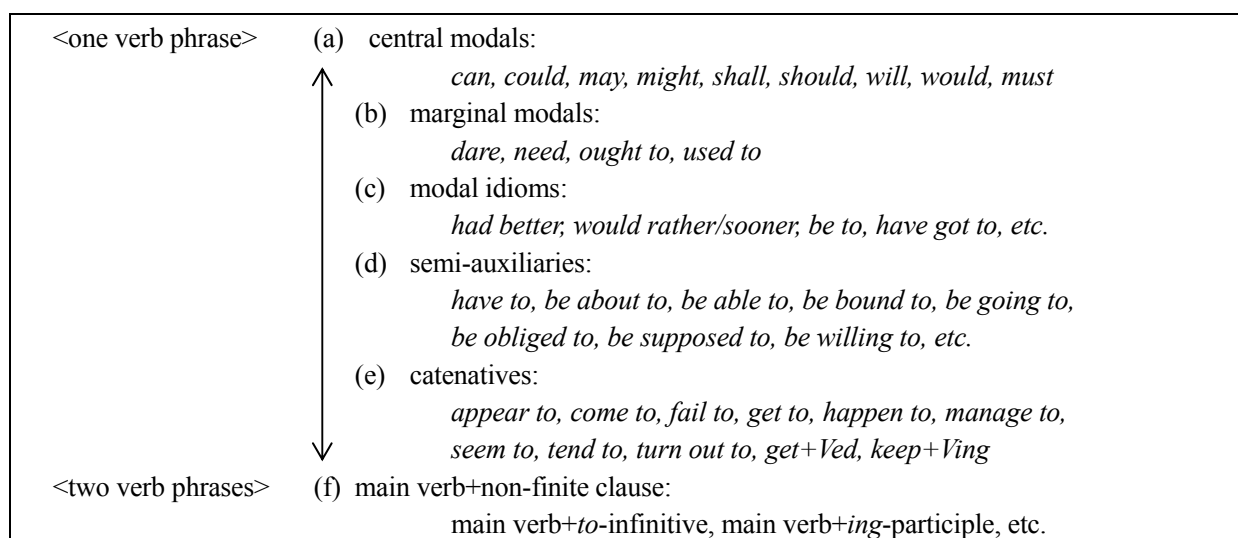


Figure 3.1. The auxiliary verb - main verb scale (see Quirk et al. 1985: 137)

The term *catenative* is used to denote verbs in such constructions as *appear to*, *come to*, *fail to*, *get to*, *happen to*, *manage to*, *seem to*, *tend to*, and *turn out to* in Figure 3.1 which are followed by the *to*-infinitive, but the term *catenative* is not used to denote verbs in such constructions as constructions as *want to*, *start to*, *try to*, *promise to*, and *stand to* in (1), (2b), and (2c) which belong to (f) in Figure 3.1. Only the *come-to-V* sequence in (2a) belongs to what Quirk et al. call *catenative verb constructions* shown in Figure 3.1. Quirk et al. (1985: 146) state that there are two features of *catenative verb constructions*. One is that since they are similar to modal or semi-modal constructions, *catenative verb constructions* have meanings related to aspect or modality. The other is that since they are closer to main verb constructions than are semi-auxiliaries, *catenative verb constructions* take *do*-support just like main verbs, as shown in (4).

- (4) a. Sam came to realize the importance of the problem.
 b. Sam didn't come to realize the importance of the problem. (Quirk et al. 1985: 146)

Quirk et al. conclude that *catenative verb constructions* are different from main verb constructions, and that they are regarded as peripheral in the one verb phrase category.

The two different interpretations on *catenative complements*, which we have presented in this subsection, come from the different scope of their interpretations. The scope of the *catenative complement* itself that Huddleston and Pullum (2002) describe is much wider than the one that Quirk et al. (1985) do. Huddleston and Pullum consider that first verbs in the whole range, from the auxiliary verb to the main verb shown in Figure 3.1, belong in the class of *catenative verbs*.¹ Stated another way, Huddleston and Pullum show that there are various types of *catenative complements*. *Catenative verb constructions* in Figure 3.1 shown by Quirk et al. are regarded as one type of *catenative complement* shown by Huddleston and Pullum. As mentioned in Section 2.2.2 in Chapter 2, Huddleston and Pullum also take account of the semantic status of the matrix subject, whether raised or controlling.

¹ Huddleston and Pullum (2002) state that the auxiliary verbs are heads from a radically different standpoint, although the auxiliary verbs are traditionally said to help lexical verbs in specifying additional meanings. Stated another way, the auxiliary verbs belong in the class of *catenative verbs*. On this account, in (i) *like it* is a non-finite complement of *may*.

(i) She may like it.

Similarly, *is* in (iia) is a head with *writing a novel* as its complement. The constituent structure is like that of (iib).

(ii)a. She is writing a novel.

b. She began writing a novel.

It should be noted here that *is writing* in (iia) is not a constituent, and that *is* is a head of *is writing a novel* in (iia) and *writing* is a head of *writing a novel* in (iib) as a non-finite subordinate clause.

3.1.2 The Semantic Studies

There is one *V-to-V* sequence that has been closely examined from the semantic point of view. It is the non-motional *come-to-V* sequence where the verb *come* does not express motion, as in (2a). In this subsection, we will review two studies of this sequence, Radden (1996) and Bourdin (2009).

In Section 2.4.2 in Chapter 2, we have presented the finding of Clark (1974) that non-motional uses of *come* often indicate entry into a normal state as the deictic center. As shown in (2a), the non-motional *come-to-V* sequence is an example where the end state is the normal state as the deictic center. Radden (1996) suggests that deictic motion lends itself to mapping onto change of state via the general conceptual metaphor CHANGE IS MOTION. Based on the findings of Fillmore (1971) and Clark (1974) mentioned in Section 2.4.2 in Chapter 2, Radden demonstrates that metaphorical extension of *come* is motivated by various sub-metaphors of this general metaphor. One sub-metaphor is proposed to account for the *come-to-V* sequence, as in (5).

(5) REACHING A STATE IS ARRIVING AT A LOCATION

She had come to realize that he couldn't be trusted. (Radden 1996: 445)

The *come-to-V* sequence often indicates the end state which is seen as a new beginning.² Radden (1996: 446) points out double-sided nature of the situation which the *come-to-V* sequence represents, inchoation and termination. The change of state denoted by (5) is inchoative in meaning, but at the same time it implies a development of event leading to the final state. This development is regular, gradual, and almost predictable. The idea of gradualness in reaching a final state is clearly conveyed by the *to*-infinitive, as in (5). With respect to the non-motional *come-to-V* sequence, Radden presents one useful finding: the pervasiveness of the metaphor CHANGE IS MOTION offers a synthesis of motion *come* and non-motion *come*.

Bourdin (2009) compares the non-motional *come-to-V* sequence in (6) to the motional

² Several grammarians and linguists have attempted to identify the semantic of the non-motional *come-to-V* sequence. Visser (1969: 1393) points out that *come* in *I came to hate him* is a near synonym of the ingressive *begin* and that *he comes to be* in *he comes to be a man* is almost the same as *he will become*. Kruisinga (1931: 225) shows that *come* in (i) expresses the result of a gradual process.

(i) Perhaps you come to know a person better when she is fog-bound in your flat.
(Kruisinga 1931: 225)

Jespersen (1931: 355-6, 359) states that the expression of futurity can be strengthened by using motion verb *come*, and that *come* in (ii) is generally considered to be the expression of what he calls after-past time.

(ii) In a few years he came to control all the activity of the great firm.
(Jespersen 1931: 359)

Gesuato (2009a: 396) argues that *come* in the non-motional *come-to-V* sequence functions as a marker of resultative aspect.

come-to-V sequence where the verb *come* expresses motion and the *to*-infinitive a purpose, as in (7).

(6) Mary came to like Sam.

(7) Mary came to see Sam. (Bourdin 2009: 349)

As *Mary* in (6) is not only the syntactic subject of *come*, but also the semantic one of *like*, Bourdin calls *come* in (6) raising-*come*. He points out three syntactic features of raising-*come*. First, with respect to the voice of the *to-V* sequence in the *come-to-V* sequence, raising-*come* is neutral, as in (8).

(8) a. Mary came to like Sam.

b. Sam came to be liked by Mary. (Bourdin 2009: 349)

Second, raising-*come* allows the dummy subject *there*, as in (9).

(9) There came to exist in Roman as in Greek portraiture a visual code in which expression was given to moral qualities. (Bourdin 2009: 350)

Third, since it does not express motion, raising-*come* is perfectly compatible with verbs of motion, whether antonymous or synonymous, as in (10).

(10) a. But how did you come to go your separate ways?

b. ... so how it was that the Gypsy Kings, carrying large musical instruments and followed by a television crew, came to arrive at the dinner table unmaimed, must remain a mystery for ever. (Bourdin 2009: 350)

For ease of reference, Bourdin calls *come* in (7) control-*come*. He points out one syntactic feature of control-*come*: control-*come* is voice-sensitive. (11a) and (11b) differ sharply in meaning.

(11) a. Mary came to see Sam.

b. Sam came to be seen by Mary. (Bourdin 2009: 349)

However, Bourdin overlooks the fact that the *to*-infinitive in (11) is not a complement. With respect to the terms raising and control, what Bourdin calls raising-*come* corresponds to what Huddleston and Pullum call a raising verb, but what Bourdin calls control-*come* does not correspond to what Huddleston and Pullum call a control verb mentioned in Section 2.2.2 in Chapter 2.

Bourdin states that the semantic contrast between raising-*come* and control-*come* is as

clear-cut and robust as the syntactic one. Control-*come* involving a spatial interpretation of *come* and a purposive interpretation of *to*-infinitive represents *come* bearing the assertive weight of the sentence. Stated another way, the sentence instantiating control-*come* requires the subject's intention or volition. However, this subject's intention or volition is totally absent from the sentence instantiating raising-*come* involving a non-spatial interpretation of *come* and a non-purposive interpretation of *to*-infinitive. Bourdin also claims that the semantic contrast between raising-*come* and control-*come* is ultimately of a modal nature. In this respect, Bourdin (2009) is similar to Quirk et al. (1985). Visser (1969) states that the earliest examples of control-*come* were found in Old English, while the ones of raising-*come* in Middle English. On the basis of the Visser's findings, Bourdin makes the assumption that raising-*come* is derived from control-*come* via a process of syntactic reanalysis. More specifically, the semantic shift from control-*come* to raising-*come* is due to what Bourdin calls the great modal shift, which means demodalization in the sense that the sentence instantiating raising-*come* lacks the subject's intention or volition. Bourdin (2009: 368) states that the demodalization as the great modal shift is 'as if "semantic" grammaticalization had proceeded without leaving any formal imprint' (cf. Haspelmath 1989). It should be emphasized here that whereas Radden points out that a synthesis of motion *come* and non-motion *come* is based on the metaphor CHANGE IS MOTION, Bourdin argues that a connection between raising-*come* and control-*come* is associated with a shift based on semantic bleaching from control-*come* to raising-*come*.

3.1.3 Problems

There are two remaining problems to be dealt with here in general. With respect to the *V-to-V* sequence, the two remaining problems are related to the two key questions in this dissertation posed in Section 2.3 in Chapter 2. One is what the semantic and syntactic relationships between the first and the second verbs in the *V-to-V* sequence are, and the other is what the relationship among various types of *V-to-V* sequences which are related to each other is. As Quirk et al. (1985) conclude that catenative constructions are regarded as peripheral in the one verb phrase category, the first problem includes a specific question of whether the non-motional *come-to-V* sequence is a single verb phrase or not. In the following sections in this chapter, we will deal with these two problems by clarifying the nature of the *V-to-V* sequence.

3.2 The Classification of *V-to-V* Sequences

This section will deal with the first problem posed in Section 3.1.3. In order to clarify the semantic and syntactic relationships between the first and the second verbs in the *V-to-V* sequence, this section will provide a classification of *V-to-V* sequences based on the general classification schema of multi-verb sequences. Based on the general classification schema of multi-verb sequences, the *V-to-V* sequences are syntactically divided into two groups, the full-syntactic-structure group and the reduced-structure group. We will deal with the full-syntactic-structure group in Section 3.2.1 and the reduced-structure group in Section 3.2.2.

3.2.1 The Full-Syntactic-Structure Group

As mentioned in Section 2.3 in Chapter 2, from a syntactic point of view, the full-syntactic-structure group involves two verb phrases and falls into three types, the catenative complement type, the clausal adjunct type, and the coordinated clause type. However, the *V-to-V* sequence is not related to the coordinated clause type due to the absence of the conjunction *and*. From a semantic point of view, the first verb in the *V-to-V* sequence is divided into two, lexical V1 and attenuated V1. In this subsection, the syntactic distinction between a complement and an adjunct mentioned in Section 2.2.3 in Chapter 2 plays an important role in exploring the nature of the *V-to-V* sequence. We will examine the *V-to-V* sequences with lexical V1 in the catenative complement type in Section 3.2.1.1 and the *V-to-V* sequences with attenuated V1 in the catenative complement type in Section 3.2.1.2. In Section 3.2.1.3, we will explicate the clausal adjunct type.

3.2.1.1 The Catenative Complement Type: Lexical V1

In the catenative complement type, the word sequence after the first verb functions as a catenative complement. There are too many instances of the catenative complement type with lexical V1 available to review. Representative catenative verbs include *start* and *try*, which can also take a gerundive complement as a catenative complement. In Section 3.2.1.1, we deal mainly with the *V-to-V* sequences with *start* and *try* as lexical V1, as in (12).

- (12) a. The bread started to burn before the cheese was melted. (Longman)
 b. He tried to control his voice. (Longman)

A comparison with the *V-Ving* sequences with *start* and *try* as lexical V1, as in (13), is given here, since it makes our point clearer.

- (13) a. Then the baby started crying. (Longman)
 b. Try logging off and logging on again. (Longman)

With respect to the semantic subtypes of the catenative complement type, we call the *start-to-V* and the *start-Ving* sequences the aspect subtype, and we call the *try-to-V* and the *try-Ving* sequences the effort subtype. Although Section 3.2.1.1 deals with only these two subtypes due to limitations of space, there are, needless to say, several semantic subtypes other than the aspect subtype and the effort subtype.

From a syntactic standpoint, the *V-to-V* and the *V-Ving* sequences in the catenative complement type with lexical V1, including the *start/try-to-V* and the *start/try-Ving* sequences, have two key features. The two key features are based on two hypotheses shown in (14) and (15).

- (14) If the catenative complement type involves two verb phrases, both the first and the second verbs can take adverbs (or adverb phrases) independently.
- (15) If the catenative complement type involves two verb phrases, a word or more than one word can be inserted between the first verb and the word following the first verb.

(14) roughly corresponds to the adverb test proposed in Section 2.3 in Chapter 2. (14) predicts that sentences in (16) and (17) are acceptable.

- (16) a. The author has bravely tried to describe succinctly all the key oriental influences on British and American art and architecture he could find. (BNC)
- b. With Sillay maybe he's hurting somewhere when he suddenly starts to exercise violently. (COHA)
- c. I quickly began running every day and naturally wanted to run further. (BNC)
- (17) a. Try some of the other suggestions instead and just try using slightly less butter than usual. (BNC)
- b. The daughter went up to the body of her mother and initially started talking quietly to her, tears streaming down her face. (BNC)
- c. She then quietly began to dress me, to which I passively submitted, and distinctly remember sitting perfectly still on a chair ... (COHA)

(15) predicts that sentences in (18) and (19) are acceptable.

- (18) a. It was the biggest mistake of my life and one that I really try hard to forget. (BNC)
- b. He started not only to print his addresses or charges but to review books of general interest. (BNC)
- c. I want not to move your passion but your reason. (BNC)
- (19) a. When the traffic lights turn red I automatically start not playing the piano. (COHA)
- b. I suggest that he wait until he felt ready, and then try actually asking a simple question of someone he felt would be approachable. (BNC)
- c. I can remember {his/him/his brother} reading some of the passages aloud to me. (OCAE)

With respect to the *V-to-V* sequence, intervening words are limited to adverbials, as in (18). With respect to the *V-Ving* sequence, intervening words are adverbials, as in (19a) and (19b), or possessive determiners or noun phrases, as in (19c). As shown in (18) and (19), the weak integrity or inseparability of the sequence of the first and the second verbs is observed in the *V-to-V* and the *V-Ving* sequences in the catenative complement type with lexical V1. From (16) through (19), it is fair to state that both the *V-to-V* sequence and the *V-Ving* sequence of the catenative complement type with lexical V1 involve two verb phrases.

(23a) indicates that John wanted to engage in the *to*-infinitive complement event, that is to say, catching the ball, but that he did not successfully perform the event. By contrast, (23b) indicates that John did engage in the gerund-participial complement event for a while, but that the event did not achieve the desired effect. In the *try-to-V* sequence which expresses a certain goal in the projected future, there is a time lag between the events described by the main verb *try* and the *to*-infinitive complement in (23a), whereas in the *try-Ving* sequence, the gerund-participial complement itself is simultaneous with the expenditure of effort expressed by the main verb *try* in (23b). In this respect, it is clear that the *start/try-to-V* and the *start/try-Ving* sequences retain the nature of the temporal difference between *to*-infinitive and gerund-participial complements. We will come back to the *start-to-V* and the *try-to-V* sequences in Chapter 4.

3.2.1.2 The Catenative Complement Type: Attenuated V1

We will examine the catenative complement type with attenuated V1. The sentences in (24) are typical examples.

- (24) a. Popular culture is coming to play an increasingly important part in the lives of the young. (OCAE)
 b. After a while the kinds grew to like Mr. Cox. (Longman)
 c. If the two firms cooperate, then they stand to benefit by increasing their profit. (OCAE)

The catenative complement type with attenuated V1 has three syntactic characteristics. The first and the second syntactic characteristics are based on two hypotheses shown in (14) and (15) in the same way as the two key features of the catenative complement type with lexical V1. The first feature is that both the first and the second verbs can take adverbs independently. (14) predicts that sentences in (25) are acceptable.

- (25) a. They may conceivably all be variations of a single theme which has gradually come to differentiate greatly. (COHA)
 b. The fine insurance machine built up by Mr. Wintermuth in his best constructive days had suddenly grown to creak painfully in its joints. (COHA)
 c. He supposedly stood to gain personally from lobbying the Interior Department in 1979 ... (TIME)

The second feature is that an adverb (or an adverb phrase) can be inserted between the first verb and the word following the first verb. (15) predicts that sentences in (26) are acceptable.

- (26) a. The literal expression ‘let us banquet at the shore’ came often to mean simply ‘let us have a good time’. (COHA)

- b. He grew slowly to feel almost for the first time the Veli that lay between him and the white world. (COHA)
- c. The Commonwealth Caribbean stands neither to lose a great deal nor to gain very much from the Single European Market (COCA)

(26) shows that the weak integrity or inseparability of the sequence of the first and the second verbs is observed in the *V-to-V* sequence in the catenative complement type with attenuated V1. From (25) and (26), it is fair to state that the *V-to-V* sequence of the catenative complement type with attenuated V1 involves two verb phrases.

The third feature is that the attenuation of the first verb has resulted in the raising nature of the first verb, at least in some cases. There are different cases of the catenative complement type with attenuated V1. In this dissertation, we deal with *come*, *grow*, and *stand* in (24) as attenuated V1.³ The verb *come* in (24a) and (27) indicates raising verb behavior mentioned in Section 2.2.1 in Chapter 2.

- (27) a. He had in fact come to be regarded as one of the chief glories of America. (COHA)
- b. The word university came to take the other's place and be exclusively used. (COHA)
- c. The result is that there comes to exist a more pleasant and friendly relation between the professor and students. (COHA)

However, the verbs *grow* in (24b) and *stand* in (24c) are somewhat problematic. Their meanings would lead us to expect them to be raising verbs, but they do not readily exhibit raising verb behavior. With respect to the verbs *grow* and *stand* shown in (24b) and (24c), (28) and (29) are acceptable, in which inanimate subjects are used.

³ In this dissertation, we do not deal with the *promise-to-V* and the *threaten-to-V* sequences. Huddleston and Pullum (2002: 1228) states that while (i) and (ii) belong to the catenative complement type with lexical V1, (iii) and (iv) belong to the catenative complement type with attenuated V1.

- (i) I had promised to bring her back a gift from Thailand. (Longman)
- (ii) He threatened to take them to court. (Longman)
- (iii) Tonight's meeting promises to be a difficult one. (Longman)
- (iv) Her insecurities threaten to sabotage her. (Longman)

(i) and (ii) have controlling subject. By contrast, (v) and (vi) point to the fact that (iii) and (iv) have raised subject.

- (v) a. In the end, I promised to be confirmed when all became clear. (BNC)
- b. There promises to be a lively debate on the general proposition to issue bonds. (COHA)
- (vi) a. They accumulated beneath the television until they threatened to be seen. (BNC)
- b. They scattered in every direction, and there threatened to be a general Hegira of physicians. (COHA)

- (28) a. Under the urgency of fear NATO's forces grew to become the most powerful peacetime alliance of free powers in the world's history. (COHA)
 b. ... the provinces of Faith and of practical life grew to be regarded as totally distinct. (COHA)
- (29) a. What does the cultural, artistic, and entertainment life of New York City stand to gain from Lincoln Center? (COHA)
 b. ... the bioengineering industries already have invested as much as \$30 billion toward the manufacture of improved human beings, and too much money stands to be made from the sale of a heart-shaped mouth or a longer life. (COHA)

However, (30) and (31) is not acceptable.⁴

- (30) ?There had grown to be unanimity between them.

(Huddleston and Pullum 2002: 1228)

- (31) ?There stands to gain money from the shares.

The relationship between the attenuation of the first verb and the raising nature of the first verb needs further consideration.

The catenative complement type with attenuated V1 is semantically divided into two subtypes, the culmination subtype and the likelihood subtype. The *come/grow-to-V* sequence occurs in the culmination subtype, and the *stand-to-V* sequence in the likelihood subtype. In the culmination subtype, the *V-to-V* sequence refers to the change of state, as in (24a) and (24b). As Radden (1996: 446) points out, the change of state is inchoative in meaning, but at the same time it implies a gradual development of event leading to the final state. Stated another way, the *come-to-V* sequence discussed here means 'to reach a point where you realize, understand, or believe something'. The subtle semantic differences between (24a) and (24b) are derived from the differences in the meaning of the first verb. The *grow-to-V* sequence is subtly different from the *come-to-V* sequence in the sense that the *grow-to-V* sequence discussed here, as in (32), means 'to gradually change your opinions and have a feeling that you did not have before'.

- (32) I grew to like you more and more – I didn't try to hide it. (Longman)

⁴ Postal (1974: 293) points out that (i) is acceptable.

(i) There grew to be opposition to the foam program.

(Postal 1974: 293)

With respect to the first verb *come*, the final or resultative state that the *come-to-V* sequence represents indicates entry into a normal state mentioned in Section 2.4.2 in Chapter 2, as in (33).⁵

- (33) a. Although it was a secret wedding, the press did eventually come to hear about it. (Collins)
 b. She had come to see the problem in a new light. (Oxford)
 c. This design came to be known as the Oriental style. (Oxford)
 d. Can you tell me how the body came to be discovered? (Longman)
 e. Come to think of it, George did seem a bit depressed yesterday. (Longman)

In this respect, *come* in the culmination subtype inherits the characteristics of the non-literal use of *come* on the basis of the goal-oriented conception of motion *come*. Since *come* and *grow* as the first verb in the culmination subtype are originally associated with motion in a broad sense, it is reasonable to assume that the primacy of motion plays an important role in shaping the *V-to-V* sequence in the culmination subtype where the first verb does not express motion. Consequently, the *V-to-V* sequence in the culmination subtype not only indicates the resultant state that happens at the end of a certain period of development, but also implies the process of reaching the resultant state. In the likelihood subtype, the *stand-to-V* sequence shows how likely something is to happen, as in (24c). *Stand* in (24c) and (34) means ‘to be likely to’.

- (34) a. You stand to make a lot from this deal? (Oxford)
 b. What do firms think they stand to gain by merging? (Longman)

The *stand-to-V* sequence is often used in a context of money. Due to such an exclusive context, the second verb is inherently limited to *benefit*, *gain*, *make*, and *lose*.

From a semantic point of view, it is necessary to discuss the temporal property with respect to the *to*-infinitive of the catenative complement type with attenuated V1. Since both the culmination and the likelihood subtypes show that the second verb phrase indicates the resultant or the predictable state, it is natural that what the second verb expresses occurs after the time of the first verb. The *V-to-V* sequences of the culmination and the likelihood subtypes belong to the forward-looking type of Egan’s classification. Moreover, it is clear that there is a certain time lag between the situations described by the first verb and the second verb phrase in the culmination subtype and the likelihood subtype. It is fair to state that the *V-to-V* sequence of the catenative complement with attenuated V1 retains the temporal property of *to*-infinitive complement.

⁵ In particular, the *come-to-V* sequence used in questions means that the speaker wants to know what caused something to happen or made something possible, as in (i) and (ii).

- (i) How do you come to be so late? (Oxford)
 (ii) How did he come to break his leg? (Oxford)

3.2.1.3 The Clausal Adjunct Type

In the clausal adjunct type, the word sequence after the first verb functions as a clausal adjunct. If the first verb is intransitive, there are too many instances that fall into the clausal adjunct type, as shown in (35).

- (35) a. She turned to say goodbye. (BNC)
 b. At gunpoint, the woman walked slowly towards the main door, carefully adjusted the lock, and then slammed it as she ran to call police. (BNC)
 c. He screamed to persuade himself that he was not frightened. (BNC)
 d. Fox never could understand why the bookworm had to read to gain knowledge. (BNC)
 e. She entered to see Annie at a corner table. (BNC)
 f. Streat worked to try to achieve common purpose and interest with American textile interests. (BNC)

From a syntactic point of view, the clausal adjuncts satisfy the requirements of the three factors on adjuncts shown in Table 2.1 in Section 2.2.2 in Chapter 2. With respect to licensing, the clausal adjuncts do not require the presence of an appropriate verb that licenses them. With respect to obligatoriness, the clausal adjuncts are optional, as in (36).

- (36) a. She walked to save money.
 b. She walked.

With respect to position, clausal adjuncts are typically mobile. For instance, (36a) has the alternative order in (37)

- (37) To save money, she walked.

The weak integrity or inseparability of the sequence of the first and the second verbs is observed in the *V-to-V* sequence in the clausal adjunct type, as shown in (37) and (38).

- (38) a. She walked in order to save money.
 b. In order to save money, she walked.

From a semantic point of view, the clausal adjunct provides circumstantial information. Since the first verb is required to bear the assertive weight of the sentence, the clausal adjunct type with attenuated V1 is virtually nonexistent.

We have to discuss Egan's classification with respect to the *to*-infinitive of the clausal adjunct, although the *V-to-V* sequence of the clausal adjunct type does not involve a *to*-infinitive complement. In the clausal adjunct type shown in (35), what is expressed by the second verb

phrase (the clausal adjunct) occurs after the time of the first verb. Roughly speaking, the *V-to-V* sequences of the clausal adjunct type belong to the forward-looking type of Egan's classification. We also have to discuss the temporal property of *to*-infinitive in the clausal adjunct type. As shown in (35), there is a certain time lag between the events described by the first verb and the second verb phrase in the clausal adjunct type where the clausal adjunct expresses a certain situation in the projected future. Therefore, the *V-to-V* sequence of the clausal adjunct type retains the temporal property of *to*-infinitive at least in most cases.

It should be noted here that since both the *V-to-V* sequence of the clausal adjunct type and the one of the catenative complement type share the temporal property of *to*-infinitive, clausal adjuncts bear some strong resemblance to catenative complements in some cases. There is a very clear ambiguity in (39).

(39) He swore to impress his mates. (Huddleston and Pullum 2002: 1223)

The catenative interpretation is 'He swore that he would impress his mates in some unspecified way, whereas the adjunct interpretation is 'He swore in order to impress his mates by swearing'. According to Huddleston and Pullum (2002: 1223), in the adjunct interpretation, *swore* receives greater phonological prominence and *swore* in writing is likely to be followed by a comma. The difference in interpretation between the clausal adjunct and the catenative complement types depends upon the context.

There is one conclusion to be drawn from the above discussion. The *V-to-V* sequence of the full-syntactic-structure group has two characteristics. One is that the weak integrity or inseparability of the sequence of the first and the second verbs is observed in the *V-to-V* sequence of the full-syntactic-structure group. The other is that the *V-to-V* sequence in the full-syntactic-structure group retains the temporal nature of the *to*-infinitive.

3.2.2 The Reduced-Structure Group

As mentioned in Section 2.3 in Chapter 2, from a syntactic point of view, the reduced-structure group involves a single verb phrase and falls into two types, the semi-complement type and the adjunct/oblique type. From a semantic point of view, the first verb in the *V-to-V* sequence is divided into two, lexical V1 and attenuated V1. We will discuss the semi-complement type in Section 3.2.2.1 and the adjunct/oblique type in Section 3.2.2.2.

3.2.2.1 The Semi-Complement Type

In the semi-complement type, the word sequence after the first verb behaves like a non-finite complement of the first verb and it is in the semantic scope of the first verb. The semi-complement type has two important features. One is that as far as we can tell, the first verb is limited to the verb *go* as attenuated V1. The other is that in the course of the Modern Period the *go-to-V* sequence, where motion in space has been lost, began to appear and developed various new meanings (see Visser 1969: 1400). In this dissertation, the semi-complement type is

semantically divided into two subtypes, the contribution subtype ('contribute to ...') in (40) and (41), and the modality subtype (e.g., 'be foolish enough to ...') in (42).

- (40) There are too many factors that go to make up a great marathon runner. (Collins)
 (41) It goes to show you the gap between reality and virtual reality in military thinking. (Longman)
 (42) Sure nobody would go to kill so handsome and good a creature. (OED)

From a syntactic point of view, the strong integrity or inseparability of the sequence of the first and the second verbs is observed in both subtypes, as in (43) and (44).

- (43) *There are too many factors that go often to make up a great marathon runner.
 (44) *Sure nobody would go often to kill so handsome and good a creature.

It is reasonable to state that the *V-to-V* sequence involving the strong integrity in the semi-complement type with attenuated V1 is a part of a single verb phrase. However, there are certain cases in which the apparent weak integrity or inseparability of the sequence of the first and the second verbs is observed in the contribution subtype, as in (45).

- (45) This all goes further to prove my theory.

Go further in (45) is regarded as a phrasal verb. The idea that *go further* in (45) is regarded as a phrasal verb is reinforced by the fact that the adverb *further* cannot occur before the first verb *go*, as in (46).

- (46) *This further goes to prove my theory.

Since a phrasal verb is a verb, it is clear that the strong integrity of the sequence of the first and the second verbs is observed in (45). Therefore, (45) belongs to the semi-complement type in the reduced-structure group where the *V-to-V* sequence is a part of a single verb phrase.

From a semantic point of view, the first verb *go* in the contribution subtype is used to express 'to contribute to as a result' and collocates with an inanimate subject, as in (40), (41), (47), and (48).

- (47) a. A few of the innermost cells go to form what's called the primitive streak. (Collins)
 b. I would like to wave goodbye to the frantic style which can only go to suffocate the glorious talents of many top players. (Collins)
 c. Two things go to render this statement worthless. (Visser 1969: 1400)

- (48) a. It just goes to show you can't always tell how people are going to react. (Oxford)
 b. Which all goes to show what can actually be achieved when an analogue master tape is lovingly transferred to compact disc. (Longman)

The *V-to-V* sequence of the contribution subtype indicates an unconscious, involuntary process. More specifically, *go* in (40) and (47) means 'to be one of the constituent elements', or 'to be among the conditions requisite for a purpose'. *Go* in (41) and (48), means 'help to prove something' or 'play an important role in doing something' and collocates with an inanimate subject, most of which are pronominal (see Gesuato 2009b). Roughly speaking, it is clear that all the sentences in the contribution subtype inherit the feature of the motion use of the verb *go* and retain its source-oriented interpretation mentioned in Section 2.4.2 in Chapter 2.

In the modality subtype, the verb *go* functions as a marker of evaluative modality that signal the modal notion of counter-normativity, and it retains no sense of movement, as in (42) and (49).

- (49) a. Indeed I did not go to do it. (OED)
 b. I am sure she would not go to tell a lie of any body. (OED)
 c. Dear ma'am, uttered Nurse Gill, 'you'd never go to suspect her!' (OED)
 d. He goes to say "You are unwilling to come to me that you may have life". (Collins)

The verb *go* retaining no sense of movement has a purely emotive meaning with an overlay of foolishness, boldness, severity, or the like. The modality subtype expresses an unexpected situation leading away from a normal and expected course of events. The modality subtype takes place only within negative or hypothetical contexts. The verb *go* is used to express 'to do anything so improper as to do' or 'to be so foolish, bold or severe as to do'. For instance, in (42), in a hypothetical context, the speaker expected that nobody was so foolish or bold as to kill so handsome and good a creature. All the sentences in (42) and (49) convey the speaker's negative judgment. A speaker's negative judgment observed in the *go-unVed* sequence mentioned in Section 2.4.2 in Chapter 2 is similarly observed in the modality subtype. It should be noted here that the modal marker *go* in the *go-to-V* sequence inherits the characteristics of the negative evaluative use of *go*. In particular, in (49d) where the *go-to-V* sequence denotes deliberate actions, the modal marker *go* inherits the characteristics not only of the negative evaluative use of *go*, but also of the continuation use of *go* mentioned in Section 2.4.2.2 in Chapter 2.

The general conclusions from the above discussion on the semi-complement type are twofold. One is that the only first verb found in this type of *V-to-V* sequence is the verb *go* where motion in space has been lost. The verb *go* as attenuated V1 inherits the characteristics either of the motion use of *go* or of the negative evaluative use of *go*. The other is that the strong integrity or inseparability of the sequence of the first and the second verbs is observed.

3.2.2.2 The Adjunct/Oblique Type

In the adjunct/oblique type, the word sequence after the first verb is not the scope of the first verb, but it is semantically like an adjunct, such as a purpose phrase, or like an oblique argument of the first verb, such as goal argument. In adjunct/oblique type, attenuated V1 is virtually nonexistent. As far as we know, the first verbs as lexical V1 are limited to *come* and *go*, as in (50).

- (50) a. A neighbor's boy comes to mow the grass on Saturdays. (Longman)
 b. When you go to buy cosmetics, the salesperson often suggests that you buy several products from the same line. (Collins)

The *come/go-to-V* sequence where the verbs *come/go* express motion does not have syntactic features of the catenative complement and the clausal adjunct types mentioned in Section 3.2.1.3. Huddleston and Pullum (2002: 1223) point out that the *go-to-V* sequence in (51a) is a borderline member of what they call the catenative complement category.

- (51) a. She went to see 'Hamlet'.
 b. She went to the Old Vic to see 'Hamlet'. (Huddleston and Pullum 2002: 1223)

In other words, the *go-to-V* sequence in (51a) belongs neither to the catenative complement type nor to the clausal adjunct type in the full-syntactic-structure group. In (51b) the phrase *the Old Vic* is a complement with role of goal and the *to*-infinitive is an adjunct of purpose. In (51a) the concept of a spatial goal is backgrounded so much, and it is not implausible to regard the *to*-infinitive as having been reanalyzed as a complement. As Huddleston and Pullum also point out, (52) shows that the phrase *in order* cannot be inserted in (51a), and (53) shows that (51a) is not interpreted as answering the question *Why did she go?*

- (52) *She went in order to see 'Hamlet'.
 (53) Why did she go? *She went to see Hamlet.

In a similar vein, Carden and Pesetsky (1977: 90) point out that the negative element *not* cannot be inserted between *went* and *to* in (51a), as in (54).

- (54) *She went not to see 'Hamlet'.

This suggests that the strong integrity or inseparability of the sequence of the first and the second verbs is observed in the *go-to-V* sequence of the adjunct/oblique type. It is fair to state that the *go-to-V* sequence in the adjunct/oblique type is a part of a single verb phrase. The same holds true for the *come-to-V* sequence in (50a). It should be emphasized here that the *V-to-V* sequence (*went to see 'Hamlet'*) in the adjunct/oblique type in (51a) is not the *V-to-V* sequence

where the first verb phrase in the *VP-to-V* sequence (*went to the Old Vic to see 'Hamlet'*) in (51b) happens to consist of a verb only.

The adjunct/oblique type of the *V-to-V* sequence has only one semantic subtype, the motion-purpose subtype. In the motion-purpose subtype, the first verb expresses motion and what appears to be the second verb phrase functions as a purpose in relation to the first verb, as in (50), (55), and (56).

- (55) a. When he came to pick me up, he was in tears. (Collins)
 b. Won't anyone come to rescue me? (Collins)
- (56) a. A fellow who had great difficulty getting to sleep at night went to see his doctor. (Collins)
 b. Where do you go to get your groceries? (Collins)

The *come/go-to-V* sequence in the motion-purpose subtype always retains the deictic meaning of the verb *come/go* mentioned in Section 2.4.2 in Chapter 2. In specifying directional motion, *come* is used only when the mover moves towards the goal as the deictic center, as in (50a) and (55). *Go* represents motion towards a goal where the speaker is not located, as in (50b) and (56). Shopen (1971: 258) points out that the motion-purpose subtype has one semantic feature: actual realization of the process represented by the *to*-infinitive in the *V-to-V* sequence is not implied. Due to this semantic feature, (57) does not show that the act of buying vegetables takes place.

- (57) They go to buy vegetables every day, but there never are any vegetables.
 (Shopen 1971: 258)

By contrast, the *V-and-V* sequence and the *V-V* sequence to be discussed in Chapters 4 and 5 imply the actual realization of the process, as in (58).

- (58) a. *They go buy vegetables every day, but there never are any vegetables.
 b. *They go and buy vegetables every day, but there never are any vegetables.

Now we discuss Egan's classification mentioned in Section 2.4.1.2 in Chapter 2, although the *V-to-V* sequence in the motion-purpose subtype does not take a *to*-infinitive as a catenative complement. Since what the *to*-infinitive expresses is described as expected to occur after the time of the main verb *come/go*, it is reasonable to state that the *V-to-V* sequences of the motion-purpose subtype correspond to the ones of the forward-looking type of Egan's classification. It is also necessary to discuss the temporal property of *to*-infinitive in the motion-purpose subtype. (57) shows that there is a certain time lag between the situations described by the first verb and the second verb in the motion-purpose subtype. In this respect, the *V-to-V* sequence of the motion-purpose subtype where the situation described by the second verb is yet to happen retains the temporal nature of the *to*-infinitive.

A metaphorical motion interpretation of the motion-purpose subtype is possible when the first verb is *go*, as in (59).

- (59) a. 13 million went to compensate damage to domestic properties. (Collins)
 b. The money will go to finance a new community center. (Oxford)
 c. My father had just died and everything went to pay debts. (Collins)

Although *go* expressing metaphorical motion in (59) means ‘serve’ or ‘be used to do’, it is clear that *go* in (59) still retains its original motion meaning (see Gesuato 2009b). The motion-purpose subtype where metaphorical motion is expressed is used only in a context of money. Due to such an exclusive context, the subject is limited to inanimate subjects which often identify financial resources.

There is one conclusion to be drawn from the above discussion on the adjunct/oblique type. The *V-to-V* sequence of the adjunct/oblique type has four characteristics. First, the first verb *come/go* inherits the characteristics of the motion use. Second, the strong integrity or inseparability of the sequence of the first and the second verbs is observed in the *V-to-V* sequence of the adjunct/oblique type. Third, the *V-to-V* sequence in the adjunct/oblique type retains the temporal property of *to*-infinitive. Fourth, only the *go-to-V* sequence occurs in the motion-purpose subtype where metaphorical motion is expressed.

3.3 The Relationship among *V-to-V* Sequences

In this section, we will deal with the second problem posed in Section 3.1.3, that is to say, what the relationship among various types of *V-to-V* sequences which are related to each other is. In Section 3.2, we have dealt with the first problem, that is to say, what the semantic and syntactic relationships between the first and the second verbs in the *V-to-V* sequence are. The general classification of the *V-to-V* sequence discussed so far is summarized in Table 3.1.

| function of word sequence group | sequence | meaning of V1 semantic subtype | <i>V-to-V</i> sequence | | <i>V-and-V</i> sequence | | <i>V-V</i> sequence | | <i>V-Ving</i> sequence | |
|---------------------------------|-----------------------|--------------------------------|------------------------|---------------|-------------------------|---------------|---------------------|---------------|------------------------|---------------|
| | | | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 |
| | | | | | | | | | | |
| full-syntactic-structure | coordinated clause | | n/a | n/a | | | | | | |
| | catenative complement | aspect | start | | | | | | start | |
| | | effort | try | | | | | | try | |
| | | culmination | | come | | | | | | |
| | | likelihood | | grow | | | | | | |
| | clausal adjunct | | | stand | | | | | | |
| | | purpose | run | | | | | | | |
| | | sit | | | | | | | | |
| reduced-structure | semi-complement | contribution | | go | | | | | | |
| | | modality | | go | | | | | | |
| | adjunct/oblique | motion-purpose (metaphorical) | come | | | | | | | |
| | | | go (go) | | | | | | | |

Table 3.1. The general classification of multi-verb sequences discussed so far

Table 3.1 shows that the *come-to-V* sequence can occur not only in the motion-purpose subtype in the reduced-structure group, but also the culmination subtype in the full-syntactic-structure group. Now we have to consider the semantic contrast between them. The most natural interpretation of (60) is that (60a) belongs to the motion-purpose subtype and (60b) belongs to the culmination subtype.

- (60) a. Our former neighbor came to dig a hole in our garden.
 b. Our former neighbor came to dig holes in our garden. (Bourdin 2009: 362)

Since *to dig a hole* in (60a) represents a single occurrence of hole-digging, it is difficult to construe hole-digging as a culmination process. By contrast, *to dig holes* in (60b) describes multiple occurrences, which can be readily construed as the culmination process. This does not mean that a single occurrence which what appears to be the second verb phrase expresses is a requisite for the motion-purpose subtype, and that multiple occurrences which the second verb phrase expresses is a requisite for the culmination subtype. In (61) *to dig a hole* is a single occurrence, but (61) belongs to the culmination subtype.

- (61) Things got so bad with our former neighbor that he came to dig a hole in our garden. (Bourdin 2009: 363)

By contrast, (62) where *to dig holes* indicates multiple occurrences belongs to the motion-purpose subtype.

(62) Every night, our former neighbor came to dig holes in our garden.

(Bourdin 2009: 363)

The difference in interpretation between the motion-purpose and the culmination subtypes depends upon the context.

We also have to discuss a relationship between motion *come* and non-motion *come*, that is to say, the one between the motion-purpose subtype in the reduced-structure group on the one hand and the culmination subtype in the full-syntactic-structure group on the other. As mentioned in Section 3.1.2, Bourdin (2009) claims that the semantic shift from control-*come* to raising-*come* is due to what Bourdin calls the great modal shift in the sense that the sentence instantiating raising-*come* lacks the subject's intention or volition. Unlike Bourdin (2009), Radden (1996) points out that a synthesis of motion *come* and non-motion *come* is based on the metaphor CHANGE IS MOTION. One thing that we can add to such observations is that, as discussed in Section 3.2, the first verb *come* in the *V-to-V* sequence, regardless of whether the *V-to-V* sequence belong to the full-syntactic-structure group or the reduced-structure group, always inherits the characteristics of the single verb *come*, such as goal orientation.

Table 3.1 also shows that the first verb plays a vital role in shaping *V-to-V* sequences. The verbs used as the first verbs in this chapter are mostly intransitive verbs. Among many intransitive verbs such as *come*, *go*, *run*, *sit*, and *stand*, only *come*, *go*, and *stand* come to take a catenative complement or to be used in a reduced structure. It is clear that some irregularities are observed in the *V-to-V* sequence. Now there are two important points that we need to clear up. First, both *sit* and *stand* are the most typical verbs of posture, but why do they behave differently in the *V-to-V* sequence? Stated another way, what is the reason that the *sit-to-V* sequence does not take part in the type that *stand* participates in? Second, both *come* and *go* are deictic verbs of motion, but why do they behave differently in the *V-to-V* sequence? Stated another way, what is the reason that the *come-to-V* sequence does not take part in the type that *go* participates in? From the comprehensive standpoint of multi-verb sequences, we will discuss these two points more fully in Chapter 8.

Table 3.2 shows the integrity or inseparability of the sequence of the first and the second verbs in addition to the general classification of multi-verb sequences.

| sequence | | <i>V-to-V</i> sequence | | <i>V-and-V</i> sequence | | <i>V-V</i> sequence | | <i>V-Ving</i> sequence | |
|--------------------------|-----------------------|------------------------|---------------|-------------------------|---------------|---------------------|---------------|------------------------|---------------|
| | | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 |
| group | function of word | meaning of V1 | | | | | | | |
| | sequence after V1 | sequence after V1 | | | | | | | |
| full-syntactic-structure | coordinated clause | n/a | n/a | | | | | | |
| | catenative complement | weak | weak | | | | | weak | |
| | clausal adjunct | weak | n/a | | | | | | |
| reduced-structure | semi-complement | n/a | strong | | | | | | |
| | adjunct/oblique | strong | n/a | | | | | | |

Table 3.2. The integrity or inseparability of the sequence of the first and the second verbs discussed so far

The weak integrity or inseparability of the sequence of the first and second verbs in the catenative complement type reinforces the idea that the full-syntactic-structure group involves two verb phrases. The strong integrity or inseparability of the sequence of the first and second verbs in the semi-complement and the adjunct/oblique types indicates that the reduced-structure group involves a single verb phrase.

3.4 Conclusion

This chapter has explored the nature of the *V-to-V* sequence on the basis of the general classification schema of multi-verb sequences. It should be stated here that only two deictic verbs *come* and *go* occur in the reduced-structure group. One thing deserves further consideration. It is to clear up two important points posed in Section 3.3. In Chapter 8, we will explicate the two points from the comprehensive standpoint of multi-verb sequences. In the next chapter, we will deal with the *V-and-V* sequence where coordination plays a major role.

Chapter 4

The *V-and-V* Sequences

The aim of this chapter is to explore the nature of the *V-and-V* sequence. The sentences in (1) and (2) are examples of *V-and-V* sequences.

- | | | |
|--------|---|-----------|
| (1) a. | At school I boxed and played rugby. | (Collins) |
| b. | He nodded and puffed on a stubby pipe as he listened. | (Collins) |
| c. | You'll have to wait and see what happens. | (Longman) |
| c. | He could read and write before he went to school. | (BNC) |
| (2) a. | Go and get me a drink! | (Oxford) |
| b. | You've really gone and done it now! | (Oxford) |
| c. | Try and finish quickly. | (Oxford) |
| d. | The three of us need to sit and have a talk. | |

There is a significant difference between (1) and (2), despite the fact that there are superficial similarities between them. The examples in (1) are fully syntactic coordinate sentences, while those in (2) have reduced structures. The difference has been discussed in previous studies (e.g., Carden and Pesetsky 1977, Culicover and Jackendoff 1997, De Vos 2005, Deane 1991, 1992, Goldsmith 1985, Hopper 2002, Lakoff 1986, McCawley 1988, Na and Huck 1992, Newman and Rice 2008, Postal 1998, Sag et al. 1985, Schmerling 1985, Zwicky 1969). Two main ideas are distilled from the previous studies. One is that from a syntactic standpoint: only the Coordinate Structure Constraint (Ross 1967) as a purely syntactic constraint makes the distinction between (1) and (2). The other is that from a semantic standpoint, semantic motivation based on 'hendiadys' plays a central role in differentiating (1) from (2). However, the difference between (1) and (2) has rarely been discussed in the previous studies from both standpoints. Through examining the difference not only from a syntactic point of view, but also from a semantic point of view, we will recapture the nature of the *V-and-V* sequence in (2) in this chapter.

This chapter is structured as follows. Section 4.1 reviews some earlier proposals of the *V-and-V* sequences, primarily focusing on exceptions to the Coordinate Structure Constraint. Section 4.1 demonstrates that the exceptions to the Coordinate Structure Constraint are divided into two types, genuine exceptions to the Coordinate Structure Constraint and apparent exceptions to the Coordinate Structure Constraint. Section 4.1 also shows that there are four problems that still remain to be treated with respect to an overall picture of the *V-and-V* sequence. Section 4.2 provides the classification of the *V-and-V* sequence on the basis of the general classification schema of multi-verb sequences. Section 4.3 reexamines exceptions to the Coordinate Structure Constraint not only from a syntactic standpoint, but also from a semantic

standpoint, demonstrating what the relationship among various types of *V-and-V* sequences which are related to each other is. Section 4.4 offers a conclusion.

4.1 Some Earlier Proposals and Remaining Problems

This section reviews previous studies of the *V-and-V* sequence. Ross (1967) presented the earliest syntactic study to the *V-and-V* sequence. Most of the studies that followed, regardless of whether they used the syntactic approach or the semantic approach, were based on Ross (1967). Reviewing Ross (1967), Section 4.1.1 summarizes the syntactic constraints on the *V-and-V* sequence. Section 4.1.2 reviews two types of semantic studies. One is based on Ross (1967), and the other is not. Section 4.1.3 shows that there are four problems that still remain to be treated with respect to an overall picture of the *V-and-V* sequence

4.1.1 The Syntactic Studies

We can hardly discuss *V-and-V* sequences without taking the Coordinate Structure Constraint (Ross 1967: 161) into account. The Coordinate Structure Constraint (CSC) is defined as follows:

(3) The Coordinate Structure Constraint

In a coordinate structure, no conjunct may be moved, nor may any element contained in a conjunct be moved out of that conjunct.

The CSC is a starting point for a study of the *V-and-V* sequence to be discussed in this chapter. Section 4.1.1.1 shows the positive and the negative aspects of the CSC. Both aspects gave the first indication of the complexity and analytical difficulty that the *V-and-V* sequence has. Based on the CSC, Section 4.1.1.2 reviews two types of syntactic studies, Zwicky (1969) and Carden and Pesetsky (1977).

4.1.1.1 The Coordinate Structure Constraint

The CSC is a purely syntactic constraint on the operation of grammatical rules. Ross (1967: 176) points out that the CSC does not allow extraction out of a coordinate structure, except for across-the-board rule where the element adjoined to the coordinate node must occur in both conjuncts, as in (4) and (5).

- (4) a. She ate dinner and washed the dishes.
 b. *What did she eat and wash the dishes?
 c. *What did she eat dinner and wash?
- (5) a. She is waiting for you and trying to call you.
 b. Who is she waiting for and trying to call?

In (4b) and (4c), extraction fails, because it affects only one conjunct. In (5b), extraction succeeds, because the across-the-board rule allows extraction to occur equally out of both conjuncts. Ross (1967: 170) claims that there is no other syntactic test for coordinate structure other than the one that the CSC provides. This is the positive aspect of the CSC, but the negative aspect is the existence of a violation of the CSC (see McCawley 1988: Ch.9). As Ross points out, extracting a noun phrase out of the second verb phrase of the coordinate structure is sometimes possible, as in (6) through (9).

- (6) a. I went to the store and bought some whisky.
- b. Here's the whisky which I went to the store and bought.
- (7) a. She's gone and ruined her dress now.
- b. Which dress has she gone and ruined now?
- (8) a. I've got to try and find that screw.
- b. The screw which I've got to try and find holds the frammis to the myolator.
- (9) a. Aunt Hattie wants you to be nice and kiss your granny.
- b. Which granny does Aunt Hattie want me to be nice and kiss? (Ross 1967: 168, 170)

To facilitate later discussion in this chapter, verb sequences in (6) through (9) are called Ross's *go-buy* type, *go-ruin* type, *try* type, and *be-nice* type, respectively. Since Ross's *be-nice* type which involves an adjective does not correspond to multi-verb sequences discussed in this dissertation, we do not treat Ross's *be-nice* type. In his brief discussion, Ross suggests that, despite the presence of the conjunction *and*, these examples are not true coordinate structures to which the CSC applies and hence are not true counterexamples to the CSC. However, Ross provides no sharp distinction between the coordinate and the non-coordinate structures in question. Therefore, previous studies with respect to the violation of the CSC set out to examine whether or not Ross's examples are really non-coordinate structures (e.g., Culicover and Jackendoff 1997, Na and Huck 1992, Postal 1998, Schachter 1977). Whether or not Ross's examples are coordinate structures is a moot point in the previous studies.

It should be emphasized here that the CSC conflicts with some linguistic data. The CSC functions properly, but there are exceptions to the CSC. In this respect, it is reasonable to assume that such exceptions are closely related to the internal structures of the coordinate structures. Sag et al. (1985) point out that the satisfactory distinction between coordinate and non-coordinate structures cannot be in the syntax. Semantic and cognitive accounts are required to demonstrate why extracting a noun phrase out of the second verb phrase of the coordinate structure is possible, although syntactic accounts are focused on demonstrating whether Ross's examples are coordinate structures or not. Through exploring the nature of the *V-and-V* sequence in this chapter, we will demonstrate that the examples where extracting a noun phrase out of the second verb phrase of the coordinate structure is possible are twofold, genuine

counterexamples to the CSC and apparent counterexamples to the CSC.¹ We will also show the two different qualities of counterexamples.

4.1.1.2 The Post-Coordinate Structure Constraint

Zwicky (1969) and Carden and Pesetsky (1977) to be addressed here use different terms to refer to what appears to be coordinate structures, which are different from fully syntactic coordinate structures. Zwicky (1969) uses the term ‘unidirectional coordination’. Carden and Pesetsky (1977) uses the term ‘fake-coordination’ to refer to apparent coordinate structures that are roughly equivalent to exceptions to the CSC.

Zwicky (1969) points out that unidirectional coordination is distinct from full coordination in the following five ways.² First, unidirectional coordination has meaning beyond that of full coordination. (10a) is not adequately paraphrased by (10b).

- (10) a. Persephone pedaled off and purchased a pomegranate.
 b. Persephone pedaled off, and she purchased a pomegranate. (Zwicky 1969: 433)

Second, some instances of unidirectional coordination, as in (11), correspond to full coordination sentences which are of questionable grammaticality out of special context.

- (11) a. I went and enjoyed the circus.
 b. ?I went, and I enjoyed the circus. (Zwicky 1969: 433)

Third, the conjuncts in unidirectional coordination are not reversible, because (12a) and (12b) do not convey the same meaning.

- (12) a. He dropped to the ground and screamed.
 b. He screamed and dropped to the ground. (Zwicky 1969: 433)

Fourth, there is obligatory tense harmony in unidirectional coordination. (13) in which there is no tense harmony represents only full coordination.

¹ The CSC is not a unitary phenomenon, because the CSC has essentially two distinct constraints, precluding the movement of conjuncts and precluding the movement of elements of conjuncts (see Grosu 1973).

² Zwicky (1969) points out that the *VP-and-V* sequence has one feature in addition to the five features. Backward pronominalization into the first conjunct is possible in unidirectional coordination. In (i), *him* refers to *George*.

(i) I ran after him and told George to remember the party. (Zwicky 1969: 434)

However, in non-unidirectional coordination, as pointed out by Langacker (1969), *him* in (ii) cannot refer to *Mr. Marx* in (ii).

(ii) The man who hired him is conservative, and Mr. Marx is quite liberal.

(Zwicky 1969: 434)

(13) Melvin rushed out and is burying us a cake. (Zwicky 1969: 434)

Fifth, the CSC does not apply to unidirectional coordination, as in (14).

(14) What did I tell him to go and do? (Zwicky 1969: 434)

The typical first verbs in such structures to meet these five requirements are intransitive verbs, especially *come* and *go*. At this point, it is fair to state that unidirectional coordination corresponds to Ross's *go-buy* type, as mentioned in Section 4.1.1.1.

Zwicky (1969) also shows that the *try-and-V* sequence which corresponds to Ross's *try* type, as in (15a), is derived from its paraphrase with *to*-infinitive, as in (15b), by a minor rule, hendiadys, which replaces the word *to* by the word *and*.³

(15) a. Try and stop me!
b. Try to stop me! (Zwicky 1969: 440)

The second verb in (15a) is thus automatically in its infinitive form, that is to say, in its bare form. In fact, both the first and the second verbs in the *try-and-V* sequence are always in their bare forms. (16) where *try* is inflected, does not suggest the clearly purposive interpretation of (15a), which *try*, not being inflected, expresses (see Gleitman 1965).

(16) You tried and stopped me. (Zwicky 1969: 440)

The inflection condition semantically differentiates (15a) from (16). Zwicky states that the *try-and-V* sequence does not represent unidirectional coordination. It should be noted here that Zwicky distinguishes Ross's *go-buy* type from his *try* type based on the inflection condition.

Carden and Pesetsky (1977) call the *V-and-V* sequence discussed in this chapter fake-coordination. They show that the surface *and* in the *V-and-V* sequence where the first verb is *come*, *go*, *run*, and *try* is a fake which does not correspond to an underlying coordinate conjunction. They provide no features of Ross's *go-buy* type, but they provide new features of Ross's *try* and *go-ruin* types.

Carden and Pesetsky provide three new features of Ross's *try* type. First, there is a phonological difference between fake and real or full coordination. While fake coordination represents the reduced pronunciation of *and* that is spelled 'n' in phrases like *rock'n'roll*, as in

³ Zwicky (1969) shows that the *be-sure-and-V*, the *remember-and-V*, and the *take-care-and-V* sequences as well as the *try-and-V* sequence are derived from their paraphrases with *to*-infinitives, as in (i), (ii), and (iii),

(i) I'll be sure and avoid the pit.
(ii) Did he remember and get the bacon?
(iii) I want her to take care and be quiet. (Zwicky 1969: 440)

(17a), real coordination has a pause before *and*, as in (17b) (see Pullum 1990).

- (17) a. John will try [n] catch Mary.
 b. John will try, [pause] and catch Mary. (Carden and Pesetsky 1977: 85)

Second, parentheticals appear in the middle of real-*and* coordination, as in (18a) and (18b).

- (18) a. John will try, unfortunately, and catch me.
 b. John will try and, unfortunately, catch me. (Carden and Pesetsky 1977: 86)

Both (18a) and (18b) have only the real-*and* reading that implies that John will succeed catching me. (19a) and (19b) show that the word *and* in (18a) and (18b) cannot be replaced by the word *to*.

- (19) a. ?John will try, unfortunately, to catch me.
 b. *John will try to, unfortunately, catch me.

However, (20) where the parenthetical word *unfortunately* does not appear in the middle of *and*-coordination has a fake-*and* reading.

- (20) John will, unfortunately, try and catch me. (Carden and Pesetsky 1977: 86)

(21) shows that the word *and* in (20) is replaced by the word *to*.

- (21) John will, unfortunately, try to catch me.

Third, there is a selectional restriction on the second verb in fake-coordination with the first verb *try*. The second verb in real-coordination is not required to be self-controllable, as in (22a), but the second verb in fake-coordination is required to be self-controllable, as in (22b).

- (22) a. A: Do you think John can cross the river on that narrow plank?
 B: John will try, and fall in the river.
 b. A: Do you think John can cross the river on that narrow plank?
 B: John will try and fall in the river. (Carden and Pesetsky 1977: 87)

Whereas the second sentence in (22a) means that John accidentally falls in the river, the interpretation of the second sentence in (22b) is that John intentionally falls in the river. The selectional restriction on the second verb in the fake-coordination is identical to the one on the infinitival complement of *try*, as in (23).

- (23) A: Do you think John can cross the river on that narrow plank?
 B: John will try to fall in the river. (Carden and Pesetsky 1977: 87)

Carden and Pesetsky provide two new features of Ross's *go-ruin* type. Examples in (24) must have an unexpected-event reading, and the second verb is not always self-controllable.

- (24) a. He went and hit me.
 b. Did you best coon dog go and die on you? (Carden and Pesetsky 1977: 89)

Because of these two features, Carden and Pesetsky state that the *V-and-V* sequence in (24) differs semantically from the one in fake-coordination in (22b). Carden and Pesetsky also show that the inflection condition differentiates Ross's *go-ruin* type from his *try* type. While both the first and the second verbs in Ross's *try* type are always in their bare forms, as in (22b), the first and the second verbs in Ross's *go-ruin* type are not required to be in their bare forms, as in (24). It should be noted here that Carden and Pesetsky distinguishes Ross's *go-try* type from his *go-ruin* type based on their meanings and the inflection condition.

These syntactic studies of *V-and-V* sequences give some significant observations. For example, they draw a clear distinction between full coordination and unidirectional coordination or fake-coordination. However, the simple distinction cannot explain the different types of *V-and-V* sequences to be discussed in this chapter. Stated another way, both Zwicky (1969) and Carden and Pesetsky (1977) do not provide a detailed description of how to differentiate the properties of various types of *V-and-V* sequences that we will see in Section 4.2. It is reasonable to conclude that the syntactic studies discussed here are not sufficient to show how the first verb and the second verb in the *V-and-V* sequence are integrated syntactically.

4.1.2 The Semantic Studies

Hendiadys is a Latin adaptation of the Greek phrase, *hen dia duoin* 'One through two'. As Putt (1939) and Spolsky (1988) point out, hendiadys has a different meaning when used in combination than when the two words are used in their original meanings, and yet they do not lose their original meanings. In hendiadys in English, a single complex idea is expressed by two words connected by the conjunction *and*.⁴ Most previous studies of the *V-and-V* sequence are based on the notion of hendiadys, even though the term hendiadys may not have been used. In particular, hendiadys holds the key to the previous studies from a semantic point of view. Since hendiadys shows both syntactic coordination and semantic integration, hendiadys and

⁴ Hendiadys contrasts with syntheton, which represents two or more distinct ideas as a coordinate structure such as *bread and wine* and *red, white, and blue*. *Bread and wine* means the Eucharist, the holy bread and wine, representing Christ's blood and body, used in a Christian ceremony. *Red, white, and blue* means any tricolor flag or banner having the three colors of red, white, and blue. In general, *red, white, and blue* refers to the flag of the United States of America or the United Kingdom.

exceptions to the CSC exhibit a parallelism in some sense. The interface between hendiadys and exceptions to the CSC is a moot point, which will be discussed in more detail in this chapter.

In this subsection, semantic studies of *V-and-V* sequences are divided into two groups. One group is directly related to exceptions to the CSC, and the other is closely related to specific *V-and-V* sequences. Section 4.1.2.1 reviews three types of semantic studies which give semantic accounts of the exceptions to the CSC, Schmerling (1975), Lakoff (1986), and Deane (1991, 1992). Section 4.1.2.2 reviews four more types of semantic studies which focus on specific *V-and-V* sequences, Poutsma (1917a, b), Hopper (2002), De Vos (2005), and Newman and Rice (2008). Poutsma (1917a, b) and Hopper (2002) offer an articulate description of hendiadys.

4.1.2.1 Semantic Accounts of Exceptions to the Coordinate Structure Constraint

Schmerling (1975), Lakoff (1986), and Deane (1991, 1992) to be addressed here provide semantic accounts of exceptions to the CSC. They do not offer an articulate description of hendiadys, but the notion of hendiadys play an important role in their studies.

Schmerling (1975), adhering to Ross (1967), points out that Ross's *go-buy* type, *go-ruin* type, and *try* type, shown in (25), involve non-logical conjunction.⁵

- (25) a. I went to the store and bought some whisky.
 b. She's gone and ruined her dress now.
 c. I've got to try and find that screw. (Schmerling 1975: 220)

She also points out that (25a), (25b) and (25c) are not understood through implicature, a term coined by Grice (1975), which refers to what is suggested in an utterance, which is neither expressed nor strictly entailed by the utterance. We call (25a), (25b), and (25c) the non-Gricean account instances. If they were instances of logical conjunction, (25a), (25b) and (25c) were reduced forms of underlying structures where two full sentences are conjoined in (26a), (26b), and (26c).

- (26) a. I went to the store and I bought some whisky.
 b. ?She's gone and she's ruined her dress now.
 c. I've got to try and I've got to find that screw. (Schmerling 1975: 220)

However, (25) and (26) demonstrate that the reduced and unreduced or full versions are not equivalent. Both (25a) and (26a) represent the conveyance of an unquestionably temporal sequence. In (25a) I need to have bought the whisky at the particular store referred to in the first

⁵ It should be noted here that the general assumption that conjunction, which involves temporal sequence, can be paraphrased with *and then* in place of *and* is not correct. The general assumption is explicitly stated by Lakoff and Peter (1969), who do not mention the existence of conjunction where temporal sequence is not involved. R.Lakoff (1971) notices that the first conjunct is typically presupposed in order for the second conjunct to be true.

conjunct, but in (26a) I need not have bought the whisky at the store referred to in the first conjunct. (25b), where the sense of physical movement is lost, does not describe a sequence of events. However, (26b) simply relates two separate sentences without such additional meanings. In (25c) the second conjunct functions as the complement of the first verb *try*, but (26c) is understood as having a null complement following *try* that is different from *to find that screw*.

There is another piece of evidence that the reduced versions do not involve logical conjunction. If they involve logical conjunction, the reduced versions can take the word *both* to conjoin the two phrases. However, (27a), (27b), and (27c) are not understood in the same way as the reduced versions in (25a), (25b), and (25c).

- (27) a. I both went to the store and bought some whisky.
 b. ?She's both gone and ruined her dress now.
 c. I've got to both try and find that screw. (Schmerling 1975: 222)

(27a), (27b), and (27c) are understood, rather, as being equivalent to the unreduced or full versions in (26a), (26b), and (26c). Schmerling indicates that there are differences between logical and non-logical conjunctions, and that only the non-logical conjunctions allow apparent exceptions to the CSC. This is consistent with Ross's claim that (25a), (25b), and (25c) are not true coordinate structures. She goes one step further and concludes that conjunction, as shown by the non-Gricean account instances, is not a unitary phenomenon.

In sharp contrast to Schmerling (1975), Lakoff (1986) argues that exceptions to the CSC definitely represent true coordinate structures in spite of the violation of the CSC. The crucial evidence lies in (28), which involves multiple conjuncts, across-the-board extraction from several conjuncts, and comma intonation before the conjunction.

- (28) a. What did he go to the store, buy, load in his car, drive home, and unload?
 b. How many courses can you take for credit, still stay sane, and get all A's in?
 (Lakoff 1986: 153)

Each factor is a direct indication of true coordinate structure, but (28a) and (28b) show the violation of the CSC. If the CSC is a purely syntactic constraint, the sentences in (28) which violate the CSC should be treated as ungrammatical but acceptable (for some performance reason). However, Lakoff claims that such sentences cannot be treated as performance errors. He points out that the sentences in (28) are semantically motivated counterexamples to a putative syntactic constraint, that is to say, genuine counterexamples to the CSC.⁶

Lakoff states that extracting a noun phrase out of the verb phrase of the coordinate structure depends upon frame semantics in Fillmore's (1985) sense, which makes sense within the

⁶ Levine (2001:161) states that Lakoff was right after all, and that the CSC cannot be maintained as a syntactic restriction.

general theory of cognitive semantics. Lakoff argues that the exceptional patterns of the CSC are divided into three types, ‘scenario of Type A’, ‘scenario of Type B’, and ‘scenario of Type C’, on the basis of the notion of ‘a natural and expected course of events’. In this dissertation, scenario of Type A, of Type B, and of Type C are called Lakoff’s Type A, Type B, and Type C, respectively. Lakoff’s Type A, where the sequence of events fits normal conventional expectations, represents the semantic relation between a main clause and a purpose clause. Lakoff’s Type A corresponds to Ross’s *go-buy* type and an instance in (25a) seen in Schmerling’s non-Gricean account instances. (29) is an example.

(29) What did Harry go to the store and buy? (Lakoff 1986: 152)

Lakoff’s Type A, on the whole, indicates the resultant state where the purpose is successfully fulfilled. Lakoff’s Type B and C are completely different from Ross’s other three types and other instances in (25b) and (25c) seen in Schmerling’s non-Gricean account instances.

Lakoff’s Type B is based on Goldsmith (1985), where conventionalized expectations are violated, and represents the semantic relation between a main clause and an adversative clause.⁷ It is exemplified in (30), where a course of events, that is to say, drinking too much and staying sober, is counter to conventional expectations.

(30) How much can you drink and still stay sober? (Lakoff 1986: 152)

In general, Lakoff’s Type B deals with hypothetical situations.

Lakoff’s Type C represents a cause-result sequence, as in (31).

(31) That’s the stuff that the guys in the Caucasus drink and live to be a hundred. (Lakoff 1986: 156)

(31) shows extraction from the first conjunct, but it does not have one of Lakoff’s Type B features. (31) does not mean that people living in the Caucasus live to be a hundred despite

⁷ Although they are different in detail, Lakoff’s and Goldsmith’s analyses focus on the correlation of syntax and semantics. Goldsmith suggests that the connective *and* discussed here, as in (i), can be paraphrased as ‘*and nonetheless*’, and that (i) should not be subject to the CSC.

(i) How many courses can we expect our graduate students to teach and finish a dissertation on time? (Goldsmith 1985: 133)

His proposal argues for a semantically-driven syntactic reanalysis, in which *and* is reanalyzed as a syntactic subordinator rather than a syntactic coordinator.

Culicover and Jackendoff (1997) demonstrate a mismatch between syntactic structure and the conceptual structure. In fact, (i) represents syntactic coordination, whereas the left-hand conjunct functions as semantic subordination at the conceptual structure. They support Goldsmith’s and Lakoff’s claims.

drinking kefir, the Near Eastern drink, but that people living in the Caucasus live to be a hundred because they drink kefir. There is a difference between a natural course of events in Lakoff's Type A and a cause-result sequence in Lakoff's Type C. As in (29), going to the store and buying something is a natural course of events, but buying something is not caused by going to the store. Thus, Lakoff's Type A is not a subcase of Lakoff's Type C.

Lakoff proves that the strange qualities in syntax observed in Lakoff's three types are motivated by semantics. Extracting a noun phrase out of one conjunct in the coordinate structure is a typical case.⁸ He analyzes the internal structures of the coordinate structures from a semantic point of view. He accounts for exceptions to the CSC that Ross does not notice, but he does not deal with Ross's *go-ruin* type and *try* type.⁹

Deane (1991, 1992) maintains that Lakoff's three types are genuine exceptions to the CSC in the sense that extracting a noun phrase out of one conjunct in the fully syntactic coordinate structure is possible, and that they are also exceptions with clear semantic motivation. He poses a question about Lakoff's classification: why should specific semantic frames be relevant to extraction from coordinate structures? To answer this, he refines Lakoff's classification. He claims that verb phrase coordination must be analyzed as a part of a narrative sequence. Instead of classifying scenarios, he classifies conjuncts, based on their need to allow extraction.

Deane (1991, 1992) shows that there are six types of verb phrase coordination which have nothing to do with across-the-board-extraction. The first of these, the 'preparatory action' type, is one where a preparatory action is not undertaken in its own right. It constitutes part of an established routine for accomplishing some other action. A preparatory action conjunct precedes the main action conjunct. This type corresponds to Ross's *go-buy* type and the majority of Lakoff's Type A, and it is exemplified in (32).¹⁰

- (32) a. What did he go to the store and buy?
 b. Who did he pick up the phone and call?
 c. Who did he open his arms wide and hug?
 d. What did he sit down and start typing? (Deane 1991: 23)

Second, the 'scene-setter' type, in which the first conjunct provides background information about the scene where the main action takes place, is exemplified in (33).

⁸ Haspelmath (2004b:30) points out that it is not clear whether the CSC is truly universal. Extracting the noun phrase out of one conjunct in the coordinate structure has not been examined systematically for many languages. Languages with forms that look like coordination, by all other criteria, could still allow extraction freely.

⁹ Na and Huck (1992) state that the exceptions to the CSC do not involve coordinate structures from a pragmatic or discourse-oriented point of view and refer to Ross's *go-ruin* type and *try* type as idiomatic conjunctions.

¹⁰ Deane (1991) points out that Lakoff (1986) fails to characterize which conjuncts in a natural sequence need not allow an across-the-board extraction, especially with respect to Lakoff's Type A.

- (33) a. Sam is not the sort of guy you can just sit there and listen to.
 b. Who did you stand in the parlor and tell jokes about?
 c. Which party did we wear Halloween costumes and get drunk? (Deane 1991: 24)

Third, the ‘internal cause’ type, which describes an internal state which causes the agent to carry out the main action, involves both mental and physical states, as in (34).

- (34) a. Who did he go berserk and start shooting at?
 b. What did he lose his balance and fall on the top of? (Deane 1991: 24)

Fourth, the ‘incidental-event’ type is that events are incidental to the main narrative sequence. Such events are often sandwiched between other events in the narrative sequence, as in (35).

- (35) a. This is the kind of job that you can work on all morning, take a lunch break, and finish off by 2 p.m.
 b. What did you talk about all night, take a shower, and then have to lecture on at your 8 a.m. class? (Deane 1991: 25)

Fifth, the violation-of-expectation type, in which an event departs from the normal, expected sequence, corresponds to Lakoff’s Type B. It is exemplified in (36).

- (36) a. Sam is not the sort of guy you can listen to and stay calm.
 b. How small a meal can you eat and feel satisfied? (Deane 1991: 25)

Finally, the ‘result’ type corresponds to Lakoff’s Type C, as in (37).

- (37) a. What did you set off and scare the neighbors?
 b. This is the kind of machine gun you can shoot off and kill a thousand men a minute. (Deane 1991: 25)

Semantic differences among the six types seem to result in different patterns of extraction. Deane (1991) concludes that such extraction seem incompatible with the thesis of syntactic autonomy. However, Deane, like Lakoff, does not deal with Ross’s *go-ruin* type and *try* type. In fact, the two types do not fall into any of Deane’s six types.

Deane (1991, 1992) also argues that extraction is motivated by attention to narrative structure.¹¹ He shows that extraction occurs from the intrinsically focal phrase, which provides the most important information. Across-the-board extraction would follow if equal emphasis is inherent to coordinate structures. When extraction occurs across the board, primary stress must fall on both phrases, as in (38).

(38) Who did John KISS and Mary SPANK? (Deane 1991: 49)

The sentences with extraction which he treats are cases in which across-the-board extraction fails to occur. He hypothesizes that conjuncts which do not allow extraction are not focal because of their special narrative functions. In fact, if only one of the conjuncts submit to extraction, only that conjunct receives primary stress, as in (39).

(39) a. Who did you stand in the parlor and tell JOKES about?
 b. Which problem did he get bored and give UP on?
 c. Which did you TALK ABOUT all night, take a shower, and then have to LECTURE ON at your 8 a.m. class?
 d. How much can you DRINK and still stay sober? (Deane 1991: 49-50)

Deane demonstrates that the CSC cannot be maintained as a purely syntactic restriction.

Goldberg (2013) confirms Deane's hypothesis that conjuncts which do not allow extraction are not focal. She shows that without special intonation, sentence negation in (40) implies that the second phrase which is focal is negated.

(40) a. I didn't just run to the store and buy milk. (I bought a week's worth of groceries.)
 b. He hasn't gone and ruined this book yet (but give him time).
 c. I don't have to try and find a paper that examines the coordinate structure constraint in great detail (because I already found a book).
 d. He didn't just grab a pen and write to his mother (although I tried to convince him to contact her).
 e. He can't drink two beers and still stay sober. (Two beers make him drunk.)
 f. He didn't go berserk and start shooting at people. (He only threw a few punches.)
 (Goldberg 2013: 232)

She thus reaffirms that whether conjuncts allow extraction or not is sensitive to information

¹¹ Kuno (1976, 1987) and Erteschik-Schir and Lappin (1979) indicate that the extracted phrase must be a potential topic, or at least be potentially dominant in the sense that the speaker intends the hearer's attention to focus on it. Takami (1988) argues that the extraction phrase expresses new or more important information than the rest of the clause. Deane (1991) attempts to integrate Kuno's, Erteschik-Schir's, and Takami's ideas.

structure properties, and that only elements that are not backgrounded are candidates for extraction.

From a semantic point of view, four previous studies with respect to the exceptions to the CSC have been discussed so far. The eight types of exceptions are treated differently by different linguists and are summarized in Table 4.1.

| works exception | Ross (1967) | Schmerling (1975) | Lakoff (1986) | Deane (1991, 1992) |
|--------------------|----------------------------|--------------------------------|------------------|---------------------------------------|
| exception 1 | <i>go-buy</i> type (6) | non-Gricean instances (25a) | Type A (29) | preparatory type (32) |
| exception 2 | <i>go-ruin</i> type (7) | non-Gricean instances (25b) | n/a | n/a |
| exception 3 | <i>try</i> type (8) | non-Gricean instances (25c) | n/a | n/a |
| exception 4 | n/a | n/a | n/a | scene-setter type (33) |
| exception 5 | n/a | n/a | Type B (30) | violation-of-expectation type (36) |
| exception 6 | n/a | n/a | Type C (31) | result type (37) |
| exception 7 | n/a | n/a | n/a | internal-cause type (34) |
| exception 8 | n/a | n/a | n/a | incidental-event type (35) |

Table 4.1. Eight types of exceptions to the CSC based on four previous studies

As the four previous studies offer fragmentary explanations, a synthesis of the previous studies is required to elucidate exceptions to the CSC. The previous studies often treat examples in which a sequence preceding *and* is a verb phrase, but this dissertation focuses on examples in which a verb occur alone before *and*. Therefore, in this dissertation, we do not deal with four exceptions in Table 4.1, exception 5, 6, 7, and 8 where the noun phrase must be extracted out of the first conjunct in the coordinate structure presupposing the verb phrase status of the first conjunct.

From the above discussion in Section 4.1.2.1, there are one conclusion and one hypothesis to be drawn. The conclusion is that Lakoff (1986) and Deane (1991, 1992) have clearly demonstrated that there are genuine exceptions to the CSC in the sense that extracting a noun phrase out of conjunct in the fully syntactic coordinate structure is possible. The hypothesis is that Ross's *go-ruin* type and *try* type, which correspond exactly to Schmerling's non-Gricean instances in (23b) and (23c), represent apparent exceptions to the CSC. In Section 4.2, we will verify this hypothesis. In Section 4.3, we will explain the reason why Lakoff and Deane do not deal with Ross's *go-ruin* type and *try* type.

4.1.2.2 Semantic Accounts of Specific *V-and-V* Sequences

There are several semantic approaches to specific *V-and-V* sequences (e.g., Hommerberg and Tottie 2007, Hopper 2002, Huddleston and Pullum 2002, Jaeggli and Hyams 1993, Lind 1983b, Pullum 1990, Quirk et al. 1985, Shopen 1971, Stefanowitsch 1999, 2000, Wulff 2006). The majority of previous studies describe the *go-and-V* sequence. Now we review four studies, Poutsma (1917a,b), Hopper (2002), De Vos (2005), and Newman and Rice (2008). The four studies focus on the semantic relationship between the first and the second verbs in the *V-and-V* sequence.

Poutsma (1917a, b) divides English hendiadys into two groups. He calls the first group ‘the copulative construction illogically used instead of an adverbial construction’ and the second group ‘the copulative construction illogically used instead of an adnominal construction’ (Poutsma 1917a: 203, 1917b: 289). He uses the term copulative construction to refer to coordinate construction. In the copulative construction, the construction indicates that the second word or phrase contains additional information that is related to the first word or phrase. Since the second group is unrelated to the *V-and-V* sequence, we deal with only the first group in this chapter.¹²

Poutsma (1917a) further divides the first group into three types.¹³ First, the second conjunct may represent an adverbial relation of purpose to the first conjunct. In (41) *come and see* stands for *come to see*.

(41) Come and see us in our new home. (OED, Poutsma 1917a: 203-204)

¹² We will provide a brief description of the second group. The second group is further divided into three types. First, the first conjunct can be understood to denote a quality of what is expressed by the second conjunct. In (i) *the earnestness and love* takes the place of *the earnest love*.

(i) I am glad to dwell upon the earnestness and love with which she lifted up her face to mine. (Dickens, *David Copperfield*, Poutsma 1917b: 289)

Second, the second conjunct can be understood to denote a quality of the first conjunct. In (ii) *conversation and confidence* takes the place of *confidential conversation*.

(ii) I felt it was time for conversation and confidence. (Dickens, *David Copperfield*, Poutsma 1917b: 290)

Third, the first conjunct can represent the noun of a relation-expressing prepositional phrase. In (iii) *in change and travel* can be substitute for *in the change of, or resulting from, travel*.

(iii) It came to be agreed among us that I was to seek the restoration of my peace in change and travel. (Dickens, *The Chimes*, Poutsma 1917b: 292)

¹³ Poutsma (1917b) points out the copulative construction illogically used in a combination of two adjectives. The hendiadys is required to function as a predicative complement. The first conjunct is more or less distinctly intended as an intensifier of the meaning of the second conjunct. In (i), *nice and strong* takes the place of *nicely strong*.

(i) Another cup of tea? I see you’re ready. This one will be nice and strong. (Lloyd, *North English*, Poutsma 1917b: 285)

Panther and Thornburg (2009) describe the *nice-and-Adj* sequence in detail.

Second, the second conjunct may function as a complement of the first conjunct. In (42) *try and be reasonable* takes the place of *try to be reasonable*.

(42) You should try and be reasonable. (Alexander, *A Life Interest*, Poutsma 1917a: 204)

Third, the second conjunct may function as an adverbial adjunct of the associated circumstances of the first conjunct. In (43) *lay and sobbed* takes the place of *lay sobbing*.

(43) Harry Webb lay and sobbed bitterly.
(Sweet, *The Old Chapel*, Poutsma 1917a: 203-204)

We call (41), (42), and (43) Poutsma's purpose type, complement type, and adjunct type, respectively. With respect to hendiadys, Poutsma (1917a, b) demonstrates that whereas the syntax is simple coordination, the semantics is complicated. This can be seen in three instances in (41), (42), and (43), and the three instances correspond to the multi-verb sequences discussed in this dissertation.

We discuss Poutsma's first group briefly. Poutsma (1917a) reveals the semantic features that characterize hendiadys. In Poutsma's purpose type, the first verb expressing the moving of a person from one place to another is very common. The first verbs *come* and *go* are typical instances, as shown in (44).¹⁴

(44) a. It was too far for people to come and dine with us.
(Marryat, *Olla Podrida*, Poutsma 1917a: 205)
b. What should he go and buy for Laura and his mother?
(Thackeray, *Pendennis*, Poutsma 1917a: 207)

Hendiadys with *come* or *go* partially correspond to Ross's *go-buy* type. Poutsma also points out that hendiadys with *go* are frequently used in the meaning of a weakened 'be so foolish', as in (45).

(45) The fool has gone and got married. (*Scribner's Magazine*, Poutsma 1917a: 210)

However, he states that this use seems to be restricted to colloquial and vulgar language. (45) corresponds to Ross's *go-ruin* type. Poutsma's purpose type has two subtypes, as shown in (44) and (45). We call (44) and (45) subtype I and subtype II in Poutsma's purpose type, respectively.

¹⁴ Brinton (1988: Ch.3) states that hendiadys was expressed in Old and Middle English. Several features of hendiadys in the earlier periods, including the aspectual meaning and the frequent use of motion verbs such as *come* and *go*, persist in present-day English.

In Poutsma's complement type, the first verbs are restricted to only a few.¹⁵ (46) is one example.

(46) Her business here on earth is to try and get a rich husband.

(Thackeray, *The Newcomes*, Poutsma 1917a: 209-210)

The verb forms in this type seem to be strictly restricted to the infinitival and the imperative forms, and the uses seem to be restricted to colloquial language. (46) corresponds to Ross's *try* type.

In Poutsma's adjunct type, *lie*, *sit*, and *stand* occur frequently in the first verbs, as in (47).

(47) a. ... he lay and read. (Tennyson, *In Memoriam A.H.H.*, Poutsma 1917a: 217)

b. I sat and pondered. (Jerome, *Three Men in a Boat*, Poutsma 1917a: 217)

c. I stood and stated at myself in the glass. (Haggard, *She*, Poutsma 1917a: 218)

The second conjunct functions as what Poutsma (1917a: 217) calls 'a predicative adnominal adjunct' which modifies the subject. Poutsma's adjunct type is not treated in Ross (1967), Lakoff (1986), and Deane (1991, 1992). In this dissertation, we treat Poutsma's adjunct type as fully syntactic coordination, rather than as hendiadys. We will discuss Poutsma's adjunct type in Section 4.2.1.

Hopper (2002) analyzes four types of hendiadic expressions that Poutsma (1917a), Ross (1967), Lakoff (1986), and Deane (1991, 1992) did not treat. (48) shows the four expressions, the *turn-(a)round-and-V*, the *start-and-V*, the *go-ahead-and-V*, and the *take-NP-and-V* sequences, which allow a violation of the CSC.¹⁶

(48) a. And if they don't deliver then one day he's going to turn round and sack them and try someone else.

b. You have to start and think about how this will be.

c. I wanted to go ahead and confirm them as soon as possible.

d. This test ... will take national standards and move them down into the classroom.

(Hopper 2002: 152)

¹⁵ Poutsma (1917a) gives three instances, *try and VP* in (26), *learn and VP*, as in (i), and *mind and VP*, as in (ii).

(i) You should learn and indulge his habits.

(Trollope, *Is He Popenjoy?*, Poutsma 1917a: 215)

(ii) Mind and keep her and the children downstairs till I come back.

(Craik, *John Halifax, Gentleman*, Poutsma 1917a: 216)

¹⁶ Schmerling (1975:217) gives one example of the *take-NP-and-V* sequence.

(i) a. Lizzie Borden took an axe and gave her mother forty whacks.

b. Who did Lizzie Borden take an axe and whack to death? (Schmerling 1975: 217)

Each expression in (48) also shows a different function of verbal hendiadys in the context of the discourse. Only the *start-and-V* sequence represents the *V-and-V* sequence in which the first part consists of a verb only. We treat only the *start-and-V* sequence in the four types of hendiadic expressions in this dissertation and describe it in more detail in Section 4.2.2.1. The *start-and-V* sequence is provisionally called Hopper's *start* type.

Hopper (2002) points out the distinction between full coordination and verbal hendiadys is identified by the criterion of whether one compound event or two separate events are intended. In (49) where water rising is actually involved, *come up* refers to the movement of the high tide up the river.

- (49) Dr. Miller said the damming of the river at Wivenhoe had meant that there was no regular flushing of the waters from upstream. The river had to rely on tides to come up and take nutrients downstream. The river has improved as far as heavy metals and pesticides concerned but nutrients are still a problem, he said. (Hopper 2002: 146)

This movement is distinct from the movement of taking nutrients downstream. It is reasonable to regard the two verb phrases *come up* and *take nutrients downstream* as referring to two distinct events and as occupying different clauses. *Come up and take nutrients downstream* represents full coordination. By contrast, this is not of the two verb phrases *come up and say* in (50).

- (50) But don't you think though that a few years' time they'll come up and say you know like with everything else Of CFCs don't harm the ozone layer it's something else. (Hopper 2002: 146)

The first verb *come up* does not represent a different action from the second verb *say*. Hopper states that it functions like an auxiliary indicating aspect, and that *come up and say* functions as one compound event, that is to say, hendiadys. However, he admits that since it depends crucially on context, it is often difficult in practice to tell whether the coordinate structure in question represents one compound event or two separate events.

Hopper concludes that although there is no telling how many different kinds of verbal hendiadys are possible in English, hendiadic expressions are subjective in the sense that they are interpersonal and oriented toward the feelings of the interlocutors.¹⁷ The hendiadic expressions are thus modal. He argues that the first verb in a hendiadic sequence can be losing its original meaning and assuming a feature of a grammatical adjunct to the second verb or of auxiliiation.

De Vos (2005) calls sentences in (51), which correspond to Ross's *go-ruin* type, contiguous coordination, where the first and the second verb phrases are contiguous.

¹⁷ Poutsma (1928) gives many types of examples with respect to hendiadys.

- (51) a. John went and read the constitution! (De Vos 2005: 32)
 b. John left his computer to sit and scan all its disks before he turned it off.
 (De Vos 2005: 34)

He points out that contiguous coordination represents a complex predicate where the first verb lexicalizes a manner component in the internal structure. The first verb in contiguous coordination is related to the semantic bleaching. The first verb plays an aspectual role, and the second verb phrase is dependent on the first verb for aspect. The verb *go* in (51a) which does not require a literal motion interpretation denotes prospective aspect. This prospective aspect allows what Carden and Pesetsky (1977) call an unexpected-event interpretation. De Vos claims that the verb *sit* in (51b) which does not have the meaning of posture and denotes durative aspect. Contiguous coordination can be also characterized by Vendler's (1967) four-way classification of verbs based on their aspectual features. Contiguous coordination with *go* has the widest range of possible meaning and is compatible with accomplishments, achievements, and activities, as in (52), while the one with *sit* can combine with accomplishments and activities, as in (53).¹⁸

- (52) a. Who did John go and drive back home safely? (accomplishments)
 b. Which board-game did John go and win? (achievements)
 c. Which board-game did John go and play for hours? (activities)
 d. *John goes and loves potatoes. (states)
- (53) a. What did John sit and eat 43 hamburgers in only 30 minutes? (accomplishments)
 b. *?Which board-game did John sit and win? (achievements)
 c. Which board-game did John sit and play for hours? (activities)
 d. *John sat and loved potatoes. (states)
- (De Vos 2005: 103)

De Vos (2005) claims that the first verbs of contiguous coordination are limited to *come*, *go*, and *sit*. However, he does not give examples where the first verb is *come*.

Newman and Rice (2008) show how the internal structures of the *V-and-V* sequence work semantically and functionally. They explain how the two verbs in the *V-and-V* sequence are integrated semantically and functionally, focusing on the *go-and-V* and the *try-and-V* sequences on the basis of the Wellington Written Corpus (WC) and the Wellington Spoken Corpus (WSC). They divide the *go-and-V* sequence into three subtypes, what Newman and Rice call the *go-and-tell*, the *go-and-visit*, and the *go-and-prove-me-wrong* subtypes.

¹⁸ Wulff (2006) shows the aspectual properties of the *go-and-VP* sequence based on the BNC corpus. She carries out what Stefanowitsch and Gries (2003) call collostructional analyses. Her results, where second verbs denoting accomplishments and achievements are predominant, and ones denoting activities represent high frequency, are almost the same as for De Vos (2005).

First, in the *go-and-tell* subtype where the first verb *go* represents a purposeful event, the first verb and the second verb occur in chronological sequence, as in (54).

- (54) a. If Debbie was going to go and tell them to stop it. [WSC]
 b. Let's go and look at the damage. [WC] (Newman and Rice 2008: 14-15)

The *go-and-tell* subtype is a subtype of Ross's *go-buy* type. Second, in the *go-and-visit* subtype, the definition of the first verb and the one of the second verb semantically overlap, as in (55).

- (55) a. Sharon went and visited the flat. [WSC]
 b. I'll have to go and fetch him, Rosey. [WC] (Newman and Rice 2008: 16-17)

The *go-and-visit* subtype also represents a subtype of Ross's *go-buy* type. Third, the *go-and-prove-me-wrong* subtype is found mainly in a colloquial, conversational style. The verbal meaning suggested by the first verb can be attenuated, as in (56).

- (56) a. Go on go and prove me wrong now [WSC]
 b. Now different people have gone and sold their houses [WSC]
 (Newman and Rice 2008: 18)

The *go-and-prove-me-wrong* subtype corresponds to Ross's *go-ruin* type. The *try-and-V* subtype which corresponds to Ross's *try* type occurs more frequently in the spoken corpus than the written one. The definition of the second verb is subsumed in the semantic scope of the definition of the first verb, as in (57).

- (57) a. Best to avoid that weekend and try and go for the May date [WSC]
 b. Somehow we have got to try and keep control of our members [WC]
 (Newman and Rice 2008: 19)

Newman and Rice (2008: 22) conclude that the dominant meaning which is closely connected to the *V-and-V* sequence, is 'human motion from one location to another followed by an activity at the destination.' They also speculate that the verbs *go* and *try* discussed here have become or seem destined to become auxiliariated. In terms of auxiliariation, Newman and Rice (2008) seem to share the same view as Hopper (2002).

From the above discussion, it is reasonable that examples cited by Poutsma (1917a), Hopper (2002), De Vos (2005), and Newman and Rice (2008) are kinds of sentences that are genuine or apparent counterexamples to the CSC. From a semantic point of view, eight previous studies with respect to the exceptions to the CSC have been discussed so far. The five types of exceptions concerning the *V-and-V* sequence are treated as differently by different linguists and are summarized in Table 4.2.

| work exception | Ross (1967) | Schmerling (1975) | Lakoff (1986) | Deane (1991, 1992) | Poutsma (1917a) | Hopper (2002) | De Vos (2005) | Newman & Rice (2008) |
|----------------|-------------------------|-----------------------------|---------------|------------------------|------------------------------|-------------------------|------------------------------|---|
| exception 1 | <i>go-buy</i> type (4) | non-Gricean instances (23a) | Type A (27) | preparatory type (30) | purpose type subtype I (42) | n/a | n/a | <i>go-and-tell</i> subtype <i>go-and-visit</i> subtype (52) & (53) |
| exception 2 | <i>go-ruin</i> type (5) | non-Gricean instances (23b) | n/a | n/a | purpose type subtype II (43) | n/a | contiguous coordination (49) | <i>go-and-prove-me-wrong</i> subtype (54) |
| exception 3 | <i>try</i> type (6) | non-Gricean instances (23c) | n/a | n/a | complement type (44) | n/a | n/a | <i>try-and-V</i> subtype (55) |
| exception 4 | n/a | n/a | n/a | scene-setter type (31) | n/a | n/a | n/a | n/a |
| exception 5 | n/a | n/a | n/a | n/a | n/a | <i>start</i> type (46b) | n/a | n/a |

Table 4.2. Five types of exceptions to the CSC based on eight previous studies

It should be emphasized here that we have a big advantage over the investigation of the *V-and-V* sequence. More specifically, we can explicate the characteristics of various kinds of *V-and-V* sequences, ranging from Ross's *go-buy* type which almost all previous studies have treated, through Ross's *go-ruin* and *try* types which Lakoff and Deane do not treat, to two types shown in exception 4 and 5 which Ross does not treat. Also, in Section 4.2 we will show how related the *V-and-V* sequence discussed in this dissertation is to the *VP-and-V* sequence discussed in the previous studies.

4.1.3 Problems

There are four remaining problems to be dealt with here with respect to an overall picture of the *V-and-V* sequence. The first problem is the first question of the two key questions in this dissertation posed in Section 2.3 in Chapter 2. It is what the semantic and syntactic relationships between the first and the second verbs in the *V-and-V* sequence are. In particular, we will show the syntactic and semantic relationships between the first and the second verbs in the reduced-structure group which involves a single verb phrase. This first problem also includes a specific question of how the general classification of the *V-and-V* sequence relate to the previous studies shown in Table 4.2. The second problem is the second question of the two key questions in this dissertation. It is what the relationship among various types of the *V-and-V* sequences which are related to each other is. The third problem is why exceptions to the CSC are divided into two types, genuine exceptions to the CSC and apparent exceptions to the CSC. The fourth problem is whether or not the *V-and-V* sequence is associated with semantic change, for instance, auxiliatation. In the following sections in this chapter, we will deal with the first, the second, and the third problems by clarifying the nature of the *V-and-V* sequence. In Chapter 6, we will deal with the fourth problem from a historical point of view.

4.2 The Classification of *V-and-V* Sequences

This section will deal with the first problem posed in Section 4.1.3. In order to clarify the highly complicated internal structures of *V-and-V* sequences, this section will provide a classification of *V-and-V* sequences based on the general classification schema of multi-verb sequences.

Based on the general classification schema of multi-verb sequences, the *V-and-V* sequence is syntactically divided into two groups, the full-syntactic-structure group and the reduced-structure group. We will deal with the full-syntactic-structure group in Section 4.2.1 and the reduced-structure group in Section 4.2.2.

4.2.1 The Full-Syntactic-Structure Group

As mentioned in Chapter 2, from a syntactic point of view, the full-syntactic-structure group in the general classification of multi-verb sequences involves two verb phrases and in principle falls into three types, the catenative complement type, the clausal adjunct type, and the coordinated clause type. The *V-and-V* sequence, however, is syntactically related only to the coordinated clause type, due to the presence of coordination. From a semantic point of view, the first verb in multi-verb sequences is divided into two: lexical V1 and attenuated V1. As for the first verb, since both the first and the second verbs are required to bear the assertive weight of the sentence in the coordinated clause type, the coordinated clause type with attenuated V1 is virtually nonexistent.

The coordinated clause type in the full-syntactic-structure group has three distinguishing features.¹⁹ First, the coordinated clause type does not put any restrictions on the first verb and the second verb. Second, the CSC is respected except under specific contexts. Needless to say, any verbs, including representative verbs *come*, *go*, *run*, *sit*, *stand*, and *try* used as the first verb in many of the multi-verb sequences in the reduced-structure group, can occur in the first verb position in the *V-and-V* sequence in the coordinated clause type, as shown in (58a), (59a), (60a), (61a), (62a), and (63a).

- (58) a. You came and brought him back.
 b. *What did I come and bring back?
- (59) a. He went and took Snoopy from various kinds of stuffed toys.
 b. *What did he go and take from various kinds of stuffed toys?

¹⁹ The *V-and-V* sequence includes non-reversible word pairs, which are not directly related to the CSC. The non-reversible word pair represents opposite meanings, and they are always in fixed order. Because of the fixed order, the integrity of the first and second verbs is strong. Typical instances are *come and go* in (i), *try and fail* in (ii), *start and end/finish* in (iii).

- (i) John's friends laughed like little demons. Their voices came and went.
 (ii) Napoleon tried and failed to take this coast.
 (iii) Any serious statement about risk starts and ends with smoking.

- (60) a. He ran and kicked a ball.
 b. *What did he run and kick?
 (The verb *run* means ‘to move using your legs, going faster than when you walk’.)
- (61) a. He sat and marveled at her news.
 b. *What did he sit and marvel at?
 (The verb *sit* means ‘to rest your weight on your bottom’.)
- (62) a. He stood and picked up the blanket.
 b. *What did he stand and pick up?
- (63) a. John tried and said something.
 b. *What did John try and say?

In (58b), (59b), (60b), (61b), (62b), and (63b) where extracting a noun phrase out of the second verb phrase of the coordinate structure is impossible, the CSC is respected. To put it another way, the sentences where the CSC is respected do not show the exceptional pattern of the CSC shown in Table 4.2 in Section 4.1.2.2. The examples in (58) through (63) do not represent the semantic relation between a main clause and a purpose clause or take the first verb which provides background information about the scene where the second verb phrase takes place. This allows (61) and (62) classified as Poutsma’s adjunct type to correspond to the coordinated clause type. Because of the inflection condition mentioned in Section 4.1.1.2, (63) where both the first and the second verbs are inflected is a case of the fully syntactic, coordinated clause type. Third, a word or more than one word can be inserted between the first verb and the conjunction *and*, as in (64).

- (64) a. You came downstairs and brought him back.
 b. He went to the next room and took Snoopy from various kinds of stuffed toys.
 c. He ran very quickly and kicked a ball.
 d. He sat down in the room and marveled at her news.
 e. He stood up suddenly and picked up the blanket.
 f. John tried and then said something.

The weak integrity of the sequence of the first and second verbs is observed in (64). The three features of the coordinated clause type, therefore, point to the fact that that the *V-and-V* sequence of the coordinated clause type involves two verb phrases.

In the previous section, we have pointed out that there are genuine counterexamples to the CSC in the sense that extracting a noun phrase out of the second verb phrase in the fully syntactic coordinate structure is possible. This is true of the fully syntactic *V-and-V* sequence, in which the first conjunct consists of a verb only. In the *V-and-V* sequence in (65a) through (65c), it seems that the first verb phrase in the *VP-and-V* sequence happens to consist of a verb only.

- (65) a. He came and did it.
 b. He went and bought ten doughnuts.
 c. He ran and bought a bag.

The three sentences in (65) correspond to Ross's *go-buy* type, Lakoff's Type A, or Deane's preparatory type. The two-verb-phrase nature of these examples in (65) can be shown by the relative acceptability of (66).

- (66) a. ?At five he came and did it at six.
 b. ?At five he went and bought ten doughnuts at six.
 c. ?At five he ran and bought a bag at six.

These sentences in (66) do allow extraction out of the second verb phrase, shown in (67).

- (67) a. What did he come and do?
 b. What did he go and buy?
 c. What did he run and buy?

Matters are complicated, because (67) may alternatively be examples of the reduced-structure type to be discussed in Section 4.2.2. We will see, however, that such reduced structure examples involve a reduced pronunciation of *and*, shown in (17), and without such a pronunciation, (67) can be safely regarded as cases of the full-syntactic-structure group.

It should be noted here that extracting a noun phrase out of a verb phrase of the coordinate structure is impossible in the coordinated clause type, except for instances cited by Lakoff (1986) and Deane (1991, 1992) in Section 4.1.2.1 (the genuine exceptions to the CSC). The genuine exceptions to the CSC occur only under specific conditions that are semantically restricted. We will go one step further and demonstrate later in Section 4.2.2 that there are also apparent exceptions to the CSC in the reduced-structure group in addition to genuine exceptions to the CSC in the full-syntactic-structure group.

4.2.2 The Reduced-Structure Group

As mentioned in Chapter 2, from a syntactic point of view, the reduced-structure group involves a single verb phrase and falls into two types, the semi-complement type and the adjunct/oblique type. From a semantic point of view, the first verb in the *V-and-V* sequence is divided into two, lexical V1 and attenuated V1. We will deal with the semi-complement type with lexical V1 in Section 4.2.2.1, the semi-complement type with attenuated V1 in Section 4.2.2.2, the adjunct/oblique type with lexical V1 in Section 4.2.2.3, and the adjunct/oblique type with attenuated V1 in Section 4.2.2.4.

4.2.2.1 The Semi-Complement Type: Lexical V1

In the semi-complement type, the word sequence after the first verb behaves like a non-finite complement of the first verb and is in the semantic scope of the first verb, and the sequence is virtually obligatory. As far as we can tell, the first verbs in the semi-complement type with lexical V1 are limited to *start* and *try*, as in (68) and (69).

- (68) Where was I? You know I go to all these different schools and start and get mixed up after a while. (Collins)
- (69) He has started a privatization program to try and win support from the business community. (Collins)

The *start-and-V* sequence in (68), that is to say, Hopper's *start* type, is hereafter called the aspect subtype, and the *try-and-V* sequence in (69), that is to say, Ross's *try* type, is called the effort subtype.

From a syntactic standpoint, the semi-complement type with lexical V1 has two features. One is that no word can be inserted between the first verb and the conjunction *and*. Both (70a) and (70b) belong to the semi-complement type in the reduced-structure group.

- (70) a. I'll try and do better.
b. Start and gain some experience.

(70a) and (70b) involve clearly purposive interpretation. (71a) and (71b), where an adverb is inserted between the first verb and the conjunction *and*, are grammatical.

- (71) a. I'll try harder and do better.
b. Start slowly and gain some experience directly.

However, (71a) and (71b) do not suggest the clearly purposive interpretation of (70a) and (70b). Since the first and the second verbs in (71) can take adverbs independently, (71a) and (71b) involve two verb phrases. (71a) and (71b) belong to the coordinated clause type in the full-syntactic-structure group. It is clear that the strong integrity or inseparability of the sequence of the first and second verbs is observed in the semi-complement type with lexical V1 in (70). The strong integrity or inseparability points to the fact that the *V-and-V* sequence in the semi-complement type with lexical V1 is a part of a single verb phrase.

The other feature is that there are apparent exceptions to the CSC which occur without any specific conditions, in sharp contrast to genuine exception to the CSC, mentioned in Section 4.2.1, which occur only under specific conditions that are semantically restricted. (72) and (73) show that extracting a noun phrase out of what appears to be the second verb phrase of the coordinate structure is possible, because the *V-and-V* sequence in (72) and (73) is a part of a single verb phrase.

- (72) ... and other products are specials you can also try and buy at the spa's enticing Blue Boutique... (CWO)
- (73) What did it start and leak?

It should be noted here that the strong integrity is closely related to apparent exceptions to the CSC.

From a semantic standpoint, Hopper (2002) was the first to point out that the *start-and-V* sequence can be a *V-and-V* sequence as the aspect subtype with a reduced-structure. As mentioned in Section 4.1.2.1, Hopper points out that the distinction between full coordination on the one hand and verbal hendiadys corresponding to the *V-and-V* sequence in the reduced-structure group on the other is identified by the criterion of whether one compound event or two separate events are intended. It should be emphasized here that the *start-and-V* sequence does not always have a reduced structure. In a discussion of beadwork, *started and established a rhythm* in (74) constitutes not a verbal hendiadys, but a full coordination, because starting and establishing a rhythm are separate events.

- (74) Beadwork is fiddly and requires concentration so once you have started and established a rhythm, the fewer the interruptions, the speedier the process. (Hopper 2002: 162)

The beadwork is first started, and then a rhythm is established. (74) belongs to the coordinated clause type in the full-syntactic-structure group mentioned in Section 4.2.1. In contrast to (74), *start and get mixed up* in (68) represents a verbal hendiadys, because starting and getting mixed up are not separate events. In (68) *start* serves purely to aspectualize the second verb phrase *get mixed up* and retains the original meaning, 'to do something that you were not doing before, and continue doing it'. (68) belongs to the aspect subtype in the semi-complement type with lexical V1.

Hopper (2002) also shows that the *start-and-V* sequence as verbal hendiadys has three features. First, the *start-and-V* sequence represents informal register. Second, the meaning of the *start-and-V* sequence is inceptive without a view to a successful completion, as in (75).

- (75) You can actually start and create your own language ... (Hopper 2002: 163)

Third, the *start-and-V* sequence is almost always followed by a discourse break, as in (76).

- (76) Jean: Well you see this is it and he's been the formative influence in your whole adult life.
 Penny: Yeah.
 Jean: So if you're going to stay with him.
 Penny: Mhm.
 Jean: You have to start and think about how this will be er this is the future.
 Penny: Yeah. (Hopper 2002: 163)

The effort subtype corresponds to Ross's *try* type shown in (69). As mentioned in Section 4.1.1.2, one finding that Zwicky (1969) and Carden and Pesetsky (1977) presented still remains the cornerstone for the grammatical study of the *try-and-V* sequence: only non-past forms of the first verb *try* and the second verb are acceptable. From a semantic standpoint, the use of the *try-and-V* sequence has been discussed in comparison with the use of the *try-to-V* sequence, which is in many ways semantically similar to the *try-and-V* sequence. Some grammarians and linguists argue that a subtle difference in meaning can be discerned if the two sequences are compared carefully. On the one hand, the *try-and-V* sequence implies that the effort will or shall succeed. Nicholson (1957: 604) suggests that the use of the *try-and-V* sequence implies a more noticeable possibility that the action expressed by the second verb will be carried out. (77) suggests that the only reason why the listener is not behaving is that she or he is not trying to.

- (77) Do try and behave.

In a similar vein, Wood (1962: 241) suggests the *try-and-V* sequence entails greater urgency. Fowler (1965) states that the *try-and-V* sequence is almost always confined to exhortations and promises, as in (78).

- (78) a. Do try and stop coughing.
 b. I will try and have it ready for you. (Fowler 1965: 666)

Newman and Rice (2008) point out that the *try-and-V* sequence seems to carry a nuance suggesting slightly more certainty or confidence about the result or effect of an action or event than the *try-to-V* sequence. They explain (79a) seems a little more insistent that the addressees should ensure the outcome than (79b).

- (79) a. We have got to try and keep control of our members.
 b. We have got to try to keep control of our members. (Newman and Rice 2008: 20)

On the other hand, Follett (1969) states that the *try-and-V* sequence is so casual that it renders the successful effort less likely. The *try-and-V* sequence can imply that the effort will fail. In (80), the *try-and-VP* sequence is ironic.

- (80) a. Try and make me move.
 b. Try and make me.
 c. Try and stop me.
 d. Try and warm them up.

Sentences in (80) should never be used except in highly informal conversation. Based on a discourse study, Nordquist (1998) suggests that the *try-and-V* sequence signals the agent's inability to achieve the second verb phrase and the speaker's lack of confidence in the agent's success. Nordquist's suggestion differentiates between (81a) and (81b).

- (81) a. John didn't try to learn French, but living in Paris he just picked it up.
 b. ?John didn't try and learn French, but living in Paris he just picked it up.
 (Carden and Pesetsky 1977: 90)

However, instances where *try-and-V* sequences imply failure are merely ironic. In this regard, the whole *try-and-V* sequence functions as an ironic phrase.

The above discussion with respect to the *try-and-V* sequence leads to one general conclusion. It is plausible to state that the *try-and-V* sequence represents subtly more certainty, success, or confidence about the result or effect that what appears to be the second verb phrase expresses than the *try-to-V* sequence, because instances where *try-and-V* sequences imply failure are merely ironic. Strictly speaking, it is fair to state that there are only marginal differences between the *try-and-V* and the *try-to-V* sequences. With respect to the functional feature, the ironic *try-and-VP* sequence would hardly be acceptable in formal style. From a functional standpoint, the differences between the *try-and-V* sequence and the *try-to-V* sequence will be discussed at great length in Chapter 6.

4.2.2.2 The Semi-Complement Type: Attenuated V1

The semi-complement type with attenuated V1 is semantically divided into two subtypes, the modality subtype (e.g., 'be foolish enough to ...') in (82) and the aspect subtype ('to suddenly do something different or surprising') in (83).

- (82) Why did you have to go and upset your mother like that? (Oxford)
 (83) He upped and left without telling anyone. (Oxford)

The first verb in the modality subtype is limited to *go*. As far as we can tell, the first verb in the aspect subtype is limited to *up*. Both subtypes share two features from a syntactic point of view. One is that no word can be inserted between the first verb and the conjunction *and*, as in (84) and (85).

- (84) *Why did you have to go further and upset your mother like that?

(85) *He upped much and left without telling anyone.

(84) and (85) show that the strong integrity or inseparability of the sequence of the first and second verbs is observed in the semi-complement type with attenuated V1. Stahlke (1970) states that the modality subtype yields inchoative-causative alternations, as in (86a) and (86b), and that the *V-and-V* sequence is incompatible with passivization, as in (86c).

- (86) a. The bottle went and broke.
 b. John went and broke the bottle.
 c. *The bottle is gone and broken. (Stahlke 1970: 91-92)

The other feature is that there are apparent exceptions to the CSC, in sharp contrast to genuine exception to the CSC. (87) and (88) show that extracting a noun phrase out of what appears to be the second verb phrase of the coordinate structure is possible.

- (87) a. You went and upset your mother.
 b. Who did you go and upset?
 (88) a. She upped and opened it.
 b. What did she up and open?

From (84), (85), (87), and (88), it is reasonable to state that the *V-and-V* sequence of the semi-complement type with attenuated V1 is a part of a single verb phrase.

From a semantic point of view, the modality subtype corresponds to Ross's *go-ruin* type, as shown in (82).²⁰ In the modality subtype where the verb *go* retains no sense of movement, the verb *go* functions as a marker of evaluative modality that signals the modal notion of counter-normativity. The verb *go* retaining no sense of movement has a purely emotive meaning with an overlay of annoyance, disapproval, foolishness, surprise, or the like. The modality subtype, as shown in (82) and (89), expresses not only an abnormal and unexpected situation leading away from a normal and expected course of events, but also the speaker's attitude towards a situation which the speaker specifically views as deviating from his or her own personal assumptions or expectations about what is right or desirable.

²⁰ Quirk et al. (1985: 979) point out that both *gone* and *been* occur in verbal hendiadys in British English, as in (i), whereas only *gone* occurs in verbal hendiadys in American English, as in (ii). Both (i) and (ii) are informal and derogatory. British English has a humorous, emotive usage in which both *been* and *gone* are conjoined with a third verb, as in (iii).

- (i) They've been and spilled wine on the floor.
 (ii) They've gone and spilled wine on the floor.
 (iii) Look what you've been and gone and done. (Quirk et al. 1985: 979)

- (89) a. We asked him not to call the police, but he went and did it anyway.
 b. And it's interesting because Hillary Clinton says some of the right things, and then unfortunately she goes and done the opposite. (CNN 2000.2.7.)
 c. Then she decides to take out a pen and scratch that out and say, then Hillary went and ran for the Senate in the state of New York and won. (CNN 2006.11.20.)
 d. Nobody thought Hanako could climb Everest, but she went and did it!

Whereas (89a) and (89b) represents the speaker's negative judgments, (89c) and (89d) represents the speaker's positive judgments. In (89a), the speaker considers what she does to be stupid or undesirable on the basis of the speaker's assumption that she does not usually do such stupid things. In (89b), the speaker is annoyed by or disapproves something like proceeding without thinking or without regard to others. In (89c) and (89d), the speaker is surprised at what she did on the basis of the speaker's assumption that she had hardly accomplished very much in the past. It should be noted here that the modal marker *go* in the *go-and-V* sequence inherits the characteristics of the non-literal uses with *go* occurring only to indicate departure from the normal state, mentioned in Section 2.4.2 in Chapter 2.

The aspect subtype, as shown in (83) and (90), corresponds to an idiomatic or formulaic expression (see Quirk et al. 1985: 979).²¹

- (90) A man who for months had been dropping amorous hints about a long-term relationship upped and disappeared to America. (Collins)

The *up-and-V* sequence in (83) and (90), means 'to suddenly move or do something unexpected'. Bolinger (1983: 165) states that the verb *up* in the *up-and-V* sequence functions like a quasi-auxiliary, owing to the fact that the intransitive verb *up* is used exclusively in the

²¹ Huddleston and Pullum (2002: 1302-1303) show that there are seven types of constructions of the form 'X and Y' where X is fixed or nearly fixed, but Y is not, and the whole is partially idiomatic. They call the seven constructions formulaic frames. Three of the seven represents the *V-and-V* sequence. They are the *go-and-V*, the *try-and-V*, and the *posture verb-and-V* constructions, as in (i), (ii), and (iii).

- (i) The TV has gone and broken down.
 (ii) We always try and do our best.
 (iii) They sat and talked about the wedding.

(Huddleston and Pullum 2002: 1302-1303)

The other four are the *nice-and-Adj*, the *good-and-Adv*, the *be-sure-V*, and the *be-an-angel-and-V* constructions, as in (iv), (v), (vi), and (vii).

- (iv) The coffee is nice and hot.
 (v) He hit it good and hard.
 (vi) Be sure and lock up.
 (vii) Be an angel and make me some coffee.

(Huddleston and Pullum 2002: 1302-1303)

up-and-V sequence, as shown in (91).²²

- (91) a. One day he just upped and left.
 b. *One day he just upped.

Bolinger (1983: 166) also states that (92) has become invariable for most American speakers.

- (92) He up and left.

In terms of auxiliation, Bolinger (1983) seems to share a view similar to Hopper (2002) and Newman and Rice (2008).

4.2.2.3 The Adjunct/Oblique Type: Lexical V1

In the adjunct/oblique type, the word sequence after the first verb is not the scope of the first verb, but it is semantically like an adjunct such as a purpose phrase, or an oblique argument of the first verb such as goal, as mentioned in Section 2.3 in Chapter 2. In the adjunct/oblique type, the first verbs as lexical V1 are limited to *come* and *go*, as in (93).

- (93) a. A lot of our friends came and saw me. (Collins)
 b. I must go and see this film. (Collins)

The adjunct/oblique type with lexical V1 has one subtype, the motion-purpose subtype. One feature of this type is that *and* has a reduced pronunciation, as shown in (17).

The motion-purpose subtype roughly corresponds to Ross's *go-buy* type where the first conjunct represents a verb phrase rather than a single verb. In the motion-purpose subtype, the first verb expresses motion and what appears to be the second verb phrase functions as a purpose phrase in relation to the first verb, as in (93) through (95).

- (94) a. Thank you very much for coming and talking with us. (CWO)
 b. I'll come and help you move the rest of the boxes. (Longman)
 (95) a. Why don't we go and buy your hat this afternoon? (CWO)
 b. I'll go and answer the door. (Oxford)

The *come/go-and-V* sequence in the motion-purpose subtype always retains the basic meaning of the verb *come/go*. In specifying directional motion, *come* is used only when the mover moves towards the goal as the deictic center, as in (93a) and (94). *Go* represents motion towards a goal

²² Bolinger (1983: 165) provides three instances where the first verb functions like a quasi-auxiliary. They are the *up-and-V* sequence, the *let-fly-and-V* sequence in (i), and the *go-and-V* sequence of the modality subtype in this dissertation.

(i) He let fly and poked me in the jaw.

where the speaker is not located, as in (93b) and (95). In this respect, the first verbs *come* and *go* in the motion-purpose subtype have the characteristics of the deictic motion use of *come/go*.

The motion-purpose subtype with lexical V1 has two features, apparent exceptions to the CSC and the strong integrity of the sequence of the first and the second verbs. These two features are closely related. While the genuine exceptions to the CSC, mentioned in Section 4.2.1, occur only under specific conditions that are semantically restricted, the apparent exceptions to the CSC do not necessitate any specific conditions. (96) and (97) show that extracting a noun phrase out of what appears to be the second verb phrase of the coordinate structure is possible.

- (96) a. She came and had your dinner.
 b. What did she come and have?
- (97) a. He went and spoke to the manager.
 b. Who did he go and speak to?

In (96) and (97), however, there is one potential problem. There are two possible interpretations: One is the apparent exception to the CSC, and the other is the genuine exception to the CSC based on the *V-and-V* sequence where the first verb phrase in the *VP-and-V* sequence happens to consist of a verb only. The distinction between the two interpretations is blurred.

We need to make a sharp distinction between genuine and apparent exceptions to the CSC. As mentioned in Section 4.2.1, the *V-and-V* sequence in the coordinated clause type involving the genuine exception to the CSC involves two verb phrases. In (98b) whether or not each verb can take an adverb phrase depends on whether they have full syntactic coordination or a reduced structure.

- (98) a. I'll go and get the car for you. (Longman)
 b. ?At three I'll go and get the car for you at four.

The key to differentiate the two cases is in the pronunciation of *and*. As shown in (17), Carden and Pesetsky (1977: 85) and Pullum (1990: 221) point out that the word *and* in the *V-and-V* sequence in the adjunct/oblique type necessitates the reduced pronunciation of *and*. In (99) with the reduced pronunciation of *and*, each verb never takes an adverb phrase.

- (99) a. I'll go and get the car for you. (the reduced pronunciation of *and*)
 b. *At three I'll go and get the car for you at four. (the reduced pronunciation of *and*)

(98) and (99) point to the conclusion that the *V-and-V* sequence in the adjunct/oblique type with lexical V1 is a part of a single verb phrase and involves the apparent exception to the CSC. More detail is provided in Section 4.3 about the distinction between the apparent and the genuine exceptions to the CSC.

4.2.2.4 The Adjunct/Oblique Type: Attenuated V1

Strictly speaking, no previous studies, except for De Vos (2005), describe the *V-and-V* sequence which corresponds to the adjunct/oblique type with attenuated V1. The adjunct/oblique type with attenuated V1 is semantically divided into two subtypes, the motion-purpose subtype in (100) and the posture-purpose subtype in (101).

- (100) a. Run and ask your mother where she's put the keys. (Longman)
 b. I ran and knocked on the nearest door. (Oxford)
- (101) a. This is something that we should sit and discuss as a team.
 b. Sit and work out just what you spend.

In both the motion-purpose and the posture-purpose subtypes, what appears to be the second verb phrase functions as a purpose phrase in relation to the first verb. As far as we know, only the first verb *run* occurs in the motion-purpose subtype and only the first verb *sit* in the posture-purpose subtype.

From a semantic point of view, the first verb *run* in the *run-and-V* sequence in the adjunct/oblique type with attenuated V1, as in (100), always means 'to do something or go somewhere quickly' rather than 'to move very quickly, by moving one's legs more quickly when you walk'. The first verb *sit* in the *sit-and-V* sequence in the adjunct/oblique type with attenuated V1, as in (101), always means 'to deal with something that needs to be done, by giving it all one's attention' rather than 'to rest one's weight on one's bottom with one's back vertical'. The first verbs *run* and *sit* do not always require the act of running and sitting, respectively. In the broad sense, the *run-and-V* sequence roughly corresponds to Ross's *go-buy* type, and the *sit-and-V* sequence is partly covered by Deane's scene-setter type dealing with *VP-and-V* sequences.

From a syntactic point of view, the adjunct/oblique type with attenuated V1 has the same feature as the adjunct/oblique type with lexical V1. The strong integrity or inseparability of the sequence of the first and the second verbs is observed. The *run-and-V* sequence in the adjunct/oblique type with attenuated V1, as in (102a), is not interpreted as the *run-and-V* sequence where the first verb phrase in the *VP-and-V* sequence in the coordinated clause type happens to consist of a verb only, as in (102b).

- (102) a. He ran and bought a bag. (the reduced pronunciation of *and*)
 b. He ran to the shop and bought a bag.

(102a), which belongs to the motion-purpose subtype with attenuated V1, always necessitates the reduced pronunciation of *and*. (103) shows that extracting a noun phrase out of (what appears to be) the second verb phrase of the coordinate structure in (102) is possible.

- (103) a. What did he run and buy? (the reduced pronunciation of *and*)
 b. What did he run to the shop and buy?

It should be noted here that the first verb *run* in (103a) does not always express the same meaning as the one in (103b). Since the first verb *run* in (103a) is always attenuated V1 which means ‘to do something or go somewhere quickly’, (104) is not acceptable.

- (104) *At five he ran and bought a bag at six. (the reduced pronunciation of *and*)

(103a) involves apparent exceptions to the CSC. By contrast, the first verb *run* in (102b) means either ‘to do something or go somewhere quickly’ or ‘to move very quickly, by moving one’s legs more quickly when you walk’. Whether (105) is acceptable or not depends upon the context.

- (105) ?At five he ran to the shop and bought a bag at six.

(103b) involves genuine exceptions to the CSC.

A variant of the *sit-and-V* sequence in the adjunct/oblique type with attenuated V1 is the *sit-down-and-V* sequence, as in (106), in which a phrasal verb occupies the first verb slot.

- (106) a. Policymakers sat down and discussed studies or research results.
 b. Policymakers sat and discussed studies or research results.

If the first verb *sit* in (106a) and (106b) is always attenuated V1, (107) shows that extracting a noun phrase out of what appears to be the second verb phrase of the coordinate structure in (106) is possible.

- (107) a. What did policymakers sit down and discuss?
 b. What did policymakers sit and discuss?

(107) where the first verb *sit* is attenuated V1 involves apparent exceptions to the CSC. The *sit-(down)-and-V* sequence in (106) as a fixed expression does not belong to the coordinated clause type in the full-syntactic-structure group, because (108) where the first and the second verbs take adverb phrases independently is not acceptable.

- (108) a. *At five policymakers sat down and discussed studies or research results and at six.
 b. *At five policymakers sat and discussed studies or research results at six.

If the first and the second verbs in the *sit-down-and-V* sequence take adverb phrases

independently, the verb *sit* means ‘to rest one’s weight on one’s bottom with one’s back vertical’, as in (109a).

- (109) a. Policymakers sat down at five and discussed studies or research results at six.
 b. ?Policymakers sat at five and discussed studies or research results at six.

However, in (109b) where the first verb *sit* is not attenuated V1, whether or not the first and the second verb can take adverb phrases independently depends upon the context. The verb *sit* in (110) is the same meaning as the one in (109a).

- (110) This is something that policymakers can sit on the sofa and discuss.

(110) shows that extracting a noun phrase *something* out of the second verb phrase of the coordinate structure is possible. (110) corresponds to Deane’s scene-setter type and belongs to the coordinated clause type in the full-syntactic-structure group. (110) involves a genuine exception to the CSC.

There is one conclusion to be drawn from the above discussion on *V-and-V* sequences of the reduced-structure group. The *V-and-V* sequences where extracting a noun phrase out of what appears to be the second verb phrase of the coordinate structure is possible always involve both apparent exceptions to the CSC and the strong integrity of the sequence of the first and the second verbs.

4.3 The Relationship among *V-and-V* Sequences

In this section, we will deal with the second problem posed in Section 4.1.3, that is to say, what the relationship among various types of the *V-and-V* sequences which are related to each other is. We will also deal with the third problem posed in Section 4.1.3, that is to say, why exceptions to the CSC are divided into two types, genuine exceptions to the CSC and apparent exceptions to the CSC. Dealing with the first problem in Section 4.2, we have clarified what the semantic and syntactic relationships between the first and the second verbs in the *V-and-V* sequences are. The general classification of the *V-and-V* sequence discussed so far is summarized in Table 4.3.

| function of word sequence group | sequence | meaning of V1 semantic subtype | <i>V-to-V</i> sequence | | <i>V-and-V</i> sequence | | <i>V-V</i> sequence | | <i>V-Ving</i> sequence | | |
|---------------------------------------|-----------------------|-----------------------------------|---------------------------|--------------------|----------------------------|------------------|------------------------|------------------|---------------------------|------------------|--|
| | | | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | |
| | | | full-syntactic-structure | coordinated clause | | n/a | n/a | any verbs | n/a | | |
| full-syntactic-structure | catenative complement | aspect | start | | n/a | n/a | | | start | | |
| | | effort | try | | n/a | n/a | | | try | | |
| | | culmination | | come | n/a | n/a | | | | | |
| | | likelihood | | grow | n/a | n/a | | | | | |
| | clausal adjunct | purpose | | run | | n/a | n/a | | | | |
| | | | | sit | | | | | | | |
| | | | | stand | | | | | | | |
| reduced-structure | semi-complement | aspect | | | start | up | | | | | |
| | | effort | | | try | | | | | | |
| | | contribution | n/a | go | | | | | | | |
| | | modality | n/a | go | | go | | | | | |
| | adjunct/oblique | motion-purpose (metaphorical) | | come | | come | run | | | | |
| | | | | go (go) | | go | | | | | |
| | posture-purpose | | | | | sit | | | | | |

Table 4.3. The general classification of multi-verb sequences discussed so far

According to Table 4.3, the *go-and-V* sequence can occur both in the modality subtype and in the motion-purpose subtype. (111) can be classified either as the modality subtype or the motion-purpose subtype.

(111) He went and bought one hundred eggs.

In (111), the difference in the meaning of the first verb *go* gives rise to the different interpretations. If (111) is classified as the modality subtype, the speaker is surprised or annoyed by what he has bought one hundred eggs. If (111) is classified as the motion-purpose subtype, he needs to have bought one hundred eggs at the particular store referred to in the first conjunct. The difference in interpretation between the modality and the motion-purpose subtypes depends upon the context.

Table 4.3 also shows that the first verb plays a vital role in shaping *V-and-V* sequences. With respect to the *V-and-V* sequence, the coordinated clause type in the full-syntactic-structure group is most common. Among the seven first verbs, *come*, *go*, *run*, *try*, *sit*, *start*, and *stand*, mainly discussed in this chapter, only *stand* displays a regular pattern of the general classification of multi-verb sequences. The verb *stand* exists only in the coordinated clause type

in the full-syntactic-structure group.

There are three observations that can be made, each accompanied by a question. First, the *try-and-V* and the *try-to-V* sequences belong to the effort subtype, respectively. We have shown that the *try-and-V* sequence is similar to the *try-to-V* sequence. What is the difference between them? Second, both *sit* and *stand* are the most typical verbs of posture, but why do they behave differently in the *V-and-V* sequences? Third, both *come* and *go* are deictic verbs of motion, but why do they behave differently in the *V-and-V* sequences? Stated another way, what is the reason that the *come-and-V* sequence and the *go-and-V* sequence share no semantic subtypes in common, with the exception of the motion-purpose subtype? It is difficult to offer explanations of the three observations from a syntactic standpoint or a semantic standpoint. From a functional standpoint and a historical standpoint, we will discuss the first observation in Chapter 6. Looking at an overall picture of four types of multi-verb sequences, we will discuss the other two observations more fully in Chapter 8.

We need to show the integrity or inseparability of the sequence of the first and second verbs in addition to the general classification of multi-verb sequences. The integrity or inseparability of the sequence of the first and second verbs is summarized in Table 4.4.

| sequence | | <i>V-to-V</i> sequence | | <i>V-and-V</i> sequence | | <i>V-V</i> sequence | | <i>V-Ving</i> sequence | |
|--------------------------|-----------------------|------------------------|---------------|-------------------------|---------------|---------------------|---------------|------------------------|---------------|
| | | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 |
| group | function of word | meaning of V1 | | | | | | | |
| | sequence after V1 | | | | | | | | |
| full-syntactic-structure | coordinated clause | n/a | n/a | weak | n/a | | | | |
| | catenative complement | weak | strong | n/a | n/a | | | weak | |
| | clausal adjunct | weak | n/a | n/a | n/a | | | | |
| reduced-structure | semi-complement | n/a | strong | strong | strong | | | | |
| | adjunct/oblique | strong | n/a | strong | strong | | | | |

Table 4.4. The integrity or inseparability of the sequence of the first and the second verbs discussed so far

With respect to the *V-and-V* sequence, the full-syntactic-structure group involves the weak integrity or inseparability of the sequence of the first and the second verbs. By contrast, the reduced-structure group involves the strong integrity or inseparability of the sequence of the first and the second verbs.

Now we also need to demonstrate how the general classification of the *V-and-V* sequence is related to exceptions to the CSC, or how the integrity of the sequence of the first and the second verbs is related to exceptions to the CSC. Based on Ross (1967), Lakoff (1986), and Deane (1991), the relationship between the general classification and exceptions to the CSC is summarized in Table 4.5.

| general classification | | works | Ross (1967) | Lakoff (1986) | Deane (1991) |
|--------------------------------|---|-------|-------------------------|------------------|---|
| full-syntactic-structure group | coordinated clause type | | <i>go-buy</i> type (6) | Type A (29) | preparatory type (32) scene-setter type (33) |
| reduced-structure group | semi-complement type with lexical V1 | | <i>try</i> type (8) | n/a | n/a |
| | semi-complement type with attenuated V1 | | <i>go-ruin</i> type (7) | n/a | n/a |
| | adjunct/oblique type with lexical V1 | | n/a | n/a | n/a |
| | adjunct/oblique type with attenuated V1 | | n/a | n/a | n/a |

Table 4.5. The relationship between the general classification and exceptions to the CSC

On the basis of the relationship shown in Table 4.5, it is possible to recapture the nature of exceptions to the CSC. Ross's main claim of exceptions to the CSC is as follows: since they are not true coordinate structures to which where the CSC applies, his examples in (6), (7), and (8) are not true counterexamples to the CSC. In sharp contrast to Ross, Lakoff's and Deane's main claims are as follows: since exceptions to the CSC, as shown in (29), (32), and (33), involves true coordinate structures in spite of the violation of the CSC, exceptions to the CSC are semantically motivated counterexamples to the CSC. With respect to the internal structure of the *V-and-V* sequence, we have shown that the *V-and-V* sequence involving the strong integrity of the sequence of the first and the second verbs (the reduced-structure group), is completely different from the *VP-and-V* sequence involving two verb phrases or the weak integrity (the full-syntactic-structure group). With respect to exceptions to the CSC, the full-syntactic-structure group involves genuine exceptions to the CSC in the sense that extracting a noun phrase out of the second conjunct in the fully syntactic coordinate structure is possible. By contrast, the reduced-structure group involves apparent exceptions to the CSC in the sense that extracting a noun phrase out of what appears to be the second part of a coordinate structure is possible.

We can safely draw two conclusions from our discussion in Sections 4.1 and 4.2. First, Ross's claim on the exception to the CSC has been proved half-right. Ross has a valid explanation for his *go-ruin* and *try* types, but he does not have a valid explanation for his *go-buy* type. As Lakoff (1986) has pointed out, Ross's *go-buy* type can involves fully syntactic coordinate structures. We can reasonably infer that the reason why Lakoff and Deane do not treat Ross's *go-ruin* and *try* types is that Ross's *go-ruin* and *try* types do not involve true coordinate structures. Lakoff's and Deane's claims have now been proved right. Second, extracting a noun phrase out of what appears to be the second verb phrase of the coordinate structure, except for across-the-board rule, does not always indicate the violation to the CSC, because there are genuine and apparent exceptions to the CSC. The general classification of the *V-and-V* sequence shown in Table 4.3 shows that whether extracting a noun phrase out of (what appears to be) the second verb phrase of the coordinate structure is possible or not depends on

the internal structure of the *V-and-V* sequence on the basis of the interpretation of the *V-and-V* sequence.

4.4 Conclusion

This chapter has explored the nature of the *V-and-V* sequence on the general classification schema of multi-verb sequences. We have shown that there are genuine and apparent exceptions to the CSC, and we have described their distinctive features. Although Sag et al (1985) point out that all Ross's types present problems for every existing analysis of coordination, we have found Ross's three types a useful classification. One feature deserves further consideration: the first verb *go* plays a central role in shaping *V-and-V* sequences, just as it plays a central role in shaping *V-to-V* sequence. In the next chapter, we will deal with the *V-V* sequence which is often regarded as a grammatical exception or an idiomatic expression.

Chapter 5

The *V-V* Sequence

The aim of this chapter is to explore the nature of the *V-V* sequence. The sequence of two verbs in English is divided into three groups on the basis of inflection, as in (1).

- (1) a. The new service helped boost pre-tax profits by 10%. (Oxford)
 b. You must really come visit us in Holland. (Collins)
 c. Water chestnuts can be eaten straight from the tin or stir-fried. (Longman)

(1a) is an example where only the first verb can inflect, and the second verb phrase is regarded as bare-infinitive. (1a) belongs to the catenative complement type in the full-syntactic-structure group in the general classification of multi-verb sequences. (1b) is an example where both the first and the second verbs never inflect, and it seems to be unreasonable to regard the second verb phrase as bare-infinitive. (1b) belongs to the reduce-structure group in the general classification of multi-verb sequences. (1c) is an example where only the second verb can inflect, and the sequence in (1c) is called an endocentric *V-V* compound.¹ The endocentric compounds which are superficially like the *V-V* sequence are different from the *V-V* sequences in (1a) and (1b) in at least two ways. One is that the accent is regularly on the first verb, and the other is that the endocentric *V-V* compounds can be exhaustively listed in a dictionary. The endocentric *V-V* compounds are not treated in this chapter.²

Given Bolinger's (1968: 127) statement that 'a difference in syntactic form always spells a difference in meaning', we are not prepared to accept that the *V-V* sequence is simply the *V-and-V* sequence or the *V-to-V* sequence in which the word *and* or *to* is dropped. Through clarifying the internal structure of the *V-V* sequence, we will show that the *V-V* sequence represents a separate sequence with distinctive features.

This chapter is structured as follows. Reviewing some earlier proposals of the *V-V* sequences, Section 5.1 shows that Zwicky's (1969) syntactic generalizations and Shopen's semantic generalizations form cornerstones of studies of *V-V* sequences. Section 5.1, however, shows that Shopen's semantic generalizations are of limited importance in distinguishing the *V-V* sequence from the *V-and-V* sequence. Section 5.1 also shows that there are three problems that still remain to be treated with respect to an overall picture of the *V-V* sequence. Providing

¹ Wald and Besserman (2002) state that the *N-V* compound is reanalyzable as the *V-V* compound.

² In this chapter, we do not treat fixed expressions as *V-V* sequence, as in (i), (ii), and (iii).
 (i) I've often heard tell of such things.
 (ii) Let go! You're hurting me.
 (iii) I tried to make believe she was happy, but knew deep down it wasn't true.

the classification of *V-V* sequences on the basis of the general classification schema of multi-verb sequences, Section 5.2 indicates that motion plays an important role in shaping the *V-V* sequence in the reduced-structure group. Section 5.3 demonstrates what the relationship among various types of the *V-V* sequences which are related to each other is. Section 5.4 offers a conclusion.

5.1 Some Earlier Proposals and Remaining Problems

Section 5.1 reviews previous studies of the *V-V* sequences. The previous studies of the *V-V* sequence in the full-syntactic-structure group are treated in Section 5.1.1 and the ones in the reduced-structure group in Section 5.1.2. Section 5.1.3 shows that there are three problems that still remain to be treated with respect to an overall picture of the *V-V* sequence.

5.1.1 The Semantic Studies on the Full-Syntactic-Structure Group

From a syntactic point of view, the first verb in the *V-V* sequence in the full-syntactic-structure group takes a bare-infinitive as a catenative complement. Judging from previous studies (e.g., Kjellmer 1985, Lind 1983a, 1983b), it is fair to state that the first verb is limited to *help*.³ No one deny that the verb *help* takes both a *to*-infinitive and a bare-infinitive, as in (2).

- (2) a. He helped to organize the party.
b. He helped organize the party.

As mentioned in Section 2.2.1 in Chapter 2, both (2a) and (2b) represent a simple catenative construction. With respect to inflection, needless to say, the first verb can inflect, and the second verb never inflects.

From a semantic point of view, previous studies put emphasis on semantic differences

³ Grammars such as Quirk et al. (1985) and Huddleston and Pullum (2002), which are regarded as highly prestigious, make no mention of the *try-V* sequence. As far as we can see, we have only one previous study, Kjellmer (2000), which makes mention of the *try-V* sequence. He states that although the majority of the instances of the *try-V* sequence are semantically similar to the *try-to-V* sequence, as in (i), a few instances seem to be equally like to the *try-Ving* sequence, as in (ii).

- (i) The ground still trembles from time to time as Irya tries remember the earthquake which left her and her 14-year-old Sasha orphans early on Sunday morning. (Kjellmer 2000: 45)
- (ii) Highlight blur eye make-up with a hint of salmon pink shadow or blusher just under the outer edge of eyebrows. Too much blue mascara looks brash. For a subtle effect, try touch the tips of upper lashes only with the wand. (Kjellmer 2000: 47)

Some of the present author's informants regard the *try-V* sequence as unacceptable. Whether the *try-V* sequence is acceptable or not depends upon speakers. It is reasonable to conclude that for only a few speakers the *try-V* sequence is acceptable.

between the *help-V* and the *help-to-V* sequences (e.g., Duffley 1992, Mair 1995, 2004, 2006). For instance, Duffley (1992) describes the difference between the *help-V* and the *help-to-V* sequences (cf. van Ek 1966, Wood 1962). The *to*-infinitive event is described as a consequence or result of the action of helping. The action of helping is represented as a prior condition or circumstance which enables someone to realize the action denoted by the *to*-infinitive. By contrast, the event which is realized by the *help-V* sequence is represented as a concurrence of the action of helping and the bare-infinitive event. This concurrence does not always involve the actual action of helping. From Duffley's description, it is fair to state that the first verb *help* in the *help-V* sequence is attenuated to some extent, as in (2b) and (3).

- (3) a. Fibre helps the digestion. It also helps prevent constipation. (CWO)
 b. Romario, whose five goals helped make him Player of the Tournament when Brazil won the World Cup in America four years ago, wept at a Press conference to announce the decision. (CWO)

The verb *help* as attenuated V1, as in (2b) and (3), means 'to make a situation better, easier, or less painful', while the verb *help* as lexical V1, as in (2a), means 'to make it possible or easier for someone to do something by doing part of their work or by giving them something that they need'. In Section 5.2.1, the *help-V* sequence will be discussed in great detail, in comparison with the *help-to-V* sequence.

5.1.2 The Studies on the Reduced-Structure Group

Interestingly, not all previous studies of the *V-V* sequence in the reduced-structure group indicate any knowledge of the studies that preceded them. Zwicky (1969) presented the earliest syntactic study of the *V-V* sequences, and Perlmutter independently (1971) contributed to the study of the *V-V* sequence. All the studies that followed, regardless of whether they took the syntactic approach or the semantic approach, are regarded as based on Zwicky (1969) and Perlmutter (1971), even though they do not offer an articulate description of Zwicky (1969) and Perlmutter (1971). Reviewing Zwicky (1969, 1990a, 1992) and Perlmutter (1971), Section 5.1.2.1 summarizes the syntactic constraints on the *V-V* sequence. Based on the syntactic constraints, Section 5.1.2.2 reviews two types of semantic studies, the descriptive approach by Shopen (1971) and the study from Construction Grammar by Goldberg (2006).

5.1.2.1. The Syntactic Studies

Zwicky (1969) presents the earliest research on the *V-V* sequence. He states that the *come-V* and the *go-V* sequences have a most peculiarly restricted distribution. As shown in (4), they occur only in the imperative, in the simple present in the first and second persons or in the third person plural, in infinitive constructions, in constructions with *do* and the modals, and in present subjunctive constructions.

- (4) a. Imperative:
 i. Go look at him!
 ii. Come see the snow fall!
- b. Simple present in the first and second persons and the third person plural:
 I/We/You/They go observe the starts whenever there's an opportunity.
- c. Infinitive constructions:
 He wants (us) to go hunt for his etchings.
- d. Constructions with *do* and the modals:
 He did/will/can/might come speak to us.
- e. Present subjunctive constructions:
 I insist that he go watch the game. (Zwicky 1969: 430)

They do not occur in the simple present in the third person singular, in the simple past, in any *-ing* form, whether progressive or nominalization, in any perfect, or in passives, as shown in (5).

- (5) a. Simple present in the third person singular:
 *She go(es) observe(s) the starts whenever there's an opportunity.
- b. Simple past:
 i. *I/They/Gregory went play(ed) in all the concerts.
 ii. *I/They/Gregory go looked at it.
- c. *-Ing* form:
 i. *I am always going talking to you.
 ii. *Coming watch(ing) the stars is fun.
- d. Perfect:
 *I have gone race(d) down the street.
- e. Passives:
 *Who was go(ne) seen by him? (Zwicky 1969: 428-429)

He formulates one constraint about inflection of the first verb *come/go* and the second verb, as stated in (6), which subsumes (4) and (5).

- (6) *Come/go* and the following verb must be identical to their infinitive form.

He also states that the *come/go-V* sequence was likely to be synchronically derived as a reduction of the *come/go-and-VP* sequence, the two being paraphrases, as in (7), (8), and (9).

- (7) a. Come/Go look at him!
 b. Come/Go and look at him!
- (8) a. I'll go solve the problem.
 b. I'll go and solve the problem.

- (9) a. Did you have to go wreck my ideas?
 b. Did you have go and wreck my ideas? (Zwicky 1969: 432-433)

Although we claims that Zwicky's idea of reduction is synchronically incorrect, it should be noted here that Zwicky points out that the absence of what he calls true motion in (8) and (9) is observed. We will come back to the absence of true motion in Section 5.2.

Although he failed to mention Zwicky (1969), Perlmutter (1971: 96) also proposed a surface constraint, stated in (10).

- (10) Output condition on the *go Verb* construction: *go Verb*

On the basis of the surface constraint, Perlmutter (1971) put forth two additional predictions. The two predictions are related to the intervention condition, rather than the inflection condition. First, *come/go* cannot take a particle, as in (11).

- (11) a. *Go over study Greek.
 b. *Go in study Greek. (Perlmutter 1971: 97)

Second, an adverb or an adverb phrase cannot intervene between *come/go* and the second verb, as in (12).

- (12) a. *Go at once confer with the manager.
 b. *Go immediately confer with the manager. (Perlmutter 1971: 97)

Although they failed to mention Perlmutter (1971), Carden and Pesetsky (1977) made a generalization of the inflection condition, as stated in (13).⁴

- (13) Each of the first and the second verbs must be the bare form in terms of morphological marking, and its phonological shape is irrelevant.

(13) is regarded as a modification of Perlmutter's output condition. (13) shows that (14a) and (15a), where *come* is morphologically a bare form, are grammatical, whereas (14b) and (15b) are ungrammatical.

- (14) a. Did John come live with you?
 b. *Has John come live with you?

⁴ Carden and Pesetsky (1977) argued that the *come/go-V* sequence was likely to be derived from the *come/go-and-V* sequence by a syntactic rule of what they called Fake-*and* Deletion.

- (15) a. John didn't come live with us.
 b. *John hasn't come live with us. (Carden and Pesetsky 1977: 83)

In (14b) and (15b), the past participle of *come* is phonologically identical to the bare form, but it is not morphologically a bare form.

In addition to Perlmutter's (1971) two predictions based on the intervention condition, Zwicky (1990a: 214) pointed out that a loose-construction modifier cannot intervene between the first verb *go/come* and the second verb, either, as in (16).

- (16) *Go, as they suggested, run to the store. (Zwicky 1990a: 214)

Needless to say, Perlmutter's output condition in (10) predicts that (16) is not acceptable. Zwicky (1992) marshaled several constraints on the inflection condition and the intervention condition, as stated in (17).

- (17) a. The inflection condition: both verbs are in a bare form in terms of morphological marking.
 b. The intervention condition: nothing intervenes between the two verbs.⁵

Zwicky (1992: 365) states that the first verbs are limited to *come* and *go*, plus for some speakers *run* and *hurry*. Zwicky's generalizations in (17) still remain the cornerstone for the study of the *V-V* sequence.⁶

5.1.2.2 The Semantic Studies

Taking the descriptive approach, Shopen (1971) shows the semantic differences between the *V-V* sequence and the *V-to-V* sequence. As mentioned in Section 3.2.2.2 in Chapter 3, the important difference between the *V-V* and the *V-to-V* sequences depends upon whether or not the sequence implies actual realization of the process represented by the second verb, that is to say, success. The *go-V* sequences in (18a) imply success, but the *go-to-V* sequence in (18b) does not.

- (18) a. *They go buy vegetables every day, but there never are any vegetables.
 b. They go to buy vegetables every day, but there never are any vegetables.
 (Shopen 1971: 258)

⁵ Zwicky (1990b) states that the *V-V* sequences behave like compounds from a morphological point of view.

⁶ Jaeggli and Hyams (1993), Pollock (1994), and Cardinaletti and Giusti (2001) attempted to account for the inflection condition in terms of the formal syntactic properties of the *V-V* sequences or affixes involved.

Similarly, the *go-and-V* sequence in (19) implies the success, mentioned in Section 4.2.2.3 in Chapter 4.

- (19) *They go and buy vegetables every day, but there never are any vegetables.

The first part of (18a) and (19) show that the act of buying vegetables takes place, while (18b) does not. With respect to success, whereas there is one essential difference between the *go-V* and the *go-and-V* sequence on the one hand and the *go-to-V* sequence on the other, there is no clear difference between the *go-V* and the *go-and-V* sequences.

Shopen (1971) points out that the important difference between the *come/go-V* sequence and the *come/go-and-V* sequence is related to selection restrictions imposed on the subject noun phrase. The *come/go-and-V* sequence allows either an agentive or a non-agentive interpretation for the subject noun phrase, because the single verb *come/go* does. In contrast, the *come/go-V* sequence allows only the agentive interpretation. Both (20a) and (20b) are acceptable because we can regard the trucks in (20a) and (20b) as an agent.

- (20) a. The trucks come and pick up the garbage every Monday.
 b. The trucks come pick up the garbage every Monday. (Shopen 1971: 258)

(21a) and (22a) are acceptable because the verbs *come* and *go* do not violate selection restrictions on their subjects. By contrast, the verbs *come* and *go* in (21b) and (22b) violate selection restrictions on their subjects.

- (21) a. Pieces of driftwood come and wash up on the shore.
 b. *Pieces of driftwood come wash up on the shore.
 (22) a. The smoke fumes go and inebriate the people upstairs.
 b. *The smoke fumes go inebriate the people upstairs. (Shopen 1971: 259)

Since their subjects cannot satisfy requirements of agentive interpretation, (21b) and (22b) are not acceptable. Observing the same phenomenon with the verb *go* where the sense of physical movement is lost, Jaeggli and Hyams (1993: 322) reinforces Shopen's idea, as shown in (23).

- (23) a. My children bother Mary.
 b. My children go bother Mary. (Jaeggli and Hyams 1993: 322)

Whether the single verb *bother* represents an agentive interpretation or not is yes or no. (23a) can express either that my children intentionally bother Mary or that they are the cause of Mary's being bothered. By contrast, (23b) has only the intentional reading. Thus, Shopen presents two useful findings. One is that the *V-V* sequence implies actual realization of the process represented by the second verb phrase, and the other is that the *V-V* sequence requires

negative implication associated with the sentence *She's gone and ruined her dress* is absent from the *GoVP_{bare}* construction. Goldberg presents one useful finding. Since the first verbs are limited to three of the basic motion verbs, *come*, *go*, and *run*, motion plays a key role in shaping *V-V* sequences.

There are three semantic constraints on the *V-V* sequence on the basis of Shopen (1971) and Goldberg (2006). First, the first verbs are limited to motion verbs *come*, *go*, and *run*. Second, the *V-V* sequence implies actual realization of the process represented by the second verb phrase. Third, the *V-V* sequence requires an agentive interpretation.

5.1.3 Problems

There are three remaining problems to be dealt with here. The first and the second problems which are related to an overall picture of the *V-V* sequence are the two key questions in this dissertation posed in Section 2.3 in Chapter 2. The first problem is what the semantic and syntactic relationships between the first and the second verbs in the *V-V* sequences are, and the second problem is what the relationship among various types in the *V-V* sequences which are related to each other is. The third problem is whether or not there is the significant difference between the *V-V* and the *V-and-V* sequences, in the absence of the semantic difference between them. Shopen's finding that the *V-V* sequence implies actual realization of the process represented by the second verb phrase cannot distinguish the *V-V* sequence from the *V-and-V* sequence, because both sequences imply the actual realization. Similarly, his finding that the *V-V* sequence requires an agentive interpretation cannot distinguish the *V-V* sequence from the *V-and-V* sequence, because both sequences allow the agentive interpretation in some cases. In the following sections in this chapter, we will deal with the first and the second problems by clarifying the nature of the *V-V* sequence. In Chapter 6, we will deal with the third problem not only from a functional point of view, but also from a historical point of view.

5.2 The Classification of *V-V* Sequences

This section will provide a classification of *V-V* sequences based on the general classification schema of multi-verb sequences. Based on the general classification schema of multi-verb sequences, the *V-V* sequence is syntactically divided into two groups, the full-syntactic-structure group and the reduced-structure group. Based on inflection, the *V-V* sequence is divided into the same two groups, the full-syntactic-structure group where only the first verb can inflect and the reduced-structure group where neither the first nor the second verb inflect. We will deal with the full-syntactic-structure group in Section 5.2.1 and the reduced-structure group in Section 5.2.2.

5.2.1 The Full-Syntactic-Structure Group

As mentioned in Chapter 2, from a syntactic point of view, the full-syntactic-structure group in the general classification of multi-verb sequences contains two verb phrases, and it falls into three types, the catenative complement type, the clausal adjunct type, and the coordinated

clause type. However, the *V-V* sequence is related to only the catenative complement type due to the quality of verb serialization without a subordination marker or a coordination marker. The first verb in the *V-V* sequence in the full-syntactic-structure group takes a bare-infinitive as a catenative complement. As mentioned in Section 5.1.1, the verb *help* is the only first verb in the *V-V* sequence in the full-syntactic-structure group. In this subsection, we will examine the syntactic and semantic properties of the *help-V* sequence, in comparison with the *help-to-V* sequence.

From a syntactic standpoint, both the *help-V* and the *help-to-V* sequences have two properties, as stated in (25) and (26).

- (25) Inflection: Only the first verb *help* can inflect, and the second verb phrase is regarded as infinitive.
- (26) Adverb-intervention: Both the first and the second verb can take adverbs (or adverb phrases) independently.

(25) is confirmed by (27) and (28).

- (27) a. The skin's normal bacterial flora helps prevent colonization by pathogenic organisms. (Oxford)
- b. The meetings helped foster a sense of solidarity among staff. (Oxford)
- c. UN peacekeeping has arguably helped keep crises under control and prevent recurrence of conflict. (Oxford)
- d. Michele Robertson of MRC became a champion of small films after helping get Hilary Swank her Oscar for *Boy's Don't Cry*. (COHA)
- (28) a. The study of the present also helps to illuminate the past. (Oxford)
- b. Tom is the CEO of an online identity company which he helped to found in 2005. (Oxford)
- c. Certainly she has helped to make a few things very clear. (COCA)
- d. This account sees attention as an essential element of the perceptual process, helping to organize incoming information. (Oxford)

(26) is confirmed by (29) and (30).

- (29) Any assistance, therefore, that might genuinely help select them more intelligently would prove to be of great benefit. (COHA)
- (30) a. The prestige of his success helps essentially to maintain him securely in his position. (COHA)
- b. The object which most helped to bring Dr. Doliver completely to his waking perceptions was one that ... (COHA)

- c. These new seekers after truth have at least helped to humanize it once more. (COHA)
- d. Unfortunately, seasoning has only helped to shelve it permanently. (COHA)

(29) and (30) point to the fact that both the *help-V* and the *help-to-V* sequences which can take adverbs or adverb phrases independently have two verb phrases. There can be no doubt that both the *help-V* and the *help-to-V* sequences which involve two verb phrases belong to the full-syntactic-structure group.

From a semantic standpoint, Mair (1995), in response to Duffley (1992) mentioned in Section 5.1.1, points out the semantic difference between the *help-V* and the *help-to-V* sequences. Whereas in (31a) Kevin will work together with unnamed third parties to pay off the debt, in (31b) money borrowed from the bank will partially cover the outstanding debt.

- (31) a. Earlier Kevin had to borrow money against his house to help to pay off more than £ 9,000 debts outstanding when his small business went under.
- b. Earlier Kevin had to borrow money against his house to help pay off more than £ 9,000 debts outstanding when his small business went under. (Mair 1995: 269)

The verb *help* taking a *to*-infinitive expresses ‘to make it possible or easier for someone to do something by doing part of their work or by giving them something they need’, whereas the one taking a bare-infinitive ‘to make a situation better, easier, or less painful’ or ‘to contribute to or provide a favorable environment for’. The verb *help* taking a *to*-infinitive represents its original lexical meaning, but the original lexical meaning of *help* taking a bare-infinitive is attenuated.⁸ Mair (2006: 140) demonstrates that the semantic difference between the *help-V* and the *help-to-V* is confirmed by the contrast between (32a) and (32b).

- (32) a. Nor have they eliminated the unburned hydrocarbons which help produce the smog that blankets such a motor-ridden conurbation as Los Angeles.
- b. ?Nor have they eliminated the unburned hydrocarbons which help to produce the smog that blankets such a motor-ridden conurbation as Los Angeles. (Mair 2006: 139)

(32a) where nobody is helped in order to produce smog is acceptable, but that (32b) is slightly strange. Taking a corpus-based approach, Mair (2004, 2006) also demonstrates that the verb

⁸ Mair (1995, 2004) points out that the meaning of *help* in (i) is turning into a deverbal preposition.

(i) But Bournemouth, his previous club, were owed £ 17,500 on the deal and the rest went to help pay off the bank overdraft. (Mair 1995: 269)

‘Went to help pay off the bank overdraft’ in (i) is roughly equivalent to ‘went towards paying off the bank overdraft’.

help in the *help-V* sequence is in the process of taking over quasi-auxiliary function. In Chapter 6, we will verify whether or not the verb *help* in the *help-V* sequence is moving in the direction of an auxiliary from a historical point of view.

It must be noted here that although Duffley (1992) and Mair (1995, 2006) observed the semantic difference between the *help-V* and the *help-to-V* sequences, some of the present author's informants found no significant difference between the *help-V* and the *help-to-V* sequences in (33) through (35).

- (33) a. She helped organize the party.
 b. She helped to organize the party.
- (34) a. Fibre helps the digestion. It also helps prevent constipation. (CWO)
 b. Fibre helps the digestion. It also helps to prevent constipation.
- (35) a. Romario's five goals helped make him Player of the Tournament.
 b. Romario's five goals helped to make him Player of the Tournament.

For this reason, it seems reasonable to conclude that there are only marginal differences between the *help-V* and the *help-to-V* sequences. It is reasonable to state that the *help-V* sequence and the *help-to-V* sequence retain both the lexical V1 and the attenuated V1, respectively. To facilitate later discussion, both the *help-V* and the *help-to-V* sequences are called the contribution subtype in the catenative complement type hereafter. From a functional standpoint and a historical standpoint, the differences between the *help-V* and the *help-to-V* sequences will be discussed more fully in Chapter 6.

5.2.2 The Reduced-Structure Group

As mentioned in Chapter 2, from a syntactic point of view, a multi-verb sequence in the reduced-structure group is a part of a single verb phrase, and it falls into two types, the semi-complement type and the adjunct/oblique type. The *V-V* sequence of the reduced-structure group has three conditions. The first and the second conditions are equivalent to Zwicky's generalizations in (17) in Section 5.1. We propose the adverb condition in (36) as the third condition.

- (36) The adverb condition: Both the first and the second verb cannot take adverbs (or adverb phrases) independently.

We use the adverb test proposed in Section 2.3 in Chapter 2 to test the adverb condition. From the previous studies, it is fair to state that the first verbs in the reduced-structure group are limited to *go*, *come*, and *run* (e.g., Carden and Pesetsky 1977, Goldberg 2006, Perlmutter 1971, Shopen 1971, Zwicky 1969). From a semantic point of view, the first verb in the *V-V* sequence is divided into two, lexical V1 and attenuated V1. In the semi-complement type, lexical V1 is virtually nonexistent.

5.2.2.1 The Semi-Complement Type

In the semi-complement type, the word sequence after the first verb behaves like a non-finite complement of the first verb and is in the semantic scope of the first verb, and the sequence is virtually obligatory. The first verb in the semi-complement type always represents attenuated V1. As far as we know, it is limited to *go*, which is used to mean ‘start to act so as to ...’ or signal counter-normativity, as in (37) and (38), respectively.

- (37) a. Write about it like a fiction writer, giving reality to a setting which a story is about to unfold. Imagine this setting in detail – or, if you can, go take a fresh look at it. (Collins)
- b. Go think that over. (Collins)
- c. I think I’ll go let the cat out of the bag. (Ishihara and Noguchi 2000: 135)
- d. I think I’ll go pound the pavement. (Ishihara and Noguchi 2000: 135)
- (38) a. ‘He didn’t even leave a message.’ ‘Go figure.’ (Longman)
- b. People are more aware of the risks of smoking nowadays, but more young women are smoking than ever. Go figure! (Oxford)

From a syntactic point of view, the second verb phrase in the *V-V* sequence of the semi-complement type is not a bare-infinitive complement, but it can take any verb without functioning as what appears to be a purpose phrase in relation to the first verb, including an idiomatic expression, as in (37) and (38).

As Zwicky (1990b) points out, (37) and (38) indicates that the *V-V* sequence involves subordination in the syntax. At the same time, (37) and (38) also suggests the *V-V* sequence does not constitute a word in the morphology. The *V-V* sequence where the second verb represents a purpose in relation to the first verb belongs to the adjunct/oblique type to be discussed in Section 5.2.2.2. The semi-complement type is similar to the catenative complement type in the full-syntactic-structure group in that what appears to be the second verb phrase of the semi-complement type can generally take any second verb phrases. Moreover, (39) and (40) show that the adverb condition in (36) is respected.

- (39) *At five go think that over at six.
- (40) *At five go figure at six.

From (39) and (40), it is clear that the *go-V* sequences of the semi-complement type cannot take adverb phrases independently, and it is also clear that *go-V* sequence of the semi-complement type is a part of a single verb phrase.

From a semantic point of view, the semi-complement type is divided into two semantic subtypes, the aspect subtype in (37) and the modality subtype in (38). In the aspect subtype, the first verb *go* functions as a marker of aspect. As in (37), the verb *go* is used to express ‘to start to act so as to do the content of the second verb’. The verb *go* as a marker of aspect in (37) is

closely related to the single verb *go* expressing ‘start doing something’ in (41).

- (41) a. The preparations have been completed and we’re ready to go. (Longman)
 b. I’ll say, ‘One, two, three, go!’ as a signal for you to start. (Oxford)

In both (37) and the two examples in (41), it is not clear whether the verb *go* expresses motion. However, it is clear that they inherit the feature of the motion use of the verb *go* and retain its source-oriented interpretation mentioned in Section 2.4.2 in Chapter 2.

In the modality subtype, the verb *go* functions as a marker of evaluative modality that signals the modal notion of counter-normativity, and it retains no sense of movement, as in (38). The modality subtype expresses an abnormal and unexpected situation leading away from a normal and expected course of events. It implies source-oriented conception of motion *go*. The quality of the modality subtype is equivalent to a speaker’s attitude towards a situation which the speaker specifically views as deviating from his or her own personal assumption or expectations about what is right or desirable. In this respect, the modality subtype inherits the feature of the evaluative use of the verb *go* mentioned in Section 2.4.2 in Chapter 2.

The verb *figure* used in (38) has at least two fixed expressions, *it figures* and *that figures*, as in (42).

- (42) a. “She was late again.” “Yes, that figures.” (Oxford)
 b. It figures that she’d be mad at you, after what you did. (Longman)

That figures in (42a) is used to say that something that happens is expected or typical, and *it figures* in (42b) is used to say that something is reasonable or make sense. Because of a combination of the verb *figure* in (42) and the evaluative use of the verb *go*, *go figure* is used to say that you do not understand the reason for something, or that you do not want to give an explanation for something because you think it is obvious. In *go figure*, the verb *go* retaining no sense of movement has a purely emotive meaning with an overlay of surprise, astonishment, wonder, or the like. In (42a) the speaker thinks that it is only natural that he should leave a message. The speaker is surprised that he did not leave a message. In (42b) the speaker finds it difficult to understand that more young women are smoking than ever. As far as we know, we have only one idiomatic expression, *go figure*, in the modality subtype. It is fair to state that the idiosyncrasy points to the fact that *go figure* belongs to the reduced-structure group.

5.2.2.2 The Adjunct/Oblique Type: Lexical V1

In the adjunct/oblique type, the word sequence after the first verb is not in the scope of the first verb, but it is semantically like an adjunct of the first verb (e.g., purpose phrase) or an oblique argument of the first verb (e.g., goal argument), as mentioned in Chapter 2. In the

adjunct/oblique type, the first verbs as lexical V1 are limited to *come* and *go*, as in (43).⁹

- (43) a. Come join us. (Collins)
 b. You can go buy food somewhere else. (Collins)

The adjunct/oblique type of the *V-V* sequence has one semantic subtype, the motion-purpose subtype. From a syntactic standpoint, both the *come-V* and the *go-V* sequences of the motion-purpose subtype in (43) fulfill the three conditions mentioned in Section 5.2.2. The adverb condition in (36) is respected, as shown by the fact that sentences in (44) are not acceptable.

- (44) a. *At five come join us at five-thirty.
 b. *At five you can go buy food somewhere else at six.

(44) points to the fact that both the *come-V* and the *go-V* sequences of the motion-purpose subtype cannot take adverb phrases independently. It is fair to state that the *V-V* sequence of the motion-purpose subtype in the reduced-structure group is a part of a single verb phrase.

From a semantic standpoint, in the motion-purpose subtype, the first verb expresses motion and the second verb represents a purpose, as in (45) and (46).

- (45) a. She will manage to come see us. (Collins)
 b. ‘Did you report a stolen knight in armor?’ he asked me. ‘Because we may have located the stolen property if you’d like to come identify it.’ (Collins)
 (46) a. Walker wanted to go look for him. (Collins)
 b. If you had a good automobile and you had problems with your engine, wouldn’t you go find a good mechanic to fix it? (Collins)

The *come/go-V* sequence always retains the basic meaning of the verb *come/go*. In specifying directional motion, *come* is used only when the mover moves towards the goal as the deictic center, as in (45). *Go* represents motion towards a goal where the speaker is not located, as in

⁹ Shopen (1971: 255) points out that the first verbs are limited to seven verbs, *go*, *come*, *run*, *hurry*, *sit*, *stay*, and *try*, as in (i) - (vii).

- (i) Go hide in the woods!
 (ii) Come hide in the woods!
 (iii) Run hide in the woods!
 (iv) Hurry hide in the woods!
 (v) Why don’t you sit watch the sunset with us?
 (vi) Why don’t you stay watch the sunset with us?
 (vii) He’ll try get a parking spot near the entrance.

(Shopen 1971: 255)

However, some of the present author’s informants regard the *go/come/run-V* sequence as acceptable.

(46). Especially, as shown in (47), we call the verbs *come/go* in imperatives hortative *come/go* (see Heine and Kuteva 2002).

- (47) a. “Tell me a story”, the girl begged. “Come sit on my lap”, said the woman.
(Collins)
- b. At a wine-tasting party, Tom said to us, ‘Go get Bordeaux wine!’

The word hortative means ‘tending to exhort, or encouraging’ or ‘trying very hard to persuade someone to do something’. The *come/go-V* with hortative *come/go* conveys not only the motion meaning, but also an overlay of friendly motive.

It should be emphasized here that the hortative *come-V* sequence is based on the different motivation from the hortative *go-V* sequence. The verb *come* basically requires that the deictic center itself be the goal of directional motion where the speaker is. Stated another way, the speaker is ready to welcome the hearer. It is fair to state that the *come-V* sequence in (47a) acts as an imperative expressing both the motion and the hortative meanings. On the other hand, in the *go-V* sequence where *go* is used only when the speaker is not at the goal, the speaker cannot be ready to welcome the hearer. Instead, the hortative *go-V* sequence in (47b) is used to recommend that the hearer should do something, especially because the speaker thinks the hearer will enjoy it or the speaker thinks it is a good idea. This expression with friendliness is similar to the expression with friendliness where the modal verb *must* is used, as in (48) (see Leech 1983).

- (48) a. You must have some of this cake.
- b. You must come and stay with us in London sometime. (Longman)
- c. “We must do this again”, he said. “I’ve enjoyed it thoroughly.” (Longman)

The examples in (48) do not mean ‘to have to do something because it is necessary or important, or because of a law or order’. They convey the hortative meanings, rather than the command meaning. Similarly, (47b) allows the hortative interpretation, if it is uttered at the wine-tasting party. Whether the *go-V* sequence acts as an imperative expressing the hortative and motion meaning or the command and motion meaning depends on the context. We will describe the *come/go-V* with hortative *come/go* in more detail in Chapter 6.

Previous studies have ignored the fact that the *go-V* sequence expresses an ironic situation as a nuisance. In this case, the first verb is limited to the verb *go*, as in (49).

- (49) a. Go fly a kite! It’s just not funny any more.

Go fly a kite is used to tell someone to go away, stop saying something, or stop annoying you.¹⁰ Other examples are given in (50).

- (50) a. Stop pestering me, Mary. Go jump in the lake.
 b. ‘Dad, can I have ten bucks?’ ‘Go climb a tree!’
 c. You’re driving me crazy! Go chase yourself.

Although the first verb expresses motion and the second verb represents its purpose in relation to the first verb, what appears to be the second verb represents a real nuisance for the speaker or what the hearer should not do. In (49) and (50) where unlikely actions that the speaker suggests are expressed, the speaker would like the hearer to stop the nuisance that the hearer is creating. The whole *go-V* sequence in (49) and (50) functions as an ironic phrase. No matter what the second verb is, the *go-V* sequence expressing an ironic situation as a nuisance means ‘to tell someone to go away, to stop saying something, or stop annoying the speaker’, as in (49) and (50). It should be noted here that since the *go-V* sequence with lexical V1 in the motion-purpose subtype allows two interpretations. Whereas (49) is interpreted as the motion-purpose subtype where the *go-V* sequence functions as an ironic phrase, (51) is interpreted as the motion-purpose subtype where the *go-V* sequence expresses a literal meaning.

- (51) It’s sunny. Let’s go fly a kite in the park.

Which interpretation is given to (49) and (51) depends upon the context.

5.2.2.3 The Adjunct/Oblique Type: Attenuated V1

In the adjunct/oblique type, the first verbs as attenuated V1 are limited to *run*, as in (52).

- (52) a. Run fetch the chamberlain. (Collins)
 b. Run flash off the mains if possible, or you’ll spend loads on batteries. (Collins)
 c. You get ready to run tell Dad. (Collins)
 d. But the decision to make no change at all in our quarantine laws despite the recommendations of the European Community is short-sighted. The only people it will benefit are those who run quarantine kennels. (Collins)

¹⁰ *Go fly a kite*, as in (i), is an allusion to Benjamin Franklin’s famous electricity experiments.

(i) Bald eagles are unique to North America and of course there was a big debate. Franklin wanted the turkey and they told him to go fly a kite and we got the national bird. (CNN)

The speaker suggests the hearer perform a dangerous activity such as flying a kite with full knowledge that the hearer may be electrocuted. The hearer is meant to infer that the hearer is so unwanted that the speaker would wish her/him harm.

Run in (52) means ‘go somewhere quickly’, as is the case with the *run-and-V* sequence shown in Chapter 4. From a syntactic point of view, the *run-V* sequence satisfies three conditions mentioned in Section 5.2.2. The *run-V* sequence respects the adverb condition in (36), as shown by the fact that (53) is not acceptable.

(53) *At five run fetch the chamberlain at five-thirty.

Thus, the *run-V* sequence is a part of a single verb phrase and belongs to the adjunct/oblique type.

From a semantic point of view, in the examples in (52), the second verb represents a purpose in relation to the first verb *run*. They belong to the motion-purpose subtype. However, the first verb *run* does not mean its basic meaning, ‘to move very quickly, by moving one’s legs more quickly than when you walk’. The first verb *run* as attenuated V1 means ‘to do something or go somewhere quickly’.

There is one main conclusion to be drawn from the above discussion. With respect to the semi-complement type, the first verb *go* inherits the characteristics of its motion use or of its evaluative use. With respect to the adjunct/oblique type, the first verbs *come*, *go*, and *run* in the motion-purpose subtype retain the characteristics of their motion uses, whereas the first verb *go* in the motion-purpose subtype where the *go-V* sequence functions as an ironic phrase inherits the characteristics of not only the motion use, but also the negative evaluative use of *go*. By contrast, the first verb *come* in a situation where the speaker is ready to welcome the hearer cannot occur in the motion-purpose subtype where the *come-V* sequence functions as an ironic or negative phrase. It is certainly true that the primacy of motion plays an important role in shaping the *V-V* sequence in the reduced-structure group.

5.3 The Relationship among *V-V* Sequences

In this section, we will deal with the second problem posed in Section 5.1.3, that is to say, what the relationship among various types of *V-V* sequences which are related to each other is. In Section 5.2 we have dealt with the first problem, and we have clarified what the semantic and syntactic relationships between the first and the second verbs in the *V-V* sequences are. The general classification of the *V-V* sequence discussed so far is summarized in Table 5.2.

| function of word sequence group | sequence | meaning of V1 semantic subtype | <i>V-to-V</i> sequence | | <i>V-and-V</i> sequence | | <i>V-V</i> sequence | | <i>V-Ving</i> sequence | | |
|---------------------------------------|--------------------------|-----------------------------------|---------------------------|------------------|----------------------------|------------------|------------------------|------------------|---------------------------|------------------|--|
| | | | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | |
| | | | | | | | | | | | |
| full- syntactic- structure | coordinated clause | | n/a | n/a | any verbs | n/a | n/a | n/a | | | |
| | catenative complement | aspect | start | | n/a | n/a | | | | start | |
| | | effort | try | | n/a | n/a | | | | try | |
| | | contribution | help | help | n/a | n/a | help | help | | | |
| | | culmination | | come grow | n/a | n/a | | | | | |
| | | likelihood | | stand | n/a | n/a | | | | | |
| | | • • • | | | n/a | n/a | | | | | |
| | clausal adjunct | purpose | run sit stand | | n/a | n/a | n/a | n/a | | | |
| | | • • • | | | n/a | n/a | n/a | n/a | | | |
| | reduced- structure | semi-complement | aspect | | | start | up | | go | | |
| effort | | | | | try | | | | | | |
| contribution | | | | go | | | | | | | |
| adjunct/oblique | | modality | | go | n/a | go | | go | | | |
| | | motion-purpose | come go (go) | | come go | run | come go | run | | | |
| | | (metaphorical) posture-purpose | | | | sit | | | | | |

Table 5.2. The general classification of multi-verb sequences discussed so far

Table 5.2 shows that the *go-V* sequence can occur in three subtypes, the aspect, the modality, and the motion-purpose subtypes. As shown in Section 5.2.2.1, *go figure* is an only *go-V* sequence of the modality subtype. The modality subtype is easily distinguishable from other two subtypes. Now we need to consider that two different interpretations are possible for (54).

(54) Go look at her.

One is that (54) belongs to the aspect subtype, and the other is that (54) belongs to the motion-purpose subtype. In (54), the difference in the meaning of the first verb gives rise to the different interpretations. Which interpretation (i.e., the aspect subtype and the motion-purpose subtype) is given depends upon the context.

Table 5.2 also shows that the *go-V* sequence plays a central role in shaping *V-V* sequences in the reduced-structure group. It also shows that the motion-purpose subtype is the prototype of *V-V* sequences. Now we have to clear up one point. Both *come* and *go* are deictic verbs of motion, but why do they behave differently in the *V-V* sequence? Stated another way, what is

the reason that the *come-V* sequence and the *go-V* sequence share no semantic subtypes in common, with the exception of the motion-purpose subtype? From the overall standpoint of multi-verb sequences, we will discuss the point more fully in Chapter 8.

We also need to show the integrity or inseparability of the sequence of the first and second verbs in addition to the general classification of multi-verb sequences. The integrity or inseparability of the sequence of the first and second verbs is summarized in Table 5.3.

| sequence | | <i>V-to-V</i> sequence | | <i>V-and-V</i> sequence | | <i>V-V</i> sequence | | <i>V-Ving</i> sequence | |
|-----------------------|------------------------------------|------------------------|---------------|-------------------------|---------------|---------------------|---------------|------------------------|---------------|
| | | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 |
| group | function of word sequence after V1 | meaning of V1 | | | | | | | |
| | full-syntactic-structure | coordinated clause | n/a | n/a | weak | n/a | n/a | n/a | |
| catenative complement | | weak | weak | n/a | n/a | weak | weak | weak | |
| clausal adjunct | | weak | n/a | n/a | n/a | n/a | n/a | | |
| reduced-structure | semi-complement | n/a | strong | strong | strong | n/a | strong | | |
| | adjunct/oblique | strong | n/a | strong | strong | strong | strong | | |

Table 5.3. The integrity or inseparability of the sequence of the first and the second verbs discussed so far

5.4 Conclusion

This chapter has demonstrated that unlike the three other types of multi-verb sequences that we have discussed, the *V-V* sequence has one exclusive characteristic: the *V-V* sequence in the full-syntactic-structure group and the *V-V* sequence in the reduced-structure group are differently constrained by inflection. Not only the general classification of multi-verb sequences but also the inflection restriction clearly distinguishes between the full-syntactic-structure and the reduced-structure structure groups. One feature deserves further consideration. The first verb *go* plays a central role in shaping *V-V* sequences, just as it plays a central role in shaping *V-to-V* and *V-and-V* sequences.

The three sequences, the *V-to-V*, the *V-and-V*, and the *V-V* sequences, discussed so far have much in common. In particular, as mentioned in Chapter 1, the examples in (55) through (58) are regarded as semantically completing multi-verb sequences.

- (55) a. I'll try to get you a new one tomorrow.
 b. I'll try and get you a new one tomorrow.
- (56) a. She helped organize the party.
 b. She helped to organize the party.
- (57) a. She'll go and see it when she can.
 b. She'll go see it when she can. (Bolinger 1983: 163)
- (58) a. The trucks come and pick up the garbage every Monday.
 b. The trucks come pick up the garbage every Monday.

In the next chapter, we turn our attention to the interpretation of the quantitative data of the multi-verb sequences. The functional and the historical angles play a vital part in differentiating between the semantically competing multi-verb sequences where there is no satisfactory explanation from a semantic standpoint in Chapters 3 through 5.

Chapter 6

Functional Features and Historical Development in Present-Day English of Semantically Competing Multi-Verb Sequences

In this chapter, we turn our attention to the interpretation of the quantitative data of the multi-verb sequences, by using two corpora, Collins Wordbanks Online (CWO) as a synchronic corpus and the Corpus of Historical American English (COHA) as a diachronic one. We deal with four pairs of multi-verb sequences, the *help-V* and the *help-to-V* sequences in (1), the *try-to-V* and the *try-and-V* sequences in (2), the *come-V* and the *come-and-V* sequences in (3), and the *go-V* and the *go-and-V* sequences in (4).

- (1) a. She is coming to help clean the machines.
b. She is coming to help to clean the machines.
- (2) a. Try to take some form of daily exercise.
b. Try and take some form of daily exercise.
- (3) a. Come have your dinner.
b. Come and have your dinner.
- (4) a. Go get me a drink!
b. Go and get me a drink!

As mentioned in Chapter 1, we call these instances in (1) through (4) ‘semantically competing multi-verb sequences.’ The four pairs of semantically competing multi-verb sequences shown in (1) through (4) are those which are difficult to differentiate semantically. In particular, we have shown in Chapter 5 that there is no satisfactory differentiation of the two pairs of semantically competing multi-verb sequences in (3) and (4), respectively, from a semantic standpoint, despite Bolinger’s statement that ‘a difference in syntactic form always spells a difference in meaning.’ In this chapter, we will show that the functional and the historical angles are required to differentiate between the semantically competing multi-verb sequences.

This chapter is divided into two parts. The first part deals with functional features of the four pairs of semantically competing multi-verb sequences in (1) through (4) on the basis of analyses of data from CWO. We test three hypotheses to pin down the difference in the semantically competing multi-verb sequences. The first hypothesis is about the second verbs used most frequently. The second hypothesis is about inflectional categories of the first verb. The third hypothesis is about fields of discourse, which means the frequency of use of multi-verb sequences per million words in six genres in CWO. The second part deals with historical development of the four pairs of semantically competing multi-verb sequences in Present-Day English on the basis of analyses of data from COHA. The second part also discusses the relationship between historical development and semantic change.

This chapter is structured as follows. Relying upon CWO, Section 6.1 provides analyses of functional features of the four pairs of semantically competing multi-verb sequences. We test the three hypotheses on a sequence-by-sequence basis and see whether or not we can tell the difference between the semantically competing multi-verb sequences from a functional standpoint. Relying upon COHA, Section 6.2 examines historical development of the four pairs of semantically competing multi-verb sequences in Present-Day English and sees whether or not we can identify a difference between the semantically competing multi-verb sequences from a historical standpoint. Section 6.3 offers a conclusion.

6.1 Functional Features

This section provides functional features of four pairs of semantically competing multi-verb sequences in (1) through (4) on the basis of analyses of data from CWO. In order to provide an appropriate context for this section's approach, we provide a brief overview of CWO. CWO contains approximately 50 million words derived from a variety of sources from 1990 to 1998. CWO has twelve sub-corpora. This dissertation uses eleven US and UK sub-corpora, divided into six genres shown in (5).

- (5) Eleven sub-corpora in six genres in CWO
 - a. two radio broadcasts
(BBC World Service Radio broadcasts and US National Public Radio broadcasts)
 - b. three newspapers (SUN, TIMES, and TODAY)
 - c. one UK magazine
 - d. two books (UK and US)
 - e. two ephemera¹ (UK and US)
 - f. one UK informal speech

In Section 6.1.1, we test three hypotheses to find any differences between the semantically competing multi-verb sequences. The three hypotheses are about second verbs used most frequently, inflectional categories of the first verb, and fields of discourse, i.e., the frequency of use of multi-verb sequences per million words in six genres in CWO. In Sections 6.1.2 through 6.1.5, we test the three hypotheses concerning the *help-V* and the *help-to-V* sequences, the *try-to-V* and the *try-and-V* sequences, the *come-V* and the *come-and-V* sequences, and the *go-V* and the *go-and-V* sequences, respectively. In Section 6.1.6, we provide a summary of the four pairs of semantically competing multi-verb sequences from a functional standpoint.

¹ Ephemera are items designed to be useful or important for only a short time, especially labels, pamphlets, posters, notices, tickets, and so on.

6.1.1 Three Hypotheses

In this subsection, we test three hypotheses to differentiate between semantically competing multi-verb sequences from a functional standpoint. The first hypothesis is about the second verbs used most frequently shown in (6).

- (6) The top ten second verbs used most frequently in CWO show that the distributions of verbs in one multi-verb sequence are different from those of the other multi-verb sequence.

The second hypothesis is about inflectional categories of the first verb shown in (7).

- (7) The inflectional categories of the first verb in CWO show that the distributions of inflection types of the first verb in one multi-verb sequence are different from those of the other multi-verb sequence.

Based on the inflectional categories of the first verb and the second verb, it is possible to check whether or not the *horror aequi* principle is observed. The *horror aequi* principle is defined as follows.

- (8) The *horror aequi* principle involves the widespread (and presumably universal) tendency to avoid the use of formally (near-) identical and (near-) adjacent (non-coordinate) grammatical elements or structures. (Rohdenburg 2003: 236)

It is a well-known fact that there are various restrictions on the use of successive *-ing* forms in Present-Day English (e.g., Bolinger 1979, Pullum and Zwicky 1999, Ross 1972, Vosberg 2003). In a similar vein, Rohdenburg (2003: 236) hypothesizes that the avoidance of *to*-infinitive sequences or serial *to*-infinitives, such as *to try to persuade Tom*, is seen. Rohdenburg carries out a case study of the verb *try*, based on the data extracted from *The Times* from 1785 to 1992, and he shows that the *horror aequi* principle applies to the verb *try* in the sense that the avoidance of *to*-infinitive sequences is seen. With respect to the *help-V* and the *help-to-V* sequences, and the *try-to-V* and the *try-and-V* sequences, it is worthwhile to check whether or not the *horror aequi* principle is observed in the sense that the avoidance of infinitive sequences may be seen. Where appropriate, we conduct a chi-squared test which is used to determine whether there is a significant difference between two variables observed in data.

The third hypothesis is about fields of discourse, i.e., the frequency of use of multi-verb sequences per million words in six genres in CWO, shown in (9).

- (9) The frequency of use of multi-verb sequences per million words in six genres in CWO shows that the genres in which one multi-verb sequence is used are different from those in which the other multi-verb sequence is used.

Based on fields of discourse, we focus on particular situations or particular types of writing where the semantically competing multi-verb sequences are used by speakers and writers. In the following sections, we test these three hypotheses on a sequence-by-sequence basis from a functional standpoint.

6.1.2 The *Help-V* and the *Help-to-V* Sequences

In this subsection, we test the three hypotheses to differentiate between the *help-V* and the *help-to-V* sequences from a functional standpoint. First, Table 6.1 shows the top ten second verbs used most frequently in the *help-V* and the *help-to-V* sequences.

| sequence rank | <i>help-V</i> (token 4012, type 665) | <i>help-to-V</i> (token 2127, type 532) |
|---------------|---|--|
| 1 | make (168) | make (92) |
| 2 | keep (132) | keep (69) |
| 3 | prevent (128) | bring (60) |
| 4 | save (104) | create (54) |
| 5 | bring (82) | prevent (51) |
| 6 | pay (74) | reduce (45) |
| 7 | protect (71) | ensure (31) |
| 8 | get (67) | get (31) |
| 9 | create (63) | explain (30) |
| 10 | reduce (60) | improve (29) |

Table 6.1. The top ten second verbs used most frequently in CWO in the *help-V* and the *help-to-V* sequences (frequency in parentheses)

Table 6.1 shows that the distributions of the second verb in the *help-V* sequence look roughly the same as those in the *help-to-V* sequence. From Table 6.1, it is fair to state that there is no notable difference between the two sequences in this regard.

Second, Table 6.2 shows the inflectional categories of the first verb in the *help-V* and the *help-to-V* sequences in CWO.

| verb form | | sequence | | <i>help-V</i> | <i>help-to-V</i> |
|------------------------|-------------------|------------------|--|---------------|------------------|
| | | | | | |
| finite | primary form | past | | 864 (20.04%) | 368 (17.3%) |
| | | present | | 193 (4.81%) | 446 (21.0%) |
| | | present singular | | 162 (4.04%) | 64 (3.0%) |
| | plain form | imperative | | 68 (1.7%) | 14 (0.7%) |
| non-finite | plain form | infinitive | | 1503 (37.46%) | 112 (5.3%) |
| | | modal+V | | 931 (23.21%) | 530 (24.9%) |
| | gerund-participle | | | 118 (2.94%) | 407 (19.1%) |
| | past participle | | | 232 (5.78%) | 186 (8.7%) |
| others with plain form | | | | 1 (0.02%) | 0 (0%) |
| TOTAL | | | | 4012 | 2127 |

Table 6.2. The *help-V* and the *help-to-V* sequences across inflectional categories of the first verb in CWO (percentages in parentheses)

Table 6.2 presents two important findings. First, infinitive forms are predominant in the *help-V* sequence, while they occur with the *help-to-V* sequence much less frequently. Second, the present-tense (=bare) forms are predominant in the *help-to-V* sequence, whereas they are not in the *help-V* sequence. Based on the chi-square test, Tables 6.3 and 6.4 show that there are extremely significant differences between the *to-help-V* and the *to-help-to-V* sequences in CWO.

| sequence \ form | infinitive form | non-infinitive form | sum |
|---------------------------|-----------------|---------------------|------|
| <i>help-V</i> sequence | 1503 | 2509 | 4012 |
| <i>help-to-V</i> sequence | 112 | 2015 | 2127 |
| sum | 1615 | 4525 | 6139 |

$$(\chi^2=743.295, df=1, p<0.001)$$

Table 6.3. The token frequencies of the infinitive form and the non-infinitive form of the first verb in the *help-V* and the *help-to-V* sequences in CWO

| sequence \ form | present form | non-present form | sum |
|---------------------------|--------------|------------------|------|
| <i>help-V</i> sequence | 193 | 3819 | 4012 |
| <i>help-to-V</i> sequence | 446 | 1681 | 2127 |
| sum | 639 | 5500 | 6139 |

$$(\chi^2=389.165, df=1, p<0.001)$$

Table 6.4. The token frequencies of the present form and the non-present form of the first verb in the *help-V* and the *help-to-V* sequences in CWO

It is clear that while the *help-to-V* sequence avoids serial *to*-infinitives, the *help-V* sequence avoids a sequence of the same forms, that is to say, a form identical to the bare form, finite on the one hand and a non-finite on the other. Tables 6.2 through 6.4 point to the fact that the

horror aequi principle is observed (see Lohmann 2011, McEnery and Xiao 2005). Therefore, it is fair to state that there are significant differences between the two sequences with respect to the inflectional categories.

Third, Figure 6.1 shows the frequencies of use of the *help-V* and the *help-to-V* sequences per million words in six genres in CWO.

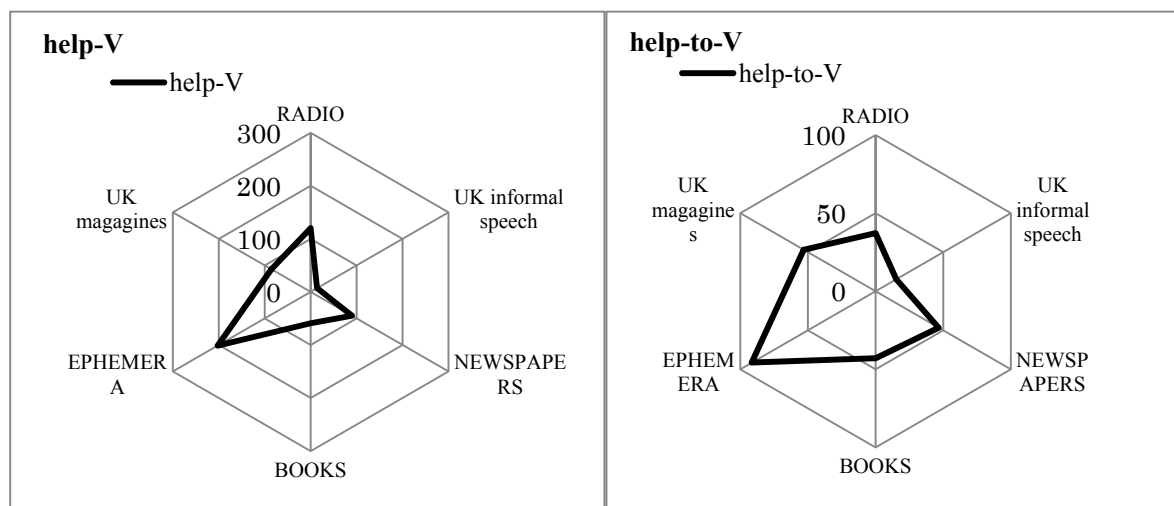


Figure 6.1. Frequencies of use of the *help-V* and the *help-to-V* sequences in the full-syntactic-structure group per million words in six genres in CWO

The relatively similar distribution between the two sequences is observed in Figure 6.1. Figure 6.1 shows that there is no significant difference between the two sequences.

A clear difference between the *help-V* and the *help-to-V* sequences is observed in the inflectional categories of the first verb. However, there is only a slight difference in the top ten second verbs used mostly frequently. With respect to fields of discourse, the *help-V* sequence is similar to the *help-to-V* sequence. In Section 6.2, we will check whether there is a significant difference in the two competing sequences from a historical standpoint.

6.1.3 The *Try-and-V* and the *Bare-Try-to-V* Sequences

In this subsection, we test the three hypotheses to differentiate between the *try-and-V* and the *try-to-V* sequences from a functional standpoint. In order to compare with the *try-and-V* sequence where the first verb *try* is always in the bare form, the occurrences of the *try-to-V* sequence examined are restricted to those in which *try* is also in the bare form. First, Table 6.5 shows the top ten second verbs used most frequently in the *try-and-V* and the *bare-try-to-V* sequences in CWO.

| rank \ sequence | <i>try-and-V</i> (token 2325, type 533) | <i>bare-try-to-V</i> (token 5538, type 945) |
|-----------------|--|--|
| 1 | get (316) | get (327) |
| 2 | do (109) | make (217) |
| 3 | make (109) | do (181) |
| 4 | find (101) | find (170) |
| 5 | keep (50) | keep (143) |
| 6 | put (42) | be (133) |
| 7 | help (32) | avoid (86) |
| 8 | be (30) | put (72) |
| 9 | stop (30) | give (69) |
| 10 | work (29) | stop (66) |

Table 6.5. The top ten second verbs used most frequently in CWO in the *try-and-V* and the *bare-try-to-V* sequences (frequency in parentheses)

Table 6.5 shows that the distribution of the second verb in the *try-and-V* sequence looks very similar to that in the *bare-try-to-V* sequence. Table 6.5 shows that there is no notable difference between the two competing multi-verb sequences.

Second, Table 6.6 shows the inflectional categories of the first verb in the *try-and-V* and the *bare-try-to-V* sequences in CWO.

| verb form \ sequence | | <i>try-and-V</i> | <i>bare-try-to-V</i> | |
|------------------------|-----------------|-------------------|----------------------|---------------|
| finite | primary form | past | 0 | |
| | | present | 320 (13.76%) | |
| | | present singular | 0 | |
| | plain form | imperative | 190 (8.17%) | 671 (12.12%) |
| non-finite | plain form | infinitive | 1252 (53.85%) | 1812 (33.72%) |
| | | modal+V | 561 (24.13%) | 1506 (27.19%) |
| | | gerund-participle | 0 | 0 |
| | past participle | 0 | 0 | |
| others with plain form | | 2 (0.09%) | 5 (0.09%) | |
| TOTAL | | 2325 | 5538 | |

Table 6.6. The *try-and-V* and the *bare-try-to-V* sequences across inflectional categories of the first verb in CWO (percentages in parentheses)

According to Table 6.6, *to*-infinitive forms occur with *try-and-V* sequence more frequently than with the *bare-try-to-V* sequence. Based on the chi-square test, Table 6.7 shows that there is a highly significant difference between the *to-try-and-V* and the *to-try-to-V* sequences in CWO.

| sequence \ form | infinitive form | non-infinitive form | sum |
|-------------------------------|-----------------|---------------------|------|
| <i>try-and-V</i> sequence | 1252 | 1073 | 2325 |
| <i>bare-try-to-V</i> sequence | 1812 | 3726 | 5538 |
| sum | 3064 | 4799 | 7863 |

$$(\chi^2=307.416, df=1, p<0.001)$$

Table 6.7. The token frequencies of the infinitive form and the non-infinitive form of the first verb in the *try-and-V* and the *bare-try-to-V* sequences in CWO

It is clear that the *bare-try-to-V* sequence avoids serial *to*-infinitives. It is fair to state that the *horror aequi* principle is observed. Therefore, there is a significant difference between the two sequences with respect to the inflectional categories (see Hommerberg and Tottie 2007, Rohdenburg 2003).

Third, Figure 6.2 shows the frequencies of use of the *try-and-V* and the *bare-try-to-V* sequences per million words in six genres in CWO.

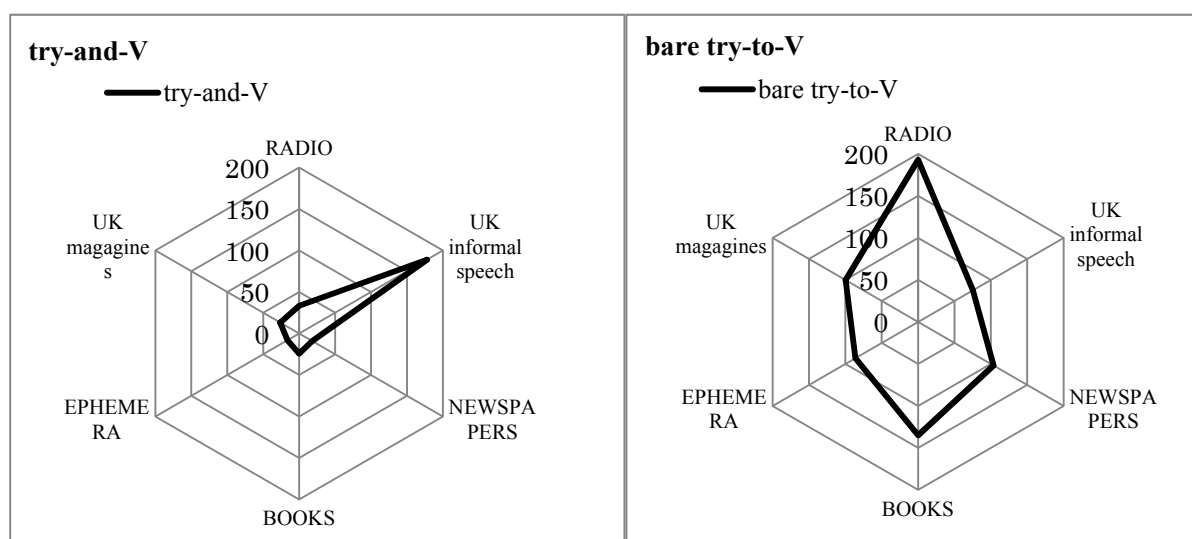


Figure 6.2. Frequencies of use of the *try-and-V* and the *bare-try-to-V* sequences per million words in six genres in CWO

In Figure 6.2, the distribution of the *try-and-V* sequence is different from that of the *bare-try-to-V* sequence. In the *try-and-V* sequence, the UK informal speech subcorpus shows the highest frequency. By contrast, in the *bare-try-to-V* sequence, the radio subcorpus shows a much higher frequency than the other five subcorpora. This contrast validates the outcome of some previous studies where the *try-and-V* sequence seems to be regarded as colloquial (e.g.,

Follett 1969, Fowler 1965, Newman and Rice 2008, Wood 1965).² Figure 6.2 thus leads to the conclusion that there is a functional difference between the two sequences with respect to fields of discourse.

In conclusion, it is fair to state that there are functional differences between the *try-and-V* and the *bare-try-and-V* sequences with respect to inflectional categories and fields of discourse, in addition to the subtle semantic difference described in Section 4.2 in Chapter 4.³ In Section 6.2, we will check whether there is significant difference in the two competing sequences from a historical standpoint.

6.1.4 The *Come-V* and the *Bare-Come-and-V* Sequences

In this subsection, we test the three hypotheses to differentiate between the *come-V* and the *come-and-V* sequences from a functional standpoint. In order to compare with the *come-V* sequence where the first verb *come* is almost always in the bare form, the occurrences of the *come-and-V* sequence examined in this chapter are restricted to those in which *come* is also in the bare form. First, Table 6.8 shows the top ten second verbs used most frequently in the *come-V* and the *bare-come-and-V* sequences in CWO.

| rank \ sequence | <i>come-V</i> (token 127, type 52) | <i>bare-come-and-V</i> (token 947, type 166) |
|-----------------|---------------------------------------|---|
| 1 | see (17) | see (151) |
| 2 | visit (11) | get (56) |
| 3 | get (9) | have (46) |
| 4 | join (7) | join (37) |
| 5 | take (7) | live (29) |
| 6 | sit (6) | do (27) |
| 7 | live (5) | say, take, visit (26) |
| 8 | fly (4) | pick (25) |
| 9 | learn (4) | sit (23) |
| 10 | find, talk (3) | work (22) |

Table 6.8. The top ten second verbs used most frequently in CWO in the *come-V* and the *bare-come-and-V* sequences (frequency in parentheses)

² Based on corpora totaling over 25 million words, Hommerberg and Tottie (2007) give a description of the quantitative differences between British and American English with respect to the variation between the *try-and-V* and the *try-to-V* sequences. The *try-and-V* sequence prevails in spoken British English (over 70 percent), but the *try-to-V* sequence prevails in written British English and spoken American English (76 percent in both varieties). The *try-to-V* sequence is totally dominant in written American English (95 percent).

³ Gries and Stefanowisch (2004: 122) show that the proposed semantic difference between the *try-to-V* and the *try-and-V* sequences is so weak or uncertain that it hardly exists, based on a collocation study of some 200 instances from the ICE-GB corpus. However, we cannot accept their view. We claim that a subtle difference in meaning can be discerned if we follow Bolinger's (1968: 127) hypothesis that 'a difference in syntactic form always spells a difference in meaning'.

Table 6.8 shows that the distributions of the first verb in the *come-V* sequence are only slightly different from those in the *bare-come-and-V* sequence. Table 6.8 shows that there is no notable difference between the two competing multi-verb sequences.

Second, Table 6.9 shows the inflectional categories of the first verb in the *come-V* and the *bare-come-and-V* sequences in CWO.

| verb form \ sequence | | | <i>come-V</i> | <i>bare-come-and-V</i> |
|------------------------|-------------------|------------|---------------|------------------------|
| finite | primary form | past | 0 (0%) | 0 (0%) |
| | | present | 3 (2.4%) | 92 (9.72%) |
| | present singular | 0 (0%) | 0 (0%) | |
| | plain form | imperative | 74 (58.3%) | 192 (20.27%) |
| non-finite | plain form | infinitive | 28 (22.0%) | 333 (35.16%) |
| | | modal+V | 22 (17.3%) | 325 (34.32%) |
| | gerund-participle | 0 (0%) | 0 (0%) | |
| | past participle | 0 (0%) | 0 (0%) | |
| others with plain form | | | 0 (0%) | 0 (0%) |
| TOTAL | | | 127 | 947 |

Table 6.9. The inflectional categories of the first verb in the *come-V* and the *bare-come-and-V* sequences in CWO (percentages in parentheses)

It should be noted here that imperative forms are predominant in the *come-V* sequence. Based on the chi-square confirms, Table 6.10 shows that there is an extremely significant difference between the imperative *come-V* and the imperative *bare-come-and-V* sequences.

| sequence \ form | imperative form | non-imperative form | sum |
|---------------------------------|-----------------|---------------------|------|
| <i>come-V</i> sequence | 74 | 53 | 127 |
| <i>bare-come-and-V</i> sequence | 192 | 782 | 974 |
| sum | 266 | 835 | 1101 |

($\chi^2=91.148$, $df=1$, $p<0.001$)

Table 6.10. The token frequencies of the imperative form and the non-imperative form of the first verb in the *come-V* and the *bare-come-and-V* sequences in CWO

It is clear that there is a functional difference in the two sequences with respect to inflectional categories. The *horror aequi* principle has nothing to do with the *come-V* sequence, because the *come-V* sequence violates the *horror aequi* principle in the sense that the *come-V* sequence always involves the repetition of the same forms.

Third, Figure 6.3 shows the frequencies of use of the *come-V* and the *bare-come-and-V* sequences per million words in six genres in CWO.

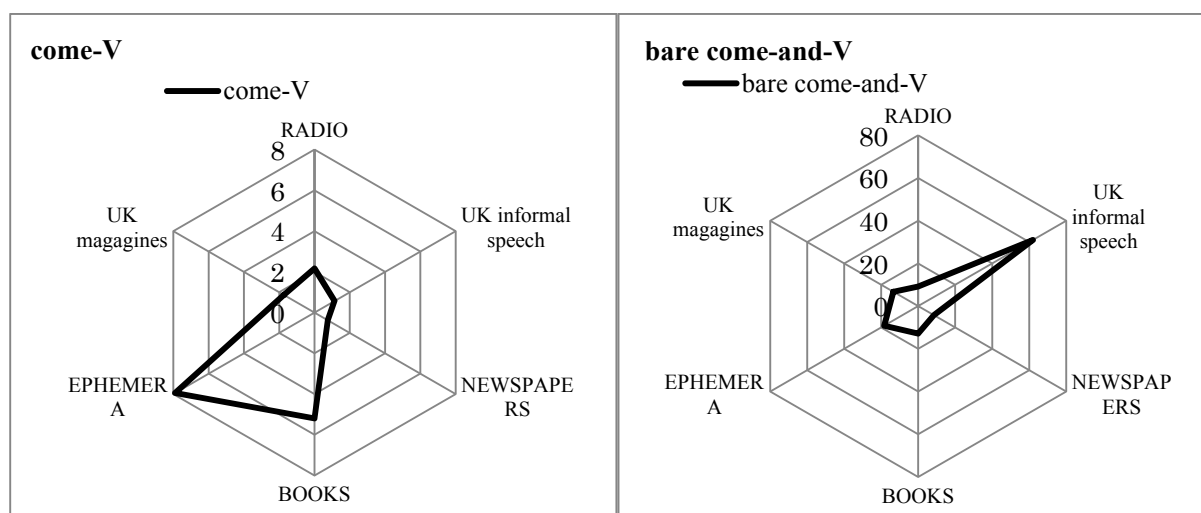


Figure 6.3. Frequencies of use of the *come-V* and the *bare come-and-V* sequences per million words in six genres in CWO

Figure 6.3 shows the *come-V* sequence presents a markedly different distribution from the *bare-come-and-V* sequence. In the *bare-come-and-V* sequence, the highest frequency is found in the UK informal speech subcorpus, and a low frequency is found in the ephemera subcorpus. By contrast, in the *come-V* sequence, the ephemera subcorpus shows the highest frequency, and the informal speech subcorpus a very much lower one. There is a functional difference between the two sequences with respect to fields of discourse.

From the above discussion, it is concluded that there are functional differences between the *come-V* and the *bare-come-and-V* sequences with respect to inflectional categories and fields of discourse, although there is no marked semantic difference between them. Now, we need to clear up one problem: what gives rise to the functional differences? From a historical angle, we will deal with this problem in Section 6.2.

6.1.5 The *Go-V* and the *Bare-Go-and-V* Sequences

In this subsection, we test the three hypotheses to differentiate between the *go-V* and the *go-and-V* sequences from a functional standpoint. In order to compare with the *go-V* sequence where the first verb *go* is almost always in the bare form, the occurrences of the *go-and-V* sequence examined in this chapter are restricted to those in which *go* is also in the bare form. First, Table 6.11 shows the top ten second verbs used most frequently in the *go-V* and the *bare-go-and-V* sequences in CWO.

| rank \ sequence | <i>go-V</i> (token 521, type 125) | <i>bare-go-and-V</i> (token 1854, type 258) |
|-----------------|--------------------------------------|--|
| 1 | get (74) | see (307) |
| 2 | see (72) | get (162) |
| 3 | find (25) | do (138) |
| 4 | do (21) | have (117) |
| 5 | look (20) | buy (66) |
| 6 | buy (17) | look (54) |
| 7 | fetch (13) | talk (53) |
| 8 | take (10) | sit (47) |
| 9 | talk (10) | find (43) |
| 10 | work (10) | ask (35) |

Table 6.11. The top ten second verbs used most frequently in CWO in the *go-V* and the *bare-go-and-V* sequences (frequency in parentheses)

Table 6.11 shows that the distributions of the first verb in the *go-V* sequence are only slightly different from those in the *go-and-V* sequence. Table 6.11 shows that there is no notable difference between the competing two multi-verb sequences.

Second, Table 6.12 shows the inflectional categories of the first verb in the *go-V* and the *bare-go-and-V* sequences in CWO.

| verb form \ sequence | | <i>go-V</i> | <i>bare-go-and-V</i> | |
|------------------------|-------------------|------------------|----------------------|--------------|
| | | | | |
| finite | primary form | past | 0 (0%) | |
| | | present | 66 (12.7%) | |
| | | present singular | 0 (0%) | |
| | plain form | imperative | 131 (25.1%) | 220 (11.87%) |
| non-finite | plain form | infinitive | 165 (31.7%) | 581 (31.34%) |
| | | modal+V | 159 (30.5%) | 790 (42.61%) |
| | gerund-participle | | 0 (0%) | 0 (0%) |
| | past participle | | 0 (0%) | 0 (0%) |
| others with plain form | | 0 (0%) | 1 (0.05%) | |
| TOTAL | | 521 | 1854 | |

Table 6.12. The inflectional categories of the first verb in the *go-V* and the *bare-go-and-V* sequences in CWO (percentages in parentheses)

Table 6.12 shows that there are more imperative forms in the *go-V* sequence than in the *bare-go-and-V* sequence. Table 6.13 shows that there is significant difference in the frequencies of imperative form and non-imperative form in the imperative *go-V* and the imperative *go-and-V* sequences, based on the chi-square test.

| sequence \ form | imperative form | non-imperative form | sum |
|-------------------------------|-----------------|---------------------|------|
| <i>go-V</i> sequence | 131 | 390 | 521 |
| <i>bare-go-and-V</i> sequence | 220 | 1634 | 1854 |
| sum | 351 | 2024 | 2375 |

($\chi^2=56.93$, $df=1$, $p<0.001$)

Table 6.13. The token frequencies of the imperative form and the non-imperative form of the first verb in the *go-V* and the *bare-go-and-V* sequences in CWO

In fact, there is a functional difference in the two sequences. The frequent use of imperatives means that two bare forms are often used in the *go-V* sequence. Therefore, just like the *come-V* sequence, the *horror aequi* principle has nothing to do with the *go-V* sequence.

Third, Figure 6.4 shows the frequencies of use of the *go-V* and the *bare-go-and-V* sequences per million words in six genres in CWO.

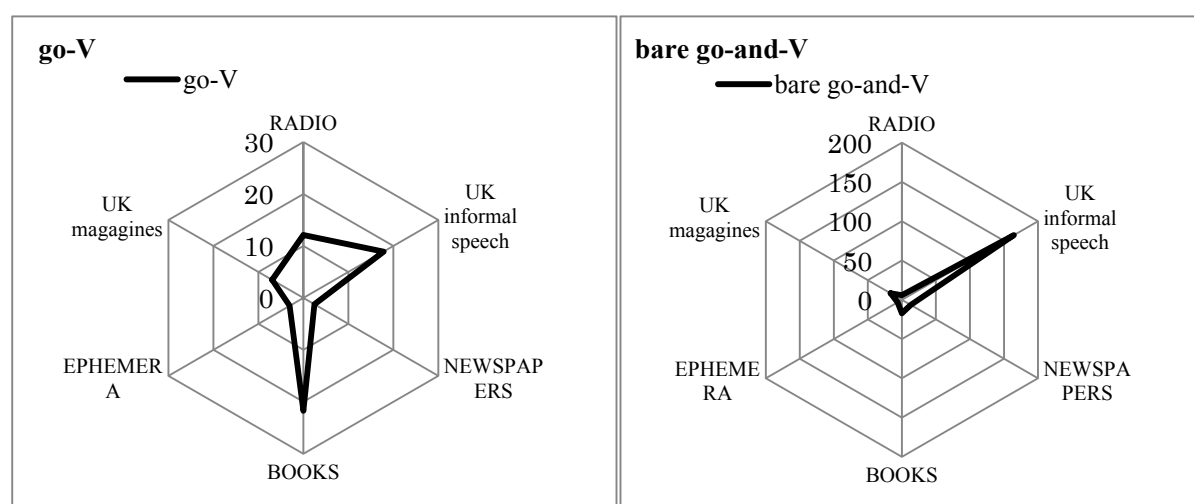


Figure 6.4. Frequencies of use of the *go-V* and the *bare go-and-V* sequences per million words in six genres in CWO

Figure 6.4 shows that the *go-V* sequence presents a different distribution from the *bare-go-and-V* sequence. In the *go-V* sequence, the high frequency is found in the books and the UK informal speech subcorpora, and in the *bare-go-and-V* sequence the highest frequency is found in the UK informal speech subcorpus. It seems reasonable to state that there is a functional difference between the two competing sequences with respect to fields of discourse.

There is one conclusion to be drawn from the above discussion. Inflectional categories and fields of discourse differentiate between the *go-V* and the *bare-go-and-V* sequences, although there is no marked semantic difference between them. At this point, we need to deal with one problem: what gives rise to the functional differences? Taking a historical angle, we will deal

with this problem in Section 6.2.

6.1.6 Summary

To differentiate between the semantically competing multi-verb sequences, Section 6.1 has tested three hypotheses concerning the top ten second verbs used most frequently, inflectional categories, and fields of discourse, on the basis of CWO. The three features of four pairs of semantically competing multi-verb sequences discussed so far are summarized in Table 6.14.

| features competing sequences | function in CWO | | |
|--|--------------------------|-------------------------------|---------------------|
| | V2s used most frequently | inflectional categories of V1 | fields of discourse |
| <i>help-V</i> vs <i>help-to-V</i> | almost the same | different | almost the same |
| <i>try-and-V</i> vs <i>bare-try-to-V</i> | almost the same | different | different |
| <i>come-V</i> vs <i>bare-come-and-V</i> | almost the same | different | different |
| <i>go-V</i> vs <i>bare-go-and-V</i> | almost the same | different | different |

Table 6.14. Three features of semantically competing pairs of multi-verb sequences

It should be noted here that the four pairs of semantically competing multi-verb sequences in Table 6.14 do not indicate a marked difference in the second verbs used. However, we see that the inflectional categories and fields of discourse play a decisive role in distinguishing between specific types of sequences.

At the same time, we argue that a historical point of view is indispensable for investigating the difference between the semantically competing multi-verb sequences. In the next section, on the basis of the functional features shown in this section, we will investigate the four pairs of semantically competing multi-verb sequences from a historical point of view.

6.2 Historical Development in Present-Day English

Section 6.2 deals with problems presented in Section 6.1, which remain undealt with so far in this dissertation. Stated differently, Section 6.2 describes the ongoing historical development of semantically and/or functionally competing multi-verb sequences in Present-Day English, relying upon a diachronic corpus, the Corpus of Historical American English (COHA). Even if a form becomes increasingly frequent, historical development does not always occur. However, if successive generations of speakers perceive and further develop a particular phenomenon, historical development will proceed. Diachronic corpus or statistics helps us record historical development and may even help us to identify ongoing processes of historical development that have not yet been detected by most linguists.

This section is structured as follows. Sections 6.2.1 and 6.2.2 deal with the *help-V* and the *help-to-V* sequences and the *try-and-V* and the *bare-try-to-V* sequences, respectively, and examine the difference in such two pairs of semantically and/or functionally competing

multi-verb sequences from a historical point of view. To facilitate our discussion of the *come/go-V* and the *bare-come/go-and-V* sequences in Section 6.2.4, Section 6.2.3 examines Zwicky's (2003) hypothesis that the *come/go-comma-V* sequence, as in *Go, get some beer!*, was reanalyzed as the *come/go-V* sequence. Section 6.2.4 deals with the *come/go-V* and the *bare-come/go-and-V* sequences and examines the difference between them from a historical point of view. Section 6.2.4 also discusses the relationship between historical development and semantic change with respect to the *come/go-V* and the *bare-come/go-and-V* sequences. Section 6.2.5 provides a summary of historical development in Present-Day English with respect to semantically competing multi-verb sequences.

6.2.1 The *Help-V* and the *Help-to-V* Sequences

As mentioned in Section 5.1.1 in Chapter 5, Mair (2004, 2006) claims that the verb *help* in the *help-V* sequence is in the process of taking over quasi-auxiliary function on the basis of *Oxford English Dictionary* as a diachronic corpus, and that the verb *help* in the *help-to-V* sequence is not. Section 6.2.1 examines whether Mair's idea is correct or not, using a different corpus from Mair's.

In order to provide an appropriate context for our discussion, two diachronic perspectives on differences between *to*-infinitives and bare infinitives need to be summarized briefly. The first perspective is related to Kjellmer's (1985, 2000) and Mair's studies (1995, 2002, 2004, 2006) mentioned in Chapter 5. The increasing use of the main verb with a bare infinitive in the twentieth century English is seen as a general tendency (see Callies 2013). With respect to the *help-V* sequence, Mair sees this tendency as an early stage of grammaticalization. The second perspective is related to Fischer's (1997, 2000, 2007) and Los's (1998, 2005) studies. Fischer states that in Old and Middle English, the occurrence of a verb with both the *to*-infinitive and the bare infinitive was not restricted to a small number of verbs as it is today, but that it was usual for the same verb to select both infinitives. The determinant of this choice was fundamentally semantic in nature. Bare infinitives imply a direct relationship between what is expressed in the main verb and what is expressed in the bare infinitive complement, while *to*-infinitives an indirect one. Fischer hence argues that *help* in the *help-V* sequence in Present-Day English is a relic of earlier stages of English. Los states that the bare infinitive has been decreasing, accompanied by an increase and grammaticalization of *to* at the expense of both bare infinitive and *that*-complement.

Now we show the difference between *help-V* and the *help-to-V* sequences from a historical standpoint. Figure 6.5 shows frequency of use in COHA of the *help-V* and the *help-to-V* sequences per million words from 1890 to 2009.

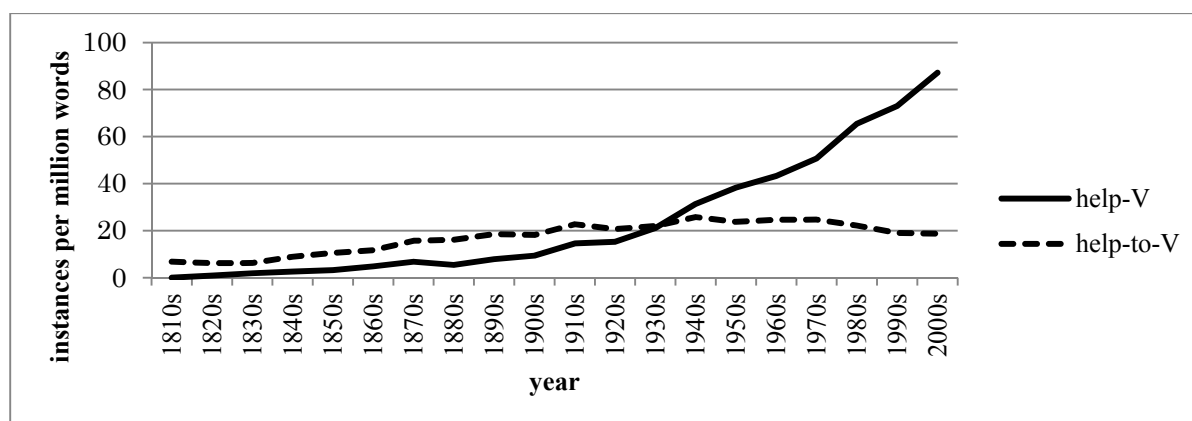


Figure 6.5. Frequency of use in COHA of the *help-V* and the *help-to-V* sequences per million words from 1810 to 2009.

The frequency of the *help-V* sequence represents a fairly marked increase from the 1830s onward, but the frequency of the *help-to-V* sequence shows little change. It is clear that the *help-V* sequence shows an ongoing historical development. Using *Oxford English Dictionary* as a corpus, Mair (2004, 2006) regards such a marked increase as a move in the direction of an auxiliary. However, it should be noted here that the continuation of ongoing historical development does not always represent grammaticalization. It is fair to state that Mair is likely to make a hasty decision, because what we have discussed so far in this dissertation shows that *help* in the *help-V* sequence does not acquire a new grammatical function (see McEnery and Xiao 2005). Observing the historical development, we require further investigation from many different angles.⁴

There is one thing that we can conclude from Figure 6.5. The *help-V* sequence has been recently gaining in currency. In this respect, the *help-V* and the *help-to-V* sequences show a difference in their ongoing historical development (see Lohmann 2011). Since Figure 6.1 in Section 6.1.2 shows that the two sequences occur in the same fields of discourse in CWO, it is plausible to state that the historical developments of the two sequences occur in the same fields of discourse.

6.2.2 The *Try-and-V* and the *Bare-Try-to-V* Sequences

We have shown in Section 6.1.3 that there are significant differences between the *try-and-V* and the *bare-try-to-V* sequences with respect to fields of discourses and the inflectional form of the first verb due to the *horror aequi* principle concerning serial *to*-infinitives. This subsection examines whether there is a significant difference between them with respect to historical development.

⁴ For instance, we need to investigate differences between American and British English. Rohdenburg and Schlüter (2009: 6) hypothesize that ‘American English grammar shows a more marked tendency to dispense with function words that are semantically redundant and grammatically omissible’.

Figure 6.6 shows frequency of use in COHA of the *bare-try-to-V* and the *try-and-V* sequences per million words from 1890 to 2009.

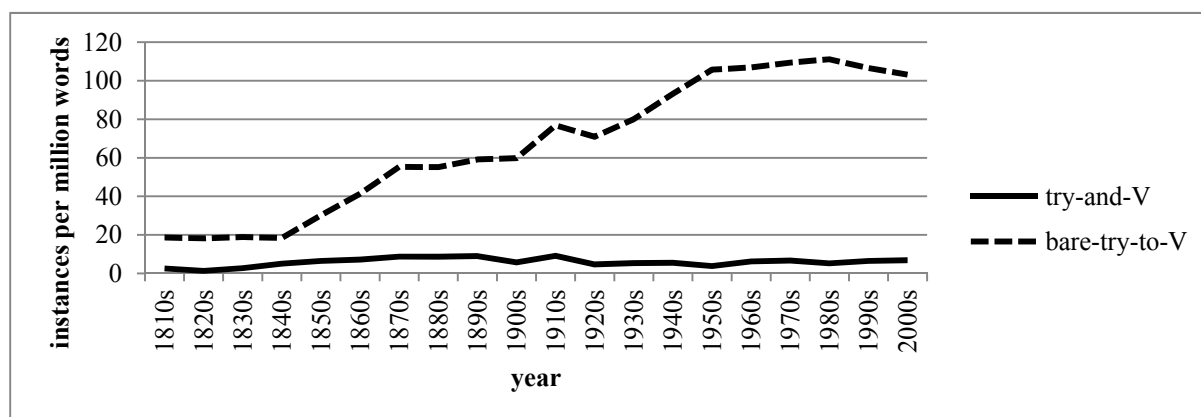


Figure 6.6. Frequency of use in COHA of the *bare-try-to-V* and the *try-and-V* sequences per million words from 1810 to 2009.

The frequency of the *bare-try-to-V* sequence shows a fairly marked increase from the 1840s to the 1950s. By contrast, the frequency of the *try-and-V* sequence shows little change. This contrast does not mean that the *try-and-V* sequence is now obsolete. With respect to frequency of use as well as historical development, the *try-and-V* sequence is quite different from the *bare-try-to-V* sequence.

6.2.3 The *Come/Go-V* and the *Come/Go-comma-V* Sequences

Zwicky (2003) observes historical development of the *come/go-V* sequence in Present-Day English. He points out that both the *come-V* and the *go-V* sequences have a strong preference for face-to-face conversation. He proposes that what Zwicky (2003) called the hortatory *come* and *go* with imperative, shown in (10), were reanalyzed as *come-V* and *go-V* sequences.⁵

- (10) a. Go, get some wine!
 b. Come, see how it's grown! (Zwicky 2003)

The *come/go-V* sequence as the resulting sequence was extended, he argues, from the imperative to the other use with the bare form. He also proposes that the resulting *come/go-V* sequence yielded the inflection constraint and the intervention constraint mentioned in Chapter 5. To facilitate later discussion, the hortatory *come* and *go* with imperatives in (10) are called the *come-comma-V* and the *go-comma-V* sequences. We will examine whether or not Zwicky's

⁵ Visser (1969) states that the *go-V* sequence where both the first and the second verbs are imperative forms still appears to be the sequence where the first verb and the second verb are sometimes separated by a comma, as in *Go, take a walk in the garden*.

hypothesis is correct. We call this hypothesis ‘the imperative reanalysis hypothesis’ in (11).

- (11) The imperative reanalysis hypothesis: The *come/go-comma-V* sequences were reanalyzed as the *come/go-V* sequences.

Table 6.15 shows frequency of use in CWO of the *come/go-V* and the *come/go-comma-V* sequences per million words from 1990 to 1998.

| sequence \ frequency | <i>come-V</i> | <i>come-comma-V</i> | <i>go-V</i> | <i>go-comma-V</i> |
|----------------------|---------------|---------------------|-------------|-------------------|
| frequency | 10.75 | 0.29 | 2.62 | 0.12 |

Table 6.15. Frequency of use in CWO of the *come/go-V* and the *come/go-comma-V* sequences per million words from 1990 to 1998

Figure 6.7 shows frequency of use in COHA of the *come-V* and the *come-comma-V* sequences per million words from 1890 to 2009.

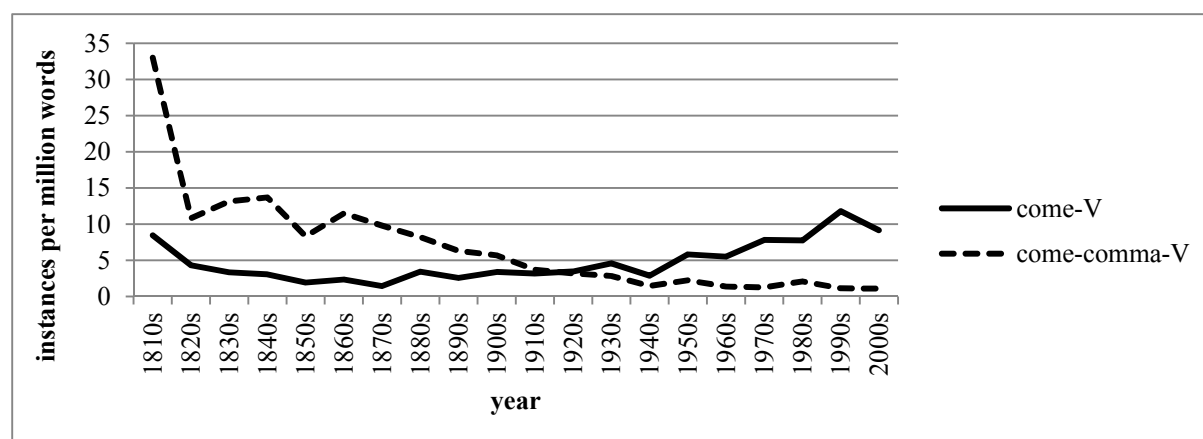


Figure 6.7. Frequency of use in COHA of the *come-V* and the *come-comma-V* sequences per million words from 1810 to 2009

Figure 6.7 shows that the *come-comma-V* sequence outnumbers the *come-V* sequence from 1810s to 1900s, but it also shows a gradual decrease in the frequency of the *come-comma-V* sequence from the 1860s onward. By contrast, the frequency of the *come-V* sequence has been increasing since the 1870s. In the 2000s, the *come-V* sequence outnumbers the *come-comma-V* sequence.

Similarly, Figure 6.8 shows frequency of use in COHA of the *go-V* and the *go-comma-V* sequences per million words from 1890 to 2009.

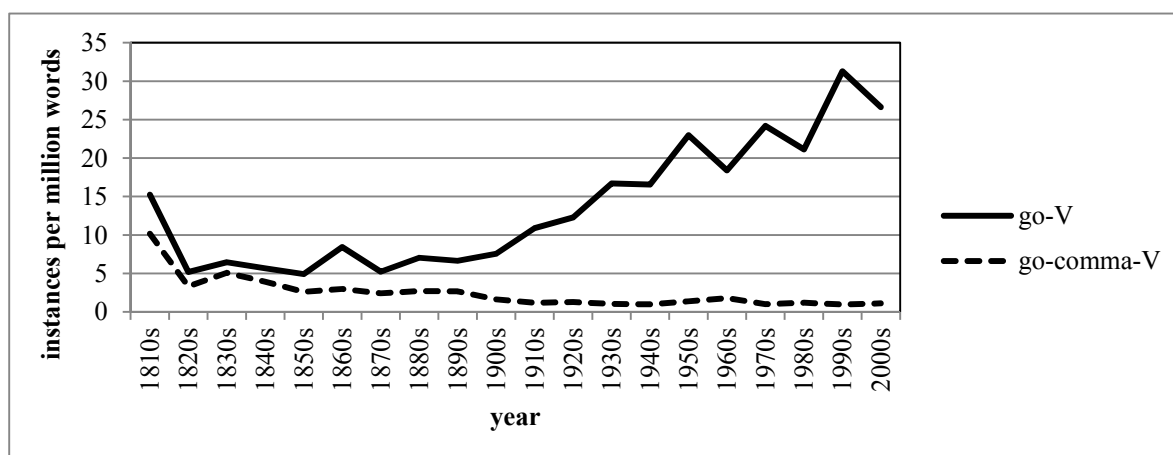


Figure 6.8. Frequency of use in COHA of the *go-V* and the *go-comma-V* sequences per million words from 1810 to 2009

Figure 6.8 shows the *go-comma-V* sequence has never been popular and has in fact been rarely used. By contrast, Figure 6.8 shows a considerable increase in the frequency of the *go-V* sequence from the 1900s onward. In the 2000s, the *go-V* sequence vastly outnumbers the *go-comma-V* sequence. Figures 6.7 and 6.8 are compatible with the imperative reanalysis hypothesis in that the *go/come-V* sequence has taken over the role of the *go/come-comma-V* sequence. It is also clear that frequency of use from the 1990s onward shown in Figures 6.7 and 6.8 are significantly related to frequency of use shown in Table 6.15.

It is reasonable to assume that the historical development of the *come/go-V* sequences is related to that of the *come/go-and-V* sequences, because the *come/go-V* sequences semantically and/or functionally compete with the *come/go-and-V* sequences. In Section 6.2.4, we will elucidate the relation between the *come/go-V* and the *come/go-and-V* sequences in Present-Day English from a historical standpoint.

6.2.4 The *Come/Go-V* and the *Bare-Come/Go-and-V* Sequences

In Section 6.2.4, the *come/go-V* sequence in the motion-purpose subtype is discussed in comparison with the *bare-come/go-and-V* sequence in the motion-purpose subtype.⁶ In Chapters 4 and 5 we have shown that both the *come/go-V* and the *bare-come/go-and-V*

⁶ As the *come-V* and the *come-and-V* sequences occur only in the motion-purpose subtype in the adjunct/oblique type, the data obtained from CWO and COHA used in this subsection always relates to the motion-purpose subtype. However, the *go-V* and the *go-and-V* sequences are problematic, since the data obtained from CWO and COHA contains both the aspect subtype and the modality subtype in the semi-complement type and the motion-purpose subtype in the adjunct/oblique type. There is a difference in the interpretations between the semi-complement and the adjunct/oblique types, and this depends upon the context. The problem is that it is difficult to extract the data about the adjunct/oblique type from the data obtained from COHA. This paper ascribes the data about *go-V* and the *go-and-V* sequences to the adjunct/oblique type, because the sequences in the semi-complement type occur only rarely.

sequences in the motion-purpose subtypes have syntactic and semantic characteristics in common. In Sections 6.1.4 and 6.1.5 we have shown that the *come/go-V* and the *bare-come/go-and-V* sequences are different with respect to fields of discourse. We have also shown in Sections 6.1.4 and 6.1.5 that the *come/go-V* sequence is quite different from the *bare-come/go-and-V* sequence with respect to inflectional form of the first verb. It is reasonable to assume that these two functional differences play a key role in explaining the historical development of the *come/go-V* and the *bare-come/go-and-V* sequences.

Visser (1969) provides brief observations of the historical development of the *come/go-V* sequences from Old English to Modern English in relation to the *come/go-and-V* sequences. In general, both the *come/go-V* and the *come/go-and-V* sequences refer to motion in space. With respect to the *come-V* sequence, in Old, Middle, and Modern English, the second verb phrase in the *come-V* sequence was usually used to express purpose. It is noteworthy that the first verb *come* and the second verb phrase were almost always adjacent. However, Visser (1969) observes that after about the end of sixteenth century, the *come-V* sequence gradually dropped into the state of being no longer used or practiced. With respect to the *come-and-V* sequence, the second verb in the *come-and-V* sequence was also used to express purpose. In terms of inflection of this sequence, both the first verb *come* and the second verb are in the bare form. Such *come-and-V* sequences arose from early Middle English. In terms of inflection, the *come-and-V* sequence where both verbs are present tense, past tense, or imperative arose from Old English. Nowadays, examples of this sequence are restricted to hortative utterances.

With respect to the *go-V* sequence, Visser observes that the second verb phrase in Old English indicated the purpose of the going. From Old English, the *go-V* sequence repeatedly occurred. In the course of subsequent periods, the first verb *go* in the *go-V* sequence has been undergoing a change, in such a way that *go* loses some of its meaning of motion in space and dwindles down to a mere sign of aspect. In Modern English, the *go-V* sequence is often used to express commands. In this case, the second verb is like a bare-infinitive, and the first verb *go* functions like a kind of auxiliary verb of aspect. It should be noted here that originally the first verb *go* and the second verb were both imperative forms. Similar to the *go-V* sequence, the *go-and-V* sequence is also used to express commands. Unlike the command *go-V* sequence, the command *go-and-V* sequence occurred in late Old English. Visser (1969) claims that the command *go-and-V* sequence seems to indicate that the *go-V* sequence developed from the *go-and-V* sequence by elision of the conjunction.

Figures 6.9 and 6.10 show instances of the *come/go-V* and the *bare-come/go-and-V* sequences, respectively, with respect to frequency of use in COHA per million words from 1890 to 2009, and that their quantitative use patterns are substantially different.

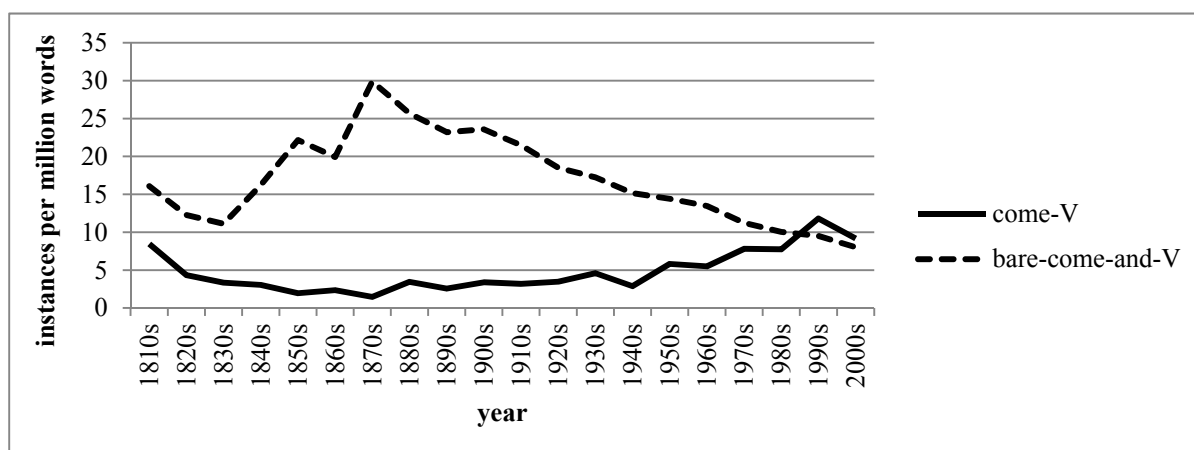


Figure 6.9. Frequency of use in COHA of the *come-V* and the *bare-come-and-V* sequences per million words from 1810 to 2009

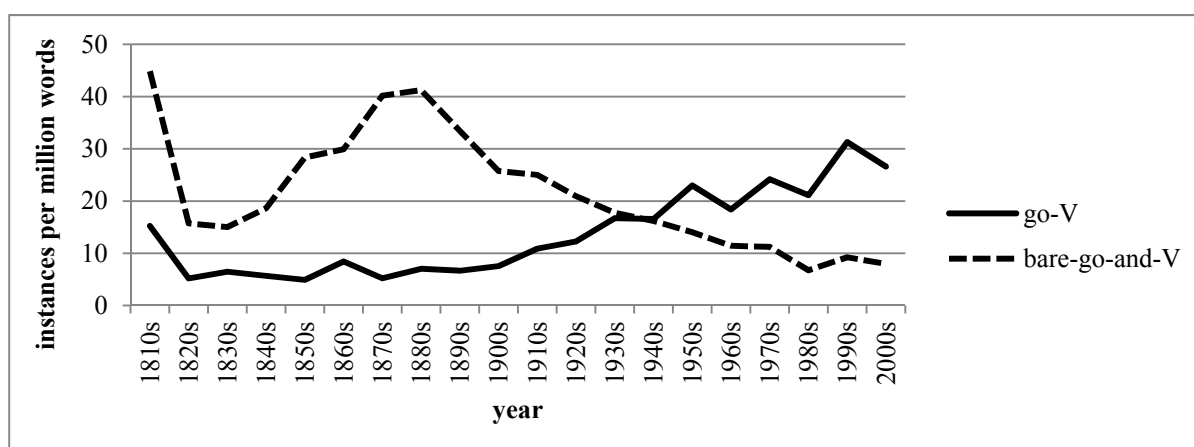


Figure 6.10. Frequency of use in COHA of the *go-V* and the *bare-go-and-V* sequences per million words from 1810 to 2009

From Figures 6.9 and 6.10, we can state (12).

- (12) Showing the connection between the *come/go-V* and the *bare-come/go-and-V* sequences, the *come-V* sequence takes a different path from the *go-V* sequence with respect to historical development.

Visser states that the *come-V* sequence has dropped out of use at the end of the sixteenth century. In actual fact, we have shown that the frequencies of the *come-V* sequence in Figure 6.9 show a fairly marked increase from the 1940s to the 1990s. It is fair to state that the *come-V* sequence is not obsolete at the present time. Based on Visser's (1969) observation mentioned above, there is a possibility that the *bare-come-and-V* sequence in Present-Day English retains not only a motion meaning, but also a hortative meaning. In this respect, we have shown in Chapter 5 that the *come-V* sequence is used as hortative utterance. The reason why the *come-V* sequence

replaced the *bare-come-and-V* sequence around the 1980s in COHA in Figure 6.9 is that the *come-V* sequence assumed the role of hortative utterances. This reason is strengthened by evidence that imperative forms in the *come-V* sequence are predominant in CWO shown in Section 6.1.4. Moreover, as a result of the replacement, fields of discourse in CWO shown in Section 6.1.4 confirm that the *come-V* sequence plays a different role from the *bare-come-and-V* sequence. The *bare-come-and-V* sequence is generally preferred in the UK informal speech subcorpus, whereas the *come-V* sequence is preferred in the ephemera subcorpus.

Visser (1969) also states that the command *go-V* sequence in Modern English developed from the command *go-and-V* sequence by elision of the conjunction. In fact, Figure 6.10 shows that the *go-V* sequence replaced the *bare-go-and-V* sequence around the 1940s in COHA. As shown in Section 6.1.5, with respect to inflectional categories, the imperative forms in the *go-V* sequence are significantly different from the ones in *bare-go-and-V* sequence in CWO. With respect to fields of discourse in CWO shown in Section 6.1.5, there is no noticeable difference between the *go-V* and the *bare-go-and-V* sequence. The *go-V* sequence is preferred both in the UK informal speeches subcorpus and in the books subcorpus. By contrast, the *bare-go-and-V* sequence is only found in the UK informal speech subcorpus. Despite the existence of replacement, both the *go-V* and the *bare-go-and-V* sequence occur in the UK informal speech subcorpus. The only plausible explanation of replacement is that although it is difficult to explain why the *go-V* sequence replaced the *bare-go-and-V* sequence around the 1940s, nowadays people tend to give preference to the *go-V* sequence. Visser's observation that the command *go-V* sequence in Modern English developed from the command *go-and-V* sequence by elision of the conjunction needs to be investigated further because of the lack of evidence.

Lastly, we argue that historical development does not always cause grammaticalization by which lexical or content words acquire grammatical function. Mauri and Sansò (2011) state that the speaker's intention of giving an order in imperative utterances implies what Mauri and Sansò (2011) call a displacement, that is to say, the act of forcing the hearer out of its normal place or position. To show that the *come/go-V* sequence is undergoing grammaticalization, Mauri and Sansò (2011) propose two hypotheses in (13) and (14).

- (13) The deictic verbs *come/go* in the *come/go-V* sequences can be reinterpreted as what Mauri and Sansò (2011) call non-dislocative directive markers.
- (14) Based on the assumption that a biclausal construction grammaticalizes into a monoclausal construction, the *come/go-V* sequence functions as a single clause allowing for the reinterpretation of the verbs *come/go* as non-dislocative directive markers.

The necessary evidential basis for Mauri and Sansò's hypotheses, however, is lacking for two reasons that become apparent based on what we have shown in Chapters 4 through 6. With respect to (13), the uses of *come* or *go* that Mauri and Sansò (2011) call non-dislocative

directive markers roughly correspond to attenuated V1 shown in the general classification of multi-verb sequences. We have shown that *come* in the *come-V* sequence is always lexical V1. We have also shown that imperative forms in the *come-V* sequence develop into hortative markers with not only an exhortative meaning, but also a motion meaning, rather than develop into non-dislocative directive markers. By contrast, the *go-V* sequence with attenuated V1 belongs to the aspect and the modality subtypes in the semi-complement type. We have shown that the aspect subtype is a vestige of the sign of aspect and is least frequently used, and that the modality subtype has an only instance, *go figure*. We have shown that *go* as attenuated V1 in the *go-V* sequence does not develop into a non-dislocative directive marker. Therefore, there is no evidence to support Mauri and Sansò's hypothesis in (13).

With respect to (14), Mauri and Sansò's hypothesis itself seems to be implausible. Since we have shown that both the *come/go-V* and the *bare-come/go-and-V* sequences almost always represent single clauses, we have questioned the assumption in (14) that a biclausal construction grammaticalizes into a monoclausal construction. The hypothesis in (14) predicts grammaticalization with respect to the *come/go-V* sequence which does not, in fact, undergo grammaticalization.⁷ It could be concluded that both the *come-V* and the *go-V* sequences are undergoing historical development, but not grammaticalization. This conclusion is reinforced by what Aikhenvald (2010) points out from a typological point of view. Deictic motion verbs have the potential for resulting in imperative markers by virtue of their 'purposeful overtones'. However, it is reasonable to state that the deictic motion verbs *come* and *go* in English have not yet become imperative markers. It is not easy to predict whether or not the deictic verbs *come* and *go* will shift from content words to directive markers in the future.

We can safely draw one conclusion from our discussion so far. The conclusion that we have reached is to confirm (12). From Figures 6.9 and 6.10, both the *come-V* and the *go-V* sequences have both been recently gaining in currency. The deictic motion verbs *come* and *go* involve different motivations behind their historical development. With respect to the *come-V* sequence, the path concerning historical development leads to a hortative-motion device for functioning at the discourse level and frequently occurring in contexts. With respect to the *go-V* sequence, the path concerning historical development leads to three kinds of devices for functioning at the discourse level, a full-motion device, an expressive-motion device, including ironical and hortative, and an aspectual device. Since the *go-V* sequence is not restricted to a specific context, it is fair to state that the frequency of the *go-V* sequences increases holistically. It is, therefore, clear that although both are currently undergoing change, the *come-V* sequence takes a different path from the *go-V* sequence with respect to historical development.

6.2.5 Summary

From a historical standpoint, relying upon COHA, Section 6.2 has revealed differences in the

⁷ Nicolle (2007) suggests that the verb *go* in the *go-V* sequence which not only express, but also functions as a tense of marker, shows grammaticalization without semantic change.

four pairs of semantically competing multi-verb sequences, the *help-V* vs. the *help-to-V* sequences, the *try-and-V* vs. the *bare-try-to-V* sequences, the *come-V* vs. the *bare-come-and-V* sequences, and the *go-V* vs. the *bare-go-and-V* sequences. The most distinctive feature of pairs of semantically competing multi-verb sequences is that one multi-verb sequence, more specifically, the *V-V* sequence has recently been gaining in currency. We have demonstrated that only the ongoing historical development shows a difference between the semantically competing multi-verb sequences. We have also demonstrated that the *V-V* sequence in Present-Day English is undergoing historical development, but not grammaticalization.

6.3 Conclusion

This chapter has emphasized the importance of linguistic function in the interpretation of the quantitative data of multi-verb sequences. It has also identified distinctive features which underlie specific types of multi-verb sequences not only from a functional point of view, but also from a historical point of view. In particular, we have shown that four types of multi-verb sequences discussed in this chapter, the *help-V*, the *bare-try-to-V*, the *come-V*, and the *go-V* sequence, are undergoing historical development but not grammaticalization. We have also shown that the motivations behind their historical development are different from one sequence to another. In the next chapter, to provide an overall picture of multi-verb sequences, we will explore the nature of the *V-Ving* sequence, which is markedly different from other three types of multi-verb sequences, from a syntactic angle, a semantic angle, and a historical angle.

Chapter 7

The *V-Ving* Sequence

To provide an overall picture of multi-verb sequences, this chapter explores the nature of another sequence, that is to say, the *V-Ving* sequence, from a syntactic angle, a semantic angle, and a historical angle. This sequence is significantly different from the other three types of multi-verb sequences. The *V-Ving* sequence embraces the sentences in (1) through (3).

- | | | |
|--------|---|-----------|
| (1) a. | Young children enjoy helping around the house. | (Longman) |
| b. | I don't like talking in public. | (Longman) |
| c. | John isn't here. Try phoning his home number. | (Oxford) |
| d. | It's time to start thinking about the next year. | (Oxford) |
| (2) a. | They sang clasping each other's hands and rocking back and forth. | (COHA) |
| b. | He had to die avenging himself. | (COHA) |
| c. | They drank sitting around Luis's bed, while Tacho rubbed the leg. | (COHA) |
| (3) a. | Let's go swimming this afternoon. | (Longman) |
| b. | The plate went crashing to the floor. | (Longman) |
| c. | He came bearing gifts. | (BNC) |
| d. | It's a secret, so don't go telling everyone. | (Longman) |
| e. | We stood watching the rain fall. | (Longman) |

The examples in (1) belong to the catenative complement type in the full-syntactic-structure group in the general classification of multi-verb sequences. Section 2.4.1 in Chapter 2 has shown that *V-Ving* sequences of the type shown in (1) have been a prolific research area for many years, with a strong emphasis on semantic differences between *to*-infinitives and gerunds. (e.g., Boertian 1979, Bolinger 1968, Dirven 1989, Dixon 1991, Duffley 1999, 2000, 2004, 2006, Duffley and Tremblay 1994, Egan 2008, Freed 1979, Huddleston and Pullum 2002, Kempson and Quirk 1971, Kiparsky and Kiparsky 1970, Langacker 1991, Mair 2003, Quirk et al. 1985, Riddle 1975, Smith and Escobedo 2001, Taylor 1993, Verspoor 1996, 2000, Wierzbicka 1985, Wood 1956). Section 3.2.1.1 in Chapter 3, in particular, has examined the *start/try-ing* sequences in comparison to the *start/try-to-V* sequences, shown in (1c) and (1d). The examples in (2) belong to the clausal adjunct type in the full-syntactic-structure group in the general classification of multi-verb sequences. The examples in (3) belong to the reduced-structure group in the general classification of multi-verb sequences. The verb *go* as the first verb plays a central role in shaping *V-Ving* sequences in the reduced-structure group, just as it plays a central role in shaping *V-to-V*, *V-and-V*, and *V-V* sequences.

We can distinguish clearly between (1) and (2) by using three key factors involved in the distinction between a complement and an adjunct, discussed in Section 2.2.2 in Chapter 2.

Similarly, we can distinguish clearly between (1) and (3), because the gerund-participial in (3) is not a complement. By contrast, the distinction between (2) and (3) seems to be blurred. *V-Ving* sequences of the type discussed in this chapter, shown in (3), received little attention in previous works. Despite their superficial similarities, the examples in (2) and those in (3) are in fact different. Moreover, there are differences among the *V-Ving* sequences in (3), not only from a syntactic standpoint, but also from a semantic standpoint. However, not only the difference between (2) and (3), but also the differences within the examples in (3) have rarely been discussed in the previous studies. Through describing such differences in this chapter, we will show striking features characteristics of *V-Ving* sequences shown in (3).

This chapter is structured as follows. Section 7.1 reviews seven previous studies, focusing on Bolinger (1983). To facilitate our discussion in this chapter, we provisionally divide the *V-Ving* sequences treated in the previous studies into five types. The five types correspond to the five examples in (3). Section 7.1 describes characteristics of the five types and shows that there are four problems that still remain to be treated with respect to an overall picture of the *V-Ving* sequence. Section 7.2 provides the classification of *V-Ving* sequences on the basis of the general classification schema of multi-verb sequences. Section 7.3 demonstrates what the relationship among various types of the *V-Ving* sequences which are related to each other is. Section 7.4 discusses the historical development and semantic change of the *go-Ving* sequence. Section 7.5 offers a conclusion.

7.1 Some Earlier Proposals and Remaining Problems

There are several studies to the *V-Ving* sequence (e.g., Berman 1973, Bolinger 1983, Bourdin 2003, Goldberg 2006, Ross 1972, Salkie 2010, Schlüter 2005, Schönefeld 2012, Silva 1975). The majority of previous studies describe the *go-Ving* sequence. Now we review seven studies, Ross (1972), Berman (1973), Silva (1975), Bolinger (1983), Bourdin (2003), Goldberg (2006), and Salkie (2010). The seven previous studies deal with five types of examples, shown in (3). To facilitate our discussion in this chapter, we provisionally need to illustrate the relationship between the previous studies and the examples in (3). The *V-Ving* sequences in (3) are divided into two groups, the motion group in (3a) through (3c) and the non-motion group in (3d) and (3e). The motion group is further divided into what Bolinger (1983) calls expeditionary type in (3a) and non-expeditionary type in (3b) and (3c). The non-motion group is also divided into the modality type in (3d) and the posture type in (3e). The types covered by the previous studies are summarized in Table 7.

| previous studies | | Ross | Berman | Silva | Bolinger | Bourdin | Goldberg | Salkie |
|------------------|------------------------------|--------|--------|--------|----------|---------|----------|--------|
| | | (1972) | (1973) | (1975) | (1983) | (2003) | (2006) | (2010) |
| group | type | | | | | | | |
| motion | (3a): expeditionary | + | + | + | + | | | + |
| | (3b) (3c): non-expeditionary | | | | + | | + | + |
| non-motion | (3d): modality | | | | + | + | + | + |
| | (3e): posture | | | | + | | | |

Table 7.1. The types covered by the previous studies

It should be noted here that the focus of the previous studies has been shifted from the purely syntactic approach to the semantic approach. We see Silva (1975) as a bridge between Ross (1972) and Berman (1973) on the one hand, and Bolinger (1983) on the other as the cornerstone for the study of the *V-Ving* sequence discussed in this chapter. Sections 7.1.1 through 7.1.3 review the expeditionary type, the non-expeditionary type, and the modality type, respectively. Section 7.1.4 shows that there are four problems that still remain to be treated with respect to an overall picture of the *V-Ving* sequence. Previous studies of the posture type in (3e) will be discussed in Section 7.2.

7.1.1 The Studies of the Expeditionary Type

The *go-Ving* sequence is truly representative of the *V-Ving* sequence of the expeditionary type. Section 7.1.1.1 deals with three syntactic studies, Ross (1972), Berman (1973), and Silva (1975), and Section 7.1.1.2 focuses on one semantic study by Bolinger (1983), which refutes Silva's (1975) claim. We do not deal with Salkie (2010) which adheres to Bolinger (1983).

7.1.1.1 The Syntactic Studies

Ross (1972), Berman (1973), and Silva (1975) deal with the *go-Ving* sequence of the type, shown in (4), and focus on the category, or word class of the *-ing* form.

- (4) a. We're going to go skiing in Colorado this winter. (Longman)
 b. There should be plenty of time to go shopping before we leave New York. (Oxford)

Ross (1972: 73fn) is a starting point for a study of the *V-Ving* sequence discussed in this chapter. Ross mentions that *fishing* as the *-ing* form in (5) is probably a noun.

- (5) He is going fishing. (Ross 1972: 73fn)

Since *fishing* is regarded as a noun, the object comes before the *-ing* form, as in (6).

- (6) He is going shark-fishing. (Ross 1972: 73fn)

The *-ing* form as a noun is confirmed by the unacceptability of (7).

- (7) *He is going drinking beer. (Ross 1972: 73fn)

Berman (1973), based on Ross (1972), provides acceptable and unacceptable examples in (8) and (9).

- (8) I'm going {camping/shopping/visiting/traveling}.
 (9) I'm going {*eating/?dining/*smoking/*working}. (Berman 1973: 403)

Berman claims that there is no generalization about which verbs after *going* are acceptable.

In contrast, Silva (1975) points out that the *-ing* form fails to function like a noun for three reasons. First, the *-ing* form cannot be questioned by *what* or *which*, as in (10).

- (10) *What/Which fishing are you going tomorrow? (Silva 1975: 347)

Second, the *-ing* form cannot be pronominalized by *it*, *that*, or *one*, as in (11).

- (11) *We want to go hunting, but John doesn't want to go {it/that/one}. (Silva 1975: 347)

Third, the *-ing* form cannot be qualified by a nominal modifier, as in (12).

- (12) a. *We're going {our/some/good} fishing.
 b. *We're going fishing that last all day. (Silva 1975: 347)

Silva also points out that the *-ing* form responds to the question *where*, as in (13).

- (13) Where are you going? Fishing. (Silva 1975: 347)

Silva claims that the *-ing* form is regarded as an adverbial, rather than a noun or a verb.

However, Bolinger (1983) refutes Silva's claim. He argues that the *-ing* form in the *go-Ving* sequence of the expeditionary type is a verb from a semantic standpoint. Bolinger's (1983) findings will be reviewed in Section 7.1.1.2. It should be noted here that the examples in (4) through (13) is not a direct indication that the *go-Ving* sequence of the expeditionary type constitutes a fully syntactic biclausal structure.

7.1.1.2 The Semantic Studies

Silva (1975) shows that the approach to the *go-Ving* sequence only from a syntactic standpoint is of limited importance. We see Silva (1975) as a bridge between the purely syntactic approach and the semantics-centered approach to the *go-Ving* sequence of the expeditionary type, because Silva (1975) takes a semantic approach in addition to the syntactic approach mentioned in Section 7.1.1.1. From a semantic standpoint, Silva states that the *-ing* forms refer to activities

which have four characteristics, shown in (14).

- (14) a. The activity is recreational.
 b. The activity is physical.
 c. The activity is relatively unstructured as far as game-like rules are concerned.
 d. In carrying out the activity, there is continued motion from one undetermined location to another. (Silva 1975: 348-349)

To confirm (14a) through (14d), Silva shows that it is impossible to use the *-ing* forms expressing non-recreational activities, as in (15), the one expressing non-physical activities, as in (16), the one expressing physical or recreational activities that are structured in a game-like manner, as in (17), and the one expressing physical or recreational activities involving movement that is constrained to occur within a relatively small radius, as in (18).

- (15) a. *He's going working
 b. *He's going teaching.
 c. *He's going studying.
 d. *He's going farming.
 (16) a. *She went puzzle solving.
 b. *She went day-dreaming.
 c. *She went mediating.
 (17) a. *Let's go racing.
 b. *Let's go polo-playing.
 (18) a. *They've gone fungo-catching.
 b. *They've gone boxing.
 c. *They've gone piano-playing.
 d. *They've gone wrestling. (Silva 1975: 349)

With respect to (14d), she also points out that the *go-Ving* sequence does not occur with a very precise specification of place, as in (19) and (20).

- (19) a. He went fishing up north.
 b. ?He went fishing under the willow by the pier.
 c. *He went fishing at the marked spot.
 (20) a. She went shopping downtown.
 b. ?She went shopping at the Petite Boutique.
 c. *She went shopping at the wig counter. (Silva 1975: 348)

The four semantic characteristics in (14) presented by Silva (1975) are, therefore, regarded as a touchstone of the *go-Ving* sequence.

Bolinger (1983) presents the earliest research on the *go-Ving* sequences used in a variety of ways, shown in (21).

- (21) a. expeditionary type: Marie and Donna went cycling yesterday. (Bolinger 1983: 153)
 b. non-expeditionary type: She went crying to her mother. (Bolinger 1983: 153)
 c. non-expeditionary type: He went breezing by. (Bolinger 1983: 158)
 d. modality type: Don't go smearing my canvas! (Bolinger 1983: 155)

Now we deal with the expeditionary type in (21a), and in the following subsections we will deal with the non-expeditionary and the modality types in (21b) through (21d). Bolinger (1983: 153) defines the *go-Ving* sequence in general as follows:

- (22) *Go+-ing* matches *be+-ing* in merging the gerundial and participial uses of *-ing* into a single progressive-type construction that can be used in a variety of ways, all associated with the meanings of *go*.

With respect to the expeditionary type, he scrutinizes Silva's four semantic characteristics shown in (14). He points out that (14d) with slight modification is all that is needed. Stated another way, (14a), (14b), and (14c) are incorrect.

With respect to (14a), the four unacceptable examples in (15) do not necessitate the recreational criterion, because (14d) rules out those examples. Since *working*, *teaching*, and *studying* in (15a) through (15c) can be carried out on one spot, (14d) is the one that is violated. Since *farming* in (15d) is a steady occupation which does not involve movement, (14d) is violated. Bolinger states that there are plentiful non-recreational instances. The sentences in (23) are the examples.

- (23) a. Where's Joe? He's gone looking for his brother.
 b. There's no time to go soliciting today. We need you in the office.
 c. What good is an employee of a collection agency who never goes collecting?
 (Bolinger 1983: 154-155)

Bolinger (1983: 155) points out that the expeditionary *go-Ving* sequence requires one condition in (24).

- (24) The expeditionary *go-Ving* sequence expresses not only motion, but also normally structured activity which is iterated.

With respect to (14b), alleged evidence in (16) can be accounted for by the lack of motion. If *go meditating* expresses both motion and iterated activity, *go meditating* in (25) is acceptable.

(25) Marie has a yoga class. She's gone meditating every day this week.

(Bolinger 1983: 158)

Bolinger also claims that game-like rules in (14c) are not a real condition. If *go polo-playing* expresses both motion and iterated activity, *go polo-playing* is acceptable, as in (26).

(26) Ken used to go polo-playing with me when I was playing professionally.

(Bolinger 1983: 158)

The reason why *Let's go polo-playing* in (17b) is unacceptable is that *go polo-playing* expresses the movement which is constrained to occur within a relatively small radius. For these reasons, (14d) is the only remaining condition. Bolinger (1983: 156) makes a small modification to (14d). The restatement is as follows:

(27) *Ving* in the expeditionary *go-Ving* sequence represents 'a PROGRESSIVE that involves relatively UNRESTRICTED LOCOMOTION'.

Bolinger does not say clearly what the term 'unrestricted locomotion' is. However, we can infer that unrestricted means not occurring with a very precise specification of place, and that locomotion means motion accompanying normally structured activity which is iterated. Thus, unrestricted locomotion means that motion accompanying normally structured activity which is iterated does not occur with a very precise specification of place.

Bolinger (1983) argues that the *go-Ving* sequence represents a combination of the *be*-progressive and the semantic content of *go*. To be a progressive, the *-ing* form must be a verb, not an adverb nor a noun.¹ Bolinger states that the idea that the *-ing* form is a verb is reinforced by the fact that the *-ing* form in the *go-Ving* sequence can take a plain object (cf. Silva 1975). The easiest case is where the plain object is a locative, as in (28).

(28) a. Where's the other squad? They've gone scouring the countryside for more recruits.

b. Where's Lavinia? She's gone prowling the streets again. (Bolinger 1983: 156)

¹ Bolinger (1983) shows that the stepwise relationships in (i) through (iii) point to a close tie between the *be*-progressive and the expeditionary *go-Ving* sequence.

(i) Where's John? He is (a-)fishing.

(ii) Where's John? He is out {off / away} fishing.

(iii) Where's John? He's gone fishing.

(Bolinger 1983: 162)

It is clear that the *be*-progressive is regarded as something more than a combination of non-stative *be* and *-ing* form. At this point, Bolinger states that nothing is left to make the *go-Ving* sequence different grammatically from the *be*-progressive. It is natural that the *go-Ving* sequence represents a combination of the *be*-progressive and the semantic content of *go*.

He also shows that there are non-locative plain objects that leave the subject free to range far and wide, as in (29).

- (29) a. Where are the kids? They've gone collecting bottles.
 b. I hear they've gone spreading rumors.
 c. I think he's gone chasing rainbows for the last time. (Bolinger 1983: 156-157)

Bolinger points out that the reason why (30) is acceptable is that hunting quail which involves ranging over hill and dale satisfies the condition of relatively unrestricted locomotion.

- (30) Where are the boys? They've gone hunting quail. (Bolinger 1983: 157)

Since the expeditionary *go-Ving* sequence is construed as an activity, involving the relatively unrestricted locomotion, the activity must continue for a period of time.

7.1.2 The Studies of the Non-Expeditionary Type

In Section 7.1.2, we deal with Bolinger (1983), Goldberg (2006), and Salkie (2010). Bolinger (1983) shows that (31) and (32) are the typical examples of the non-expeditionary type.

- (31) They came bearing gifts. (Bolinger 1983: 153)
 (32) He went breezing by. (Bolinger 1983: 158)

He points out that the non-expeditionary type satisfies one condition in (33).

- (33) The first verb and the second verb represent simultaneous or overlapping activities.

There is an important difference between (31) and (32). Bolinger states that the *-ing* form in (31) functions like an adverbial modifying the main verb. (31), in fact, responds to the question *how*, as in (34).

- (34) How did they come? – They came bearing gifts. (Bolinger 1983: 158)

In contrast to (34), the *-ing* form in (32) cannot be questioned easily with *how*, as in (35).

- (35)*How did George go? – He went breezing by. (Bolinger 1983: 158)

Bolinger argues that the independence of the main verb in (32) has been weakened. More specifically, he claims, the main verb in the *V-Ving* sequence, shown in (32), has been reduced to a kind of auxiliary.

Goldberg (2006) describes the *V-Ving* sequence corresponding to the non-expeditionary

go-Ving sequence in (31) and (32) from a Construction Grammar perspective. She states that the *V-Ving* sequence is not completely general. The *V-Ving* sequence serves to illustrate the partial productivity and idiosyncrasy in the argument structure pattern, with its syntactic and semantic constraints. She calls the *V-Ving* sequence in (36) the VVingPP construction.

(36) The toddler went screaming down the street. (Goldberg 2006: 50)

Syntactically, she claims that the first verbs in the VVingPP construction are limited to *come*, *go*, *run* and *take off*, and that PP is a directional complement. The directional complement is an argument of the first verb, not of the second verb. The second verb in the VVingPP construction cannot take its own arguments, as in (37).

(37) *Bill went whistling a tune down the street. (Goldberg 2006: 51)

Moreover, with respect to position, the PP is fronted in (38b). However, the VingPP is not fronted in (38c).

(38) a. Bill went screaming down the hill.
 b. Down the hill Bill went screaming.
 c. ??Screaming down the hill Bill went. (Goldberg 2006: 52)

The contrast between (38a) and (38b) reinforces the idea that the PP is an argument of the first verb. Semantically, she claims that the activity described by the second verb must be construed as being extended over a period of time or iterative. While (39a) is interpreted as a single action, jumping in (39b) is always interpreted as iterative.

(39) a. Bill jumped off the bridge.
 b. Bill went jumping off the bridge. (Goldberg 2006: 52)

Goldberg states that the second verb in (39b) has an adverbial meaning.

The VVing PP construction can be represented in Table 7.2.

| | | |
|---|-------------|--------------|
| Sem: MOVE | in a Manner | along a Path |
| | | |
| Syn: V _ε [go, come, run, take off] | Ving | (oblique) |

Table 7.2. The VVingPP construction (Goldberg 2006: 52)

We claim that Goldberg's VVingPP construction includes two types of VVingPP construction. As shown in (40b), *screaming* in (40a) is omissible.

- (40) a. Bill went screaming down the hill.
b. Bill went down the hill.

Went down the hill in (40a) conveys the same meaning as *went down the hill* in (40b). By contrast, as shown in (41b), *jumping* in (41a) cannot be omitted.

- (41) a. Bill went jumping off the bridge.
b. ?Bill went off the bridge.

Went off the bridge in (41a) does not convey the same meaning as *went off the bridge* in (41b), because *jump off the bridge* in (41a) is construed as a single unit.

Salkie (2010) divides non-expeditionary *V-Ving* sequences into two types and calls them the adverbial and the adjectival type, as shown in (42).

- (42) a. Adverbial: We went staggering sideways.
b. Adjectival: Mom went screaming out of the house. (Salkie 2010: 181)

With respect to the adverbial type, the *-ing* form in (42a) and (43) functions as an adverbial specifying the manner of motion.

- (43) a. Boxes and baggage went tumbling; our comrades swore and wrestled against the tatty netting, even as it grew tighter around us.
b. As she read the words, written in a flowing feminine hand, the oddest sensation went lurching through her. (Salkie 2010: 177)

The *-ing* form in the adverbial type is not straightforward manner adjunct, because it is not omissible, as in (44).

- (44) a. Unlike some of his old friends, she was not the sort of person to go stumbling helplessly into holes.
b. *Unlike some of his old friends, she was not the sort of person to go helplessly into holes. (Salkie 2010: 178)

Salkie points out that *go stumbling* in (44a) is more of a single unit than a combination of motion verb *go* and manner of motion *stumbling*. With respect to the adjectival type, he claims, the *-ing* form in (42b) in (45) functions like an adjective modifying the subject.

- (45) a. “You noticed a lot before you ran screaming down the corridor,” said Thomas spitefully.
 b. Then as four pints of blood spurted from his gaping wounds, he staggered screaming to the nearby home of 63-year-old Mavis Clark. (Salkie 2010: 179)

The *-ing* form in (42b) and (45) respond to the question, *what was the subject like?*

From the above discussion of the non-expeditionary type, it seems that the non-expeditionary type has some subtypes. We will discuss the non-expeditionary type in greater detail in Section 7.2.

7.1.3 The Studies of the Modality Type

In Section 7.1.3, we deal with Bolinger (1983), Bourdin (2003), and Goldberg (2006). We do not deal with Salkie (2010) which adheres to Bolinger (1983) and Bourdin (2003).

Bolinger shows that (46) where the *go-Ving* sequence expresses a willful act represents the clearly modal import of *go*, and that the first verb *go* has been reduced to a kind of auxiliary and means something that is wrong or bad.

- (46) a. Don't go blabbing on your sister.
 b. If they go stirring up trouble I'll have the law on them.
 c. Why does he go messing up my desk every time he comes here?
 (Bolinger 1983: 162-3)

He also points out that the modal *go-Ving* sequence is constrained by inflection to some extent, as in (47).

- (47) a. *You always went blaming me for everything.
 b. *She always goes blaming me for everything.
 c. ?He had gone messing up my desk again. (Bolinger 1983: 163)

The past participle form of *go* is marginally acceptable, as in (47c).² He claims that *go* in the modality type represents its quasi-auxiliary status.

Bourdin (2003) gives special attention to the *go-Ving* sequence of the modality type, shown in (48).

² Bolinger (1983) points out that if the least literal or figurative locomotion is indicated, other forms of *go* are acceptable, as in (i), (ii), and (iii).

- (i) If your friend goes shooting off his mouth again, I'll fix him.
 (ii) Why every chance they get have they always gone beating up on everybody?
 (iii) They went firing up all the old hatreds. (Bolinger 1983: 163)

- (48) a. Sitting there now is okay, but if you go sitting there past midnight, you're going to get picked up by the police. (Spears 1982: 865)
- b. If you're the little one, don't go bringing your big brother round here. (BNC, Bourdin 2003: 107)

Go in the *go-Ving* sequence of the modality type functions as a marker of evaluative modality, which signals a speaker's attitude towards a situation that the speaker specifically views as deviating from her own personal assumptions or expectations about what is right or desirable. In a detailed and exact way, the *go-Ving* sequence of the modality type shows what Bourdin calls the interpersonal quality. The interpersonal quality is equivalent to a speaker's subjective evaluation which tends to be contingent upon particular circumstances or fraught with interpersonal conflict, because the norm being violated tends to be perceived as deviation or dissonance from a standard, rule, principle, or convention that is considered to be fundamentally right. *Go* emphasizes undesirability in the eyes of the speaker. For instance, (48a) implies that it is common courtesy not to sit there past midnight, and that the speaker would expect that sort of behavior. Bourdin (2003) goes one step further than Bolinger (1983), because Bourdin (2003) points out that the *go-Ving* sequence of the modal type expresses the interpersonal quality of modal meanings.

Goldberg also calls the *V-Ving* sequence in (49) the *GoVingPP* construction where the first verb is limited to *go*.

- (49) You shouldn't go reading the newspaper all day. (Goldberg 2006: 52)

The *GoVingPP* construction in (49) is completely different from the *VVingPP* construction in (36). With respect to inflection, *go* is usually in the bare form. Based on the fact that *go* in the *GoVingPP* construction does not express motion from a semantic standpoint, *go* in the *GoVingPP* construction does not license a directional PP from a syntactic standpoint. Unlike the second verb in the *VVingPP* construction, the second verb in the *GoVingPP* construction takes its own arguments. *The newspaper* in (49) is a complement of *read*, not *go*. From a semantic standpoint, the *GoVingPP* construction is interpreted as an instantaneous action, as in (50).

- (50) Pat'll go telling Chris what to do, you'll see. (Goldberg 2006: 53)

The *GoVingPP* construction implies that there is something negative about performing the action shown by the *VingPP* in the *GoVingPP* construction. The speaker in (50) disapproves of Pat's telling Chris what to do.

The *GoVing PP* construction, Goldberg argues, can be represented in Table 7.3.

| | | |
|-------------|--|---------------------------|
| Pragmatics: | The action designated by VP is construed negatively by the speaker | |
| Sem: | Action type | |
| | | |
| Syn: | <i>go</i> | [Ving.....] _{vp} |

Table 7.3. The *GoVing*PP construction (Goldberg 2006: 53)

Goldberg presents one important finding. There are some syntactic and semantics evidence to distinguish the *VVing*PP construction from the *GoVing* PP construction. With respect to the modality type, Bolinger, Bourdin, and Goldberg do not explain what triggers the modal meaning of the *go-Ving* sequence.

7.1.4 Problems

There are four remaining problems to be dealt with here. The first problem, which is related to an overall picture of the *V-Ving* sequence, concerns the first question of the two key questions in this dissertation posed in Section 2.3 in Chapter 2. It is what the semantic and syntactic relationships between the first and the second verbs in the *V-Ving* sequences are. The first problem includes one specific question concerning the types to be recognized. In Sections 7.1.1 through 7.1.3, we have shown that there are five types of *V-Ving* sequences in the previous studies. However, the sentences in (51) are difficult to classify, according to the five types.

- (51) a. Another chance goes begging. (CWO)
 b. A tremendous idea had come pounding up I his head. (CWO)
 c. I tripped and went sprawling. (Oxford)
 d. She went fainting over guys.

Moreover, we have shown that the non-expeditionary type can be further divided into several types. We need to show how many types there are in the *V-Ving* sequence. The second problem concerns the second question of the two key questions, which is what the relationship among various types of the *V-Ving* sequences which are related to each other is. The third problem that we are left with is whether or not there is a dividing line between the expeditionary type on the one hand, and the non-expeditionary and the modality types on the other. It seems that the expeditionary type is slightly different from the non-expeditionary and the modality types. The fourth problem is whether or not the *V-Ving* sequence is associated with what Bolinger (1983) calls auxiliary-formation. In the following sections in this chapter, we will deal with these four problems by clarifying the nature of the *V-Ving* sequence.

7.2 The Classification of *V-Ving* Sequences

This section will provide a classification of *V-Ving* sequences based on the general classification schema of multi-verb sequences. Based on the general classification schema of multi-verb sequences, the *V-Ving* sequence is syntactically divided into two groups, the full-syntactic-structure group and the reduced-structure group. We will deal with the full-syntactic-structure group in Section 7.2.1 and the reduced-structure group in Section 7.2.2.

7.2.1 The Full-Syntactic-Structure Group

As mentioned in Chapter 2, from a syntactic point of view, the full-syntactic-structure group involves two verb phrases and falls into three types, the catenative complement type, the clausal adjunct type, and the coordinated clause type. However, the *V-Ving* sequence is not related to the coordinated clause type due to the lack of a conjunction *and*. From a semantic point of view, the first verb in the *V-Ving* sequence is divided into two, lexical V1 and attenuated V1. In the catenative complement and the clausal adjunct types, attenuated V1 are, in fact, nonexistent.

In the catenative complement type, there are many first verbs that can take the *-ing* forms as gerunds, as in (52).

- | | | |
|---------|--|-----------|
| (52) a. | I vaguely remember reading something about it in the paper. | (Longman) |
| b. | I finished typing the report just minutes before it was due. | (Longman) |
| c. | I don't mind driving if you're tired. | (Longman) |
| d. | Dana admitted feeling hurt by what I had said. | (Longman) |
| e. | John prefers having morning meetings. | (Longman) |
| f. | Paul hates having his picture taken. | (Longman) |

We have discussed the *V-Ving* sequences with lexical V1 in the catenative complement type in Section 3.2.1.1 in Chapter 3, by providing the *start-Ving* and the *try-Ving* sequences as representative examples. Here we reiterate two important features shown in Section 3.2.1.1 in Chapter 3. One is that the integrity or inseparability of the sequence of the first and second verbs in the catenative complement type is not strong. The other is that the *Ving* in the *V-Ving* sequence of the catenative complement type has the temporal property of gerund-participial clause mentioned in Section 2.4.1.2 in Chapter 2, shown in (53).

- (53) There is no time lag between the situation described by the first verb and the one by the gerund-participial clause.

In the clausal adjunct type, the word sequence after the first verb functions as a clausal adjunct. If the first verb is intransitive, there are many instances that fall into the clausal adjunct type, as in (54).

- (54) a. His first wife died giving birth to their only daughter. (BNC)
 b. He left looking quite pleased. (BNC)
 c. He smiled remembering the word. (COHA)
 d. He shouted sticking his head in at the bedroom door. (COHA)
 e. I've nearly wept reading some of the reviewers of the shows. (COHA)
 f. They had talked looking into each other's eyes. (COHA)

From a syntactic standpoint, the clausal adjuncts in (54) have the properties of adjuncts in terms of the three factors, licensing, obligatoriness, and position mentioned in Section 2.2.2 in Chapter 2. With respect to licensing, the clausal adjuncts in (54) are not licensed by the first verb. With respect to obligatoriness, the clausal adjuncts are optional, as shown by the comparison with (54a) and (54b) on the one hand and (55a) and (55b) on the other.

- (55) a. His first wife died.
 b. He left.

With respect to position, clausal adjuncts are typically mobile, as in (56).

- (56) a. Giving birth to their only daughter, his first wife died.
 b. Looking quite pleased, he left.

Since the integrity or inseparability of the sequence of the first and second verb is not strong, a word or more than one word can be inserted between the first and the second verbs, as in (57).

- (57) a. His first wife died in the hospital giving birth to their only daughter.
 b. He left for Paris looking quite pleased.

From a semantic standpoint, the clausal adjunct type, in most cases, provides circumstantial information about the when, how or why of a situation.

It is also necessary to discuss the temporal nature of the clausal adjunct type. The clausal adjunct type in the full-syntactic-structure group in many cases expresses the situation where what the second clause expresses is described as occurring simultaneously with the first verb, because (54a) and (54b) mean basically the same as (58a) and (58b).

- (58) a. His first wife died during the time that she was giving birth to their only daughter.
 b. He left for Paris in a quite pleased state of mind.

From (58a) and (58b), there is no time lag between the situation described by the first verb and the gerundive-participial clause in (54a) and (54b). Although each sentence in (54) does not involve a catenative complement, it is fair to state that the *Ving* in the *V-Ving* sequence in the

clausal adjunct type retains the temporal nature of gerund-participial clause mentioned in Section 2.4.1.2 in Chapter 2.

7.2.2 The Reduced-Structure Group

As mentioned in Chapter 2, from a syntactic point of view, the reduced-structure group has a reduced structure and falls into two types, the semi-complement type and the adjunct/oblique type. From a semantic point of view, the first verb in the *V-Ving* sequence is divided into two, lexical V1 and attenuated V1. In the semi-complement type, lexical V1 is virtually nonexistent. We will deal with the semi-complement type in Section 7.2.2.1 and the adjunct/oblique type with lexical V1 in Section 7.2.2.2. In the adjunct/oblique type, attenuated V1 is virtually nonexistent.

7.2.2.1 The Semi-Complement Type

In the semi-complement type, the word sequence after the first verb behaves like a non-finite complement of the first verb and is in the semantic scope of the first verb, and the sequence is virtually obligatory. The semi-complement in the *V-Ving* sequence type has one semantic subtype, the modality subtype in (59) which corresponds to the modality type in Section 7.1.3.

- (59) a. Don't you go thinking it was your fault. (Collins)
 b. Don't go getting yourself into trouble. (Oxford)

Since the verb *go* in (59) does not express motion, the first verb in the semi-complement type is attenuated V1. As mentioned in Section 7.1.3, the first verb in the modality subtype is limited to the verb *go*. From a syntactic point of view, no word can be inserted between the first verb *go* and *Ving*, as in (60).

- (60) a. *Don't you go further thinking it was your fault.
 b. *Don't go anywhere getting yourself into trouble.

The strong integrity or inseparability of the sequence of the first and second verbs is observed in (60). It is fair to state that the strong integrity is a true indication that the *V-Ving* sequence in (59) has a reduced structure.

From a semantic point of view, the verb *go* functions as a marker of evaluative modality that signals the modal notion of counter-normativity. The modality subtype expresses an abnormal situation leading away from a normal course of events. Specifically, it expresses disapproval. In this respect, it is obvious that the modal marker *go* in the *go-Ving* sequence inherits the characteristics of the negative evaluative use of *go*, mentioned in Section 2.4.2 in Chapter 2. It should be noted here that the modality subtype in the *go-Ving* sequence which expresses disapproval is subtly different from the one in the *go-to-V/VP*, the *go-and-V/VP*, and the *go-V/VP* sequence which expresses a variety of emotive meaning, such as annoyance,

astonishment, disapproval, foolishness, surprise, and wonder, mentioned in Chapters 3 through 5. According to Bourdin (2003), the modality subtype of the *V-Ving* sequence has the interpersonal quality which is equivalent to a speaker's negative evaluation which tends to be 'contingent upon particular circumstances' or 'fraught with interpersonal conflict.'

7.2.2.2 The Adjunct/Oblique Type: Lexical V1

In the adjunct/oblique type, the word sequence after the first verb is not the scope of the first verb, but it is semantically either like an oblique argument of the first verb such as goal argument or like an adjunct of the first verb such as manner adverbials, as mentioned in Section 2.3 in Chapter 2. As far as we know, lexical verbs as the first verbs are limited to *come*, *go*, *run*, *sit*, and *stand*. The adjunct/oblique type with lexical V1 of the *V-Ving* sequence is semantically divided into five subtypes, the motion-purpose, the motion-manner, the motion-subject-depictive, the posture-subject-depictive, and the motion-result subtypes. The motion-purpose and the posture-subject-depictive subtypes correspond to the expeditionary and the posture types, respectively. We divide the non-expeditionary type into two subtypes. The two subtypes are the motion-manner and the motion-subject-depictive subtypes. The motion-result subtype is not treated in previous studies.

First, the motion-purpose subtype corresponds to the expeditionary type. In the motion-purpose subtype, the first verbs are limited to *come* and *go*, as in (61) and (62).

- (61) a. He came looking for me. (CWO)
 b. Want to come shopping with me? (Bolinger 1983: 153)
- (62) a. I need to go shopping this afternoon. (Longman)
 b. He never wore denims, went swimming, rode a bike, or ate greens. (Longman)

From a syntactic point of view, no word can be inserted between the first verb and the second verb, as in (63).

- (63) a. We went shopping.
 b. *We went further shopping.

The *-ing* form cannot be omitted, as in (64a), and it is not fronted, as in (64b).

- (64) a. ?We went.
 b. *Shopping, we went.

From (63) and (64), the strong integrity or inseparability of the sequence of the first and the second verbs is observed in (63b) and (64b). This strong integrity is a direct indication that the motion-purpose subtype has a reduced structure. Moreover, the fact that the first and the second verbs in (63a) cannot take adverb phrases independently, as in (65), indicates that the

motion-purpose subtype involves a reduced structure.

(65) *At five we went shopping at eight.

From a semantic point of view, the first verb expresses deictic motion, and what appears to be the second verb phrase functions as a purpose. The *V-Ving* sequence represents not only the deictic motion which must be construed as being extended over a period of time, but also the deliberate activity where what appears to be the second verb phrase expresses is described as expected to occur after the time of the first verb. With respect to the temporal relationship between the first and the second verbs, the *V-Ving* sequence in the motion-purpose subtype is similar to the *V-to-V*, the *V-V*, and the *V-and-V* sequences in the motion-purpose subtype where motion which the first verb expresses and the activity which what appears to be the second verb phrase expresses occur sequentially.

The *V-Ving* sequence in the motion-purpose subtype has one semantic feature which is different from the *V-to-V*, the *V-V*, and the *V-and-V* sequences. The goal in the *go-to-V*, the *go-and-V*, or the *go-V* sequence is a restricted area or a specific place. For instance, (66a), (66b), and (66c) imply a restricted area or a specific place such as a grocery store.

- (66) a. They go to buy ten eggs every day.
 b. They go and buy ten eggs every day.
 c. They go buy ten eggs every day.

By contrast, Bolinger (1983) points out that the goal in the *go-Ving* sequence in (67) is such an unrestricted area as a shopping area, a shopping mall, or one or more shops, even if it may be just around the corner.

(67) They go shopping every day.

The goal in (67) is not a restricted area or a specific place like a grocery store.

We need to discuss the temporal property of gerund-participial clause mentioned in Section 2.4.1.2 in Chapter 2. If the *-ing* form in the motion-purpose subtype retains the temporal nature of the gerund-participial clause, there is no time lag between the first verb and the second verb, that is to say, the *-ing* form. In fact, there is some time lag between them. In this sense, this sequence may be atypical. However, what the *V-Ving* sequence expresses can be construed as being extended over a period of time, not only because of the deictic motion that the *V-Ving* sequence expresses, but also because of the meaning expressed by the *-ing* form, that is to say, the continuation, the duration, or the repetition that the *-ing* form in the *V-Ving* sequence expresses. Such an extended nature is typical of gerund-participials. We will discuss the temporal property of the motion-purpose type in detail in Section 7.3.

In the motion-purpose subtype, there are some examples where metaphorical deictic motion

is expressed. The sentences in (68) are some examples.

- (68) a. Trouble comes calling. (CWO)
 b. Another chance goes begging. (CWO)

Since *come* in (68a) retains its original deictic motion meaning of *come*, (68a) means that trouble falls on the speaker. (68b) means that everyone can jump at the chance. Moreover, the fixed form *going begging* in (69) means that the subject is available because nobody else wants it.

- (69) a. There is other housing going begging in town.
 b. I'll have that last cake if it's going begging.

In (69) an ironic situation is described.

The second subtype in our classification is the motion-manner subtype, which corresponds to Bolinger's non-expeditionary in (31), Goldberg's V VingPP construction in (38a), and Salkie's adverbial type in (42a). In the motion-manner subtype, the first verbs are limited to *come* and *go*, as in (70) and (71), and the second verb always represents a manner of motion.

- (70) a. All these peculiar creatures came prowling round to steal it. (CWO)
 b. Nora came scampering down the aisle. (CWO)
 c. The gas came creeping across the pool like a mist. (CWO)
 d. When Paul went down to dinner, the music of the orchestra came floating up the elevator shaft to greet him. (CWO)
 (71) a. I never go wandering round ships to buy clothes for myself. (CWO)
 b. Thousands of snakes escape from their building site nest and go slithering into town. (CWO)

The first verb expresses deictic motion, and the second verb functions as adverbial phrase. Sometimes a touch of hyperbole is involved in the *V-Ving* sequence, as in (72).

- (72) a. The window next to me literally exploded and shards of glass came flying at me. (Collins)
 b. Schoolboy Bobby Dennison had a narrow escape when the car missed him by inches as he crossed a road with a friend. It hit a parked car then hit the kerb and went flying round the corner on to the main road. (CWO)

It should be noted here that deictic motion which the first verb expresses and a manner of motion which the second verb expresses occur simultaneously. This indicates that the *V-Ving* sequence matches the temporal property of gerund-participial.

From a syntactic standpoint, the weak integrity or inseparability of the sequence of the first and the second verbs seems to be observed in (73b).

- (73) a. He came striding into the room.
 b. He came confidently striding into the room. (COHA)

It should be noted here that (73b) can be classified as the clausal adjunct type in the full-syntactic-structure group. In (73a) the semantic overlap between the verb *come* and the verb *stride* is usually observed, but in (73b) such a semantic overlap is ambiguous. In some sense, the adverb-insertion in (73b) allows the semantic non-overlap between the first and the second verbs.

In the motion-manner subtype, there are some instances where metaphorical deictic motion is expressed. The *V-Ving* sequence in (74) and (75) represents metaphorical deictic motion, and the second verb functions as an adverbial.

- (74) a. Her fury will come buckling to the surface along with the same old problems. (CWO)
 b. A tremendous idea had come pounding up in his head. (CWO)
 c. His ambition to succeed came burning through his dossier. (CWO)
- (75) a. Price went spiraling upwards. (CWO)
 b. A photograph went winging around the world this week. (CWO)
 c. The vision went flying like a rocket. (CWO)
 d. All these things went flashing over my head. (CWO)
 e. His arrogance went marching on. (CWO)

The third type in our classification is the motion-subject-depictive subtype, which corresponds to part of Bolinger's non-expeditionary in (32) and Goldber's VVingPP construction in (41a), and to Salkie's adjectival type in (42b) in the non-expeditionary type. In the motion-subject-depictive subtype, the first verbs are limited to motion verbs such as *come*, *go*, *run*, and some verbs expressing actions that accompany motion, as in (76)³

- (76) a. A while later the medical examiner came puffing in with his little black bag,
 followed by a police photographer. (CWO)
 b. Orphan turned away and went weeping over the pool on the stepping-stones. (CWO)
 c. Evidently sensing intruders in the ditch, the children ran shrieking toward the
 village. (CWO)

³ Salkie (2010: 179) points out one instance where the form of a verb is passive, as in (i).

(i) TV girl Yvette Fielding was dragged screaming behind a horse when a stunt backfired.

- d. Then as four pints of blood spurted from his gaping wounds, he staggered screaming to the nearby home of 63-year-old Mavis Clark. (Salkie 2010: 179)

The *V-Ving* sequence in the motion-subject-depictive subtype has two interesting features. As Goldberg (2006) and Salkie (2010) have pointed out, one is that the first verb is required to take a prepositional phrase as a directional complement. The other is that the second verb functions as subject-depictive. The first verb expressing motion should be simultaneous with the second verb functioning as subject-depictive. This indicates that the *V-Ving* sequence in the motion-subject-depictive subtype matches the temporal property of gerund-participial.

From a syntactic standpoint, as Goldberg has pointed out, the VingPP in the VVingPP is not fronted, as in (77).

- (77) a. He went crying into his father's office.
b. *Crying into his father's office, he went.

Moreover, the strong integrity or inseparability of the sequence of the first and the second verbs is observed in (78).

- (78) a. He went crying into his father's office.
b. *He went really crying into his father's office.

From (77) and (78), it is fair to state that the motion-subject-depictive subtype has a reduced structure.

The fourth subtype, the posture-subject-depictive subtype, is similar to the motion-subject-depictive subtype. In the posture-subject-depictive subtype, the first verbs are limited to the posture verbs *sit* and *stand*, as in (79).

- (79) a. He sat drying himself in the sun with a towel around his neck. (COHA)
b. The bridegroom stood waiting for the ceremony. (COHA)

In the *V-Ving* sequence in the posture-subject-depictive subtype, the second verb functions as subject-depictive. Duffley (2006) points out that this feature is reinforced by the fact that the function of the *-ing* form in (80a) is almost the same as that of the adjective in (80b).

- (80) a. He stood brooding in the corner.
b. He stood silent in the corner. (Duffley 2006: 9)

Furthermore, the first verb expressing motion/posture should be simultaneous with the second verb functioning as subject-depictive. This indicates that the *V-Ving* sequence in the posture-subject-depictive subtype matches the temporal property of gerund-participial clause.

From a syntactic point of view, Quirk et al. (1985: 506) calls the gerund-participial clause in (79) ‘obligatory adjunct’, which in our term is an argument.⁴ According to Quirk et al. (1985), (81a) and (81b) are unusual, though they are not ungrammatical or unacceptable.

- (81) a. ?He sat.
b. ?He stood.

From (80) and (81), the strong integrity or inseparability of the sequence of the first and the second verbs is observed in the posture-subject-depictive subtype. Just like the weak integrity of the motion-manner subtype in (73), however, an apparent weak integrity of the sequence of the first and the second verbs is observed in (82) and (83).

- (82) a. He stood talking for a few minutes.
b. He stood in the room talking for a few minutes.
(83) a. He sat sipping his drink.
b. He sat in the room sipping his drink.

(82b) and (83b) can in fact be classified as the clausal adjunct type in the full-syntactic-structure group. Huddleston and Pullum (2002: 1225) point out that if we add a locative phrase, as in (82b) and (83b), the gerund-participial clause is easily omissible, as in (84).

- (84) a. He stood in the room.
b. He sat in the room.

The final type discussed is the motion-result subtype. As far as we know, the first verb in the motion-result subtype is limited to the verb *go*. There is a clear dividing line between the motion-result subtype on the one hand, and the motion-purpose, the motion-manner, and the motion/posture-subject-depictive subtypes on the other hand. The motion-result subtype in (85) is semantically different from the other three subtypes.

- (85) a. I tripped and went sprawling. (Oxford)
b. My hair freezes on my neck to see her on the other side of the bar. I get a prickle down my back and I go fainting and weak all over. (CWO)

The second verb represents a resulting state in (85). In (85a), for instance, the speaker describes the situation that I lay with my arms and legs spread out in an awkward, careless way, as a result

⁴ Quirk et al. (1985) point out that the basic meaning of the first verb in *he sat sipping his drink* is weakened. This is similar to Bolinger’s view that the main verb in the *V-Ving* sequence, shown in *she sat looking at me suspiciously*, has been reduced to a kind of auxiliary.

of tripping on a stone. From a syntactic standpoint, the strong integrity or inseparability of the sequence of the first and the second verbs is observed in (86).

- (86) a. He went sprawling.
 b. *He went suddenly sprawling.

It is fair to state that the motion-result subtype has a reduced structure.

From the above discussion, the *V-Ving* sequence of the reduced-structure group has three characteristics. First, the first verbs *come* and *go* plays a major role of shaping the *V-Ving* sequence in the adjunct/oblique type. By contrast, non-deictic verbs such as *run*, *sit*, and *stand* occur only in the motion-subject-depictive and the posture-subject-depictive subtypes. Second, the strong integrity or inseparability of the sequence of the first and the second verbs is observed in the reduced-structure group. In particular, the motion-manner and the posture-subject-depictive subtypes show apparent counterexamples, but they are examples of the clausal adjunct type in the full-syntactic-structure group. Third, the *Ving* in the *V-Ving* sequence retains the temporal property of gerund-participial clause at least in most cases.

7.3 The Relationship among *V-Ving* Sequences

In Section 7.2 we have demonstrated the first problem posed in Section 7.1.4, which is what the semantic and syntactic relationships between the first and the second verbs in the *V-Ving* sequences are. The general classification of the *V-Ving* sequence discussed so far is summarized in Table 7.4.

| function of word sequence group | sequence | meaning of V1 semantic subtype | <i>V-to-V</i> sequence | | <i>V-and-V</i> sequence | | <i>V-V</i> sequence | | <i>V-Ving</i> sequence | | |
|---------------------------------------|--------------------------|-----------------------------------|---------------------------|------------------|----------------------------|------------------|------------------------|------------------|---------------------------|------------------------------|-----|
| | | | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | |
| | | | after V1 | | | | | | | | |
| full- syntactic- structure | coordinated clause | | n/a | n/a | any verbs | n/a | n/a | n/a | n/a | n/a | n/a |
| | catenative complement | aspect | start | | n/a | n/a | | | | start | |
| | | effort | try | | n/a | n/a | | | | try | |
| | | contribution | help | help | n/a | n/a | help | help | | | |
| | | culmination | | come | n/a | n/a | | | | | |
| | | likelihood | | grow | | | | | | | |
| | | • | | | | | | | | | |
| | | • | | | | | | | | | |
| | | • | | | | | | | | | |
| | clausal adjunct | purpose | run | | n/a | n/a | n/a | n/a | | any verbs | |
| | | sit | | | | | | | | | |
| | | stand | | | | | | | | | |
| | • | | | | | | | | | | |
| | • | | | | | | | | | | |
| | • | | | | | | | | | | |
| reduced- structure | semi-complement | aspect | | | start | up | | go | | | |
| | | effort | | | try | | | | | | |
| | | contribution | | go | | | | | | | |
| | | modality | | go | | go | | go | | go | |
| | adjunct/oblique | motion-purpose | come | | come | run | come | run | come | | |
| | | (metaphorical) | go | (go) | go | | go | | go | (come) (go) | |
| | | posture-purpose | | | | sit | | | | | |
| | | motion-manner | | | | | | | | | |
| | | (metaphorical) | | | | | | | | come go (come) (go) | |
| | | motion-subject- depictive | | | | | | | | come go run | |
| posture-subject- depictive | | | | | | | | sit stand | | | |
| | motion-result | | | | | | | | go | | |

Table 7.4. The general classification of multi-verb sequences discussed so far

In this section, we will deal with the second and the third problems posed in Section 7.1.4.

The second problem is what the relationship among various types of the *V-Ving* sequences which are related to each other is. Table 7.4 shows that the *go-Ving* sequence with lexical V1 in the reduced-structure group can occur in four semantic subtypes, the motion-purpose, the motion-manner, the motion-subject-depictive, and the motion-result subtypes. Now we will consider the two different interpretations for (87) and (88).

(87) He went running down the road.

(Bolinger 1983: 160)

(88) He went looking for a gas leak with a lighted match. (Salkie 2010: 182)

(87) can be interpreted as the motion-manner subtype where running means ‘at a run’, and it can be also interpreted as the motion-purpose subtype where running means ‘for a run.’ Similarly, Salkie shows that (88) can be seen as the motion-purpose or the motion-subject-depictive subtype. (88) can be interpreted as the motion-purpose subtype where he went somewhere for the purpose of finding a gas leak, or it can be interpreted as the motion-subject-depictive subtype where he went somewhere while looking for a gas leak. Which interpretation is given depends upon the context.

There is one important point that we need to clear up in this section: why do the posture verbs *sit* and *stand* occur only in the subject-depictive subtype or in the less number of subtypes than *go/come*? From the comprehensive standpoint of multi-verb sequences, we will discuss this point more fully in Chapter 8.

Now we need to discuss the third problem, which is whether there is a dividing line between the motion-purpose subtype and the non-motion-purpose subtypes. The answer is yes at least for two reasons. First, in Section 7.2, we have shown that the *V-Ving* sequence retains the temporal property of gerund-participial, except for the *V-Ving* sequence of the motion-purpose subtype. Second, as previous studies pointed out, the motion-purpose subtype has one exclusive characteristic, unlike the other subtypes of the *V-Ving* sequence. The *-ing* form in the *V-Ving* sequence can take the *N-Ving* sequence where the object is attached before the verb, as in (89) and (90) (e.g., Kageyama 1985, Lieber 1983, Roeper and Siegel 1978, Ross 1972).

(89) One of the chaps that came carol-singing had an accordion quite good. (CWO)

(90) a. A young English couple emigrated to America and went house-hunting in Alabama where they had decided to settle. (Collins)

b. It was great fun to go penguin-spotting along the beach by torchlight before having a drink at the friendly ‘local’, the Penneshaw Hotel. (Collins)

c. The pair had planned to go fruit-picking, then travel home via Perth and Timor. (Collins)

d. Go fact-finding at the Discovery Dome at Motherwell Heritage Centre. (CWO)

As shown in (91), the *N-Ving* sequence is not the *-ing* form of the corresponding *N-V* sequence. (see Mustanoja 1960).

(91) a. What’s he doing? He’s (at) trap-shooting.

b. What did he do? *He trap-shot. (Bolinger 1983: 159)

It is fair to state that the *N-Ving* sequence behaves like a nominal while it retains the

gerund-participial use.⁵ In this regard, the *N-Ving* sequence is gerund-like, while the *V-Ving* sequence except for that of the motion-purpose subtype is participial-like. Table 7.5 shows the token frequencies of the *come/go-N-Ving* sequences in COCA and COHA.

| corpus | sequence | <i>come-N-Ving</i> sequence | <i>go-N-Ving</i> sequence |
|--------|----------|-----------------------------|---------------------------|
| | COCA | | 26 |
| COHA | | 41 | 146 |

Table 7.5. The token frequencies of the *come/go-N-Ving* sequences in COCA and COHA

In terms of the quantitative data of the *N-Ving* sequences, the *go-N-Ving* sequence, as shown in (90), is productive.

Table 7.6 shows the integrity or inseparability of the sequence of the first and the second verbs discussed so far.

| group | function of word sequence after V1 | meaning of V1 | <i>V-to-V</i> sequence | | <i>V-and-V</i> sequence | | <i>V-V</i> sequence | | <i>V-Ving</i> sequence | |
|-----------------------|---------------------------------------|---------------|------------------------------|--------------------|----------------------------|------------------|------------------------|------------------|---------------------------|------------------|
| | | | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 |
| | | | full-syntactic- structure | coordinated clause | n/a | n/a | weak | n/a | n/a | n/a |
| | catenative complement | weak | weak | n/a | n/a | weak | weak | weak | weak | n/a |
| | clausal adjunct | weak | n/a | n/a | n/a | n/a | n/a | weak | weak | n/a |
| reduced- structure | semi-complement | n/a | strong | strong | strong | n/a | strong | n/a | strong | strong |
| | adjunct/oblique | strong | n/a | strong | strong | strong | strong | strong | strong | strong |

Table 7.6. The integrity or inseparability of the sequence of the first and the second verbs discussed so far

The weak integrity or inseparability of the sequence of the first and second verbs in the catenative complement and the clausal adjunct types reinforce the idea that the full-syntactic-structure group involves two verb phrases. The strong integrity or inseparability of the sequence of the first and second verbs in the semi-complement and the adjunct/oblique

⁵ We also see another sign of *Ving* behaving like a noun with respect to the *go-Ving* sequence of the motion-purpose type. The close parallels between the *go-Ving* sequence and the *go-for-NP* sequence are observed in (i) and (ii).

(i) I went driving. = I went for a drive.

(ii) She went swimming. = She went for a swim. (Bolinger 1983: 159)

Bolinger (1983) states that the *go-Ving* sequence do not always have a corresponding *go-for-N* sequence, as shown in (iii).

(iii) *Let's go for a fish.

(iv) ?Ley's go for a ski.

(Bolinger 1983: 159)

However, he states that the parallel is obvious.

types indicates that the reduced-structure group involves a reduced structure.

7.4 Historical Development and Semantic Change

In this section, we will deal with the fourth problem posed in Section 7.1.4, which is whether the *V-Ving* sequence is associated with what Bolinger (1983) calls auxiliary-formation. As mentioned in Section 7.1.3, Bolinger has argued that auxiliary-formation of the *go-Ving* sequence is a continuing process. Responding to Bybee and Hopper's (2001) idea that grammaticizing constructions undergo extreme increases in frequency, there is a possibility that the *go-Ving* sequence has been gaining in currency.

Figure 7.1 shows instances of the *go-Ving* sequence per million words in COHA from 1890 to 2009.

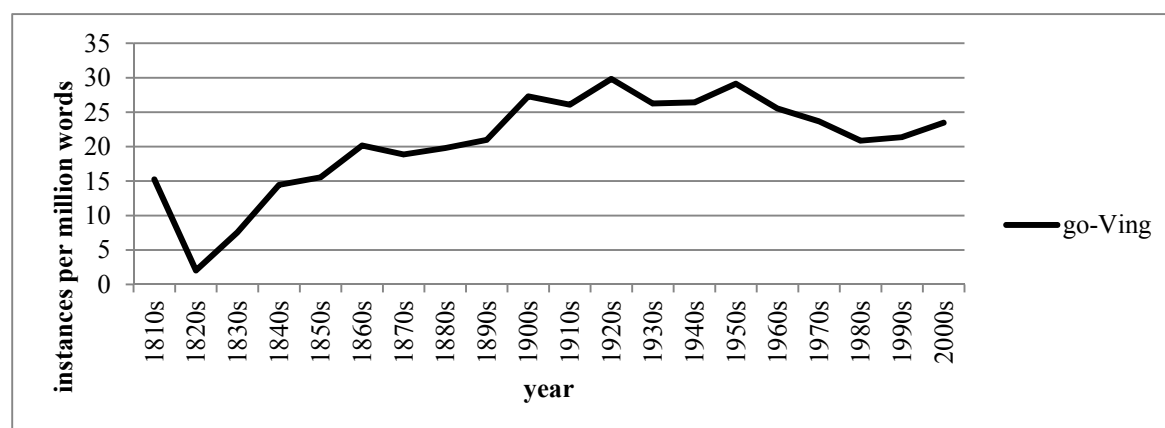


Figure 7.1. Frequency of use in COHA of the *go-Ving* sequence per million words from 1810 to 2009.

The *go-Ving* sequence shows a gradual increase in frequency from the 1820s to 1860s, but it has not shown a marked increase in frequency since 1860s. However, the instances of the *go-Ving* sequence in Figure 7.1 include the instances of all the semantic subtypes in the *go-Ving* sequence. Figure 7.2 shows instances of the *not-go-Ving* sequence per million words in COHA from 1890 to 2009.

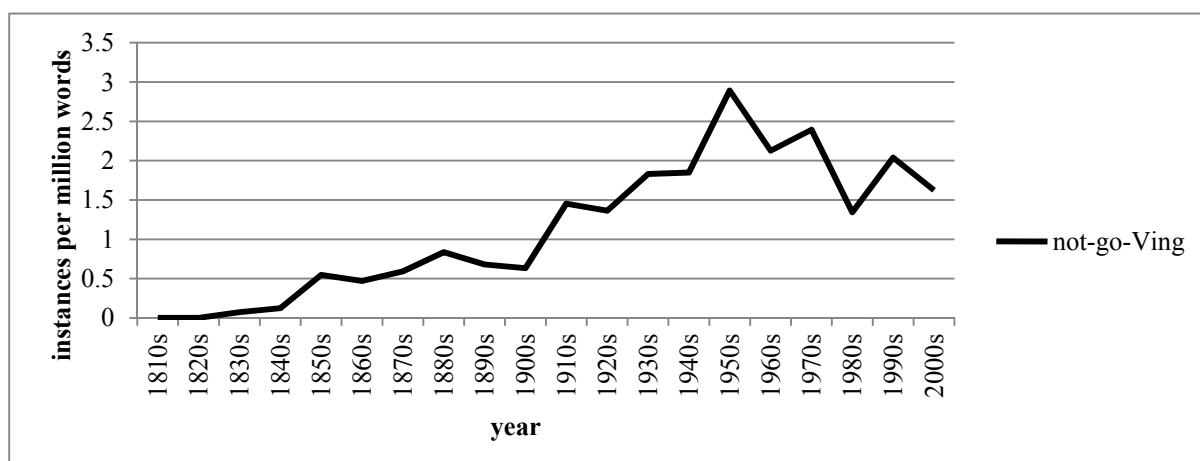


Figure 7.2. Frequency of use in COHA of the *not-go-Ving* sequence per million words from 1810 to 2009.

In general, the *not-go-Ving* sequence, as in (92), belongs to the modality subtype.

- (92) a. It's a secret, so don't go telling everyone. (Longman)
 b. Don't go getting yourself into trouble. (Oxford)

The *not-go-Ving* sequence shows a gradual increase in frequency from the 1830s to 1950s, but it has not shown a marked increase in frequency since 1950s. According to Visser (1969: 1908), the *go-Ving* sequence emerged in late Old English and occurred afterwards quite often. The *go-Ving* in the modality subtype emerged in the late nineteenth century. This is supported by Figure 7.2. At this point, we can safely draw one conclusion from Figures 7.1 and 7.2, it is uncertain whether or not auxiliary-formation of the *go-Ving* sequence is a continuing process. Observing the historical development, we require further investigation from many different angles.

Generally speaking, linguists deal with only linguistic data which are predictable or follow a predictable pattern. The present author broadly agrees on this. In fact, the present author has dealt with such linguistic data and will deal with them. However, seen from this perspective, historical development or semantic change, which, in principle, is not predictable, remains a mystery. Mentioned in Chapter 1, this dissertation is based on the assumption that the essence of language is its dynamics and plasticity and focuses much more on changes in English that have taken place over relatively short spans of time. It is possible to detect not only a sign of semantic change, but also some linguistic data where semantic change is on its way. Although we know that only time will tell us the result, all we have to do is to monitor the historical development of particular linguistic data. As Aarts et al. (2013) point out that the English verb phrase suggests the possibility of change, we will explore further the possibility of change in multi-verb sequences, including the *go-Ving* sequence.

7.5 Conclusion

This chapter has explored the nature of the *V-Ving* sequence on the basis of the general classification schema of multi-verb sequences. The most distinguishing feature of the *V-Ving* sequence is that the *V-Ving* sequence in the full-syntactic-structure group and the one in the reduced-structure group retain the temporal property of gerund-participial at least in most cases, just as the *V-to-V* sequence in the full-syntactic-structure group and the one in the reduced-structure group retain the temporal property of *to*-infinitive. One feature deserves further consideration: the number of subtypes in the *V-Ving* sequence is larger than any other multi-verb sequence. In the next chapter, we will provide an overall discussion of multi-verb sequences.

Chapter 8

An Overall Discussion of Multi-Verb Sequences

The aim of this chapter is to determine what the general classification of multi-verb sequences signifies. The aim is twofold. One is to reexamine the general classification of multi-verb sequences, and the other is to discover what significant features the reduced-structure group has. This chapter is structured as follows. Section 8.1 reexamines the full-syntactic-structure group and the reduced-structure group in terms of regularities and irregularities. Section 8.2 describes key features of first verbs in the reduced-structure group and examines each participating verb. Section 8.3 discusses the nature of the reduced-structure group. Section 8.4 offers a conclusion.

8.1 Regularities and Irregularities

In this section, we show that regularities and irregularities are observed in the full-syntactic-structure group and the reduced-structure group, respectively. Three basic concepts in English syntax, constituents, syntactic categories, and grammatical functions, are crucial in explaining the regularities and the irregularities in the two groups. Sentences have parts called constituents. Constituents in a sentence have both syntactic categories and grammatical functions. In other words, both syntactic categories and grammatical functions play key roles in the analysis of sentences. In the previous chapters, in terms of syntactic categories, we have discussed four multi-verb sequences, the *V-to-V*, the *V-and-V*, the *V-V*, and the *V-Ving* sequences. In terms of grammatical functions, we have identified three types of constituents in the full-syntactic-structure group, the catenative complement type, the clausal adjunct type, and the coordinated clause type, and two types in the reduced-structure group, the semi-complement type and the adjunct/oblique type.

With respect to the grammatical functions in the full-syntactic-structure group, we have clearly distinguished the coordinated clause type from the catenative complement and the clausal adjunct types due to the presence of coordination. We have distinguished the catenative complement type from the clausal adjunct type due to three criteria, licensing, obligatoriness, and position, described in Section 2.2.2 in Chapter 2. Since the conventionally syntactic criteria differentiate the three types of full syntactic structures, it is clear that regularities are observed in this group. However, in Chapter 4 we have identified one irregularity in the *V-and-V* sequence in the full-syntactic-structure group. The irregularity concerns genuine counterexamples to the Coordinate Structure Constraint (CSC). In the full-syntactic-structure group, we have identified such counterexamples as an irregularity.

In contrast, a sure sign that the reduced-structure group has irregularities is that multi-verb sequences in the reduced-structure group do not involve two verb phrases despite the fact that

each multi-verb sequence contains two verbs. However, there are other observations that can be made of all cases of the reduced-structure group, suggesting regularities.

We have used adverb independence tests to identify the reduced structure: if a particular multi-verb sequence is a part of two verb phrases, the first and the second verbs can take adverbs (or adverb phrases) independently. The reduced-structure group identified by such tests shows the integrity or inseparability of the sequence of the first and second verbs, as shown in Table 8.1

| group | function of word sequence after V1 | sequence | | <i>V-to-V</i> sequence | | <i>V-and-V</i> sequence | | <i>V-V</i> sequence | | <i>V-Ving</i> sequence | |
|--------------------------|------------------------------------|------------|---------------|------------------------|---------------|-------------------------|---------------|---------------------|---------------|------------------------|--|
| | | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | | |
| full-syntactic-structure | coordinated clause | n/a | n/a | weak | n/a | n/a | n/a | n/a | n/a | | |
| | catenative complement | weak | weak | n/a | n/a | weak | weak | weak | n/a | | |
| | clausal adjunct | weak | n/a | n/a | n/a | n/a | n/a | weak | n/a | | |
| reduced-structure | semi-complement | n/a | strong | strong | strong | n/a | strong | n/a | strong | | |
| | adjunct/oblique | strong | n/a | strong | strong | strong | strong | strong | strong | | |

Table 8.1. The integrity or inseparability of the sequence of the first and the second verbs with respect to four multi-verb sequences

Two important features are observed in Table 8.1. One is that the integrity or inseparability is always weak in the full-syntactic-structure group which involves two verb phrases, and the other is that the integrity or inseparability is always strong in the reduced-structure group which involves a single verb phrase. It is reasonable to conclude that constituting a single verb phrase is associated with the strong integrity or inseparability of the sequence of the first and second verbs. In terms of a dichotomy between regularity and irregularity, the weak integrity in the full-syntactic-structure group is regarded as regular, and the strong integrity is also a clear regularity in the reduced-structure group.

In addition, there is another characteristic associated with the reduce-structure groups. The characteristic is the status of the subject. We have stated in Section 2.2.1 in Chapter 2 that there are two types of subject that verbs with a catenative complement can have, a controlling subject and a raised subject. The subject in the full-syntactic-structure group is, in many cases, a controlling subject, but there are also cases of a raised subject. There is even a case like (1), in which the subject of the second verb is generic, distinct from the subject of the main clause.

- (1) The accident helped (to) promote gun control.

With respect to the clausal adjunct type, we identify one irregularity in the *V-Ving* sequence. The irregularity concerns dangling participles. In the dangling participle, the subject of a gerund-participial clause is not identical with that of the main clause (e.g., Hayase 2011, Kortmann 1991, 1995, Russell 1935). The sentences in (2) are the examples of dangling

participles.

- (2) a. Walking home, my phone rang.
 b. Reaching the station, the sun rose.

We call the subject in (2) a non-identical subject. By contrast, the reduced-structure group involving a single verb phrase, the first and the second verbs form some kind of complex predicate in which the same subject is shared, as in (3) and (4).

- (3) the semi-complement type
- a. This all goes to prove my theory. (Oxford)
 - b. He has started a privatization programme to try and win support from the business community. (Collins)
 - c. Somebody goes and does something mindless like that and just destroy everything for you. (Collins)
 - d. Go think that over. (CWO)
 - e. Don't go getting yourself into trouble. (Oxford)
- (4) the adjunct/oblique type
- a. She went to see 'Macbeth'.
 - b. He wanted me to go and visit him. (CWO)
 - c. Go ask your mom! (Oxford)
 - d. I ran and knocked on the nearest door. (Oxford)
 - e. I have to go shopping this afternoon. (Oxford)
 - f. She came running to meet us. (Oxford)
 - g. I tripped and went sprawling. (Oxford)
 - h. We sat talking for hours. (Oxford)

We call the subject in (3) and (4) the shared subject. Table 8.2 summarizes the status of the subject with respect to four types of multi-verb sequences.

| group | function of meaning of V1 word sequence after V1 | sequence | | <i>V-to-V</i> sequence | | <i>V-and-V</i> sequence | | <i>V-V</i> sequence | | <i>V-Ving</i> sequence | |
|----------------------------------|--|-------------------|-------------------|---------------------------|------------------|----------------------------|------------------|------------------------------|------------------|---------------------------|--|
| | | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | | |
| full- syntactic- structure | coordinated clause | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | |
| | catenative complement | control raised | control raised | n/a | n/a | control | control | control raised | n/a | | |
| | clausal adjunct | control | n/a | n/a | n/a | n/a | n/a | control non- identical | n/a | | |
| reduced- structure | semi-complement | n/a | shared | shared | shared | n/a | shared | n/a | shared | | |
| | adjunct/oblique | shared | n/a | shared | shared | shared | shared | shared | shared | | |

Table 8.2. The status of the subject with respect to four types of multi-verb sequences

From Table 8.2, it should be noted here that the subject of the reduced-structure group is always the shared subject. With respect to the subject, there are no irregularities in the reduced-structure group. The shared subject shows a clear regularity in the reduced-structure group.

From the above discussion, there are two constraints on the reduced-structure group to be drawn. The two constraints are the integrity constraint in (5) and the subject constraint in (6).

(5) the integrity constraint:

No word can be inserted between the first verb and the word following the first verb in the multi-verb sequence of the reduced-structure group.

(6) the subject constraint:

The first and the second verbs in the reduced-structure group share the same subject.

Viewing the integrity constraint from the opposite side, a word or more than one word can be inserted between the first verb and the word following the first verb in the full-syntactic-structure group. The subject constraint is not relevant to four types of multi-verb sequence in the full-syntactic-structure group. The two constraints shown in (5) and (6), in fact, show that ‘irregularities’ in the multi-verb sequences are, in fact, regular properties of the reduced-structure group. In the next section, we will focus on characteristics of first verbs in the reduced-structure group.

8.2 Key Features of First Verbs in the Reduced-Structure Group

This section describes key features of first verbs in the reduced-structure group. Table 8.3 is the general classification of multi-verb sequences, which is rearranged in a clearer way.

| function of word sequence group | sequence | meaning of V1 semantic subtype | <i>V-to-V</i> sequence | | <i>V-and-V</i> sequence | | <i>V-V</i> sequence | | <i>V-Ving</i> sequence | | |
|---------------------------------------|--------------------------|--|---------------------------|-------------------------------|----------------------------|------------------|------------------------|------------------|---------------------------|-----------------------------------|--|
| | | | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | |
| full- syntactic- structure | coordinated clause | | n/a | n/a | any verbs | n/a | n/a | n/a | n/a | n/a | |
| | catenative complement | | start try help | come grow help stand | | | help | help | start try | | |
| | clausal adjunct | | any verbs | | n/a | n/a | n/a | n/a | any verbs | | |
| reduced- structure | semi-complement | aspect | | | start | up | | go | | | |
| | | modality | | go | | go | | go | | go | |
| | | others | | go | try | | | | | | |
| | adjunct/oblique | motion/posture- purpose | come go | | come go | run sit | come go | run | come go | come go | |
| | | motion-manner | | | | | | | | come go | |
| | | motion/posture- subject- depictive | | | | | | | | come go run sit stand | |
| | motion-result | | | | | | | go | | | |

Table 8.3. The general classification of multi-verb sequences

Table 8.3 includes verbs treated in this dissertation. We have enumerated the first verbs in four types of multi-verb sequences in the reduced-structure group in Chapters through 3 to 5 and Chapter 7. As far as we know, the first verbs occurring in the reduced-structure group are limited to eight verbs, *come*, *go*, *run*, *sit*, *stand*, *start*, *try*, and *up*, in Table 8.3. Since it is a formulaic sequence, the *up-and-V* sequence is not treated in this section. As shown in Chapters 3 and 4, the two catenative verbs *start* and *try* are not only the first verbs occurring in the reduced-structure group, but also the ones occurring in the full-syntactic-structure group. In this section, we do not dare pursue these two verbs further. The first verbs that we should pursue in this section are limited to *come*, *go*, *run*, *sit*, and *stand*.

Table 8.4 lists the first verbs occurring in four types of multi-verb sequences in the reduced-structure group, which is rearranged in a clearer way.

| sequence meaning of V1 first verb | <i>V-Ving</i> sequence | | <i>V-and-V</i> sequence | | <i>V-V</i> sequence | | <i>V-to-V</i> sequence | |
|---|---------------------------|------------------|----------------------------|------------------|------------------------|------------------|---------------------------|------------------|
| | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 |
| | <i>go</i> | + | + | + | + | + | + | + |
| <i>come</i> | + | | + | | + | | + | |
| <i>run</i> | + | | | + | | + | | |
| <i>sit</i> | + | | | + | | | | |
| <i>stand</i> | + | | | | | | | |

Table 8.4. The first verbs occurring in four types of multi-verb sequences in the reduced-structure group

There are two characteristics observed in Table 8.4. One characteristic concerns the individual first verbs in the reduced-structure group. The first verbs are limited to motion and posture verbs. Motion verbs are dominant. In particular, the deictic motion verbs *come* and *go* are dominant. While the deictic verb *go* occurs in all the four types of sequences not only with lexical V1 but also with attenuated V1, the posture verb *stand* occurs only in the *V-Ving* sequence as lexical V1. From Table 8.4, it is clear that we see a variation in the number of sequence types that verbs participate in. The verbs *come* and *go* participate in more sequence types than the verbs *run*, and *sit*, which in turn occur in more sequence types than the verb *stand*. In other words, the number of the sequence types where a particular first verb occurs is different from each other. In Sections 8.2.1 through 8.2.4, we will show this by examining each first verb. The other characteristic observed in Table 8.4 concerns the four types of multi-verb sequences in the reduced-structure group. The *V-Ving* sequence takes all the five verbs, *come*, *go*, *run*, *sit*, and *stand*, whereas the *V-to-V* sequence takes only the two deictic verbs *come* and *go*. From Table 8.4, it is clear that we see a variation in the number of verbs that different sequence types can have. The *V-Ving* sequence has more verbs than the *V-and-V* and the *V-V* sequences, which in turn have more verbs than the *V-to-V* sequence. There is a variation from the *V-Ving* sequence to the *V-to-V* sequence. We will examine such a variation in Section 8.3.

8.2.1 *Go* as the First Verb

Table 8.5 shows the general classification of multi-verb sequences regarding the first verb *go*, and the verb *go* as the first verb occurs in all the four types of multi-verb sequences not only as a lexical V1 but also as an attenuated V1.

| function of word sequence after V1 group | | | sequence | | <i>V-Ving</i> sequence | | <i>V-and-V</i> sequence | | <i>V-V</i> sequence | | <i>V-to-V</i> sequence | | |
|---|-----------------|-------------------------------|---------------|----|------------------------|---------------|-------------------------|---------------|---------------------|---------------|------------------------|---------------|--|
| | | | meaning of V1 | | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | |
| semantic subtype | | | | | | | | | | | | | |
| reduced-structure | semi-complement | modality | | go | | go | | go | | go | | go | |
| | | aspect | | | | | | go | | | | | |
| | | contribution | | | | | | | | | | go | |
| | adjunct/oblique | motion-purpose (metaphorical) | go (go) | | go | | go | | go | | go (go) | | |
| | | motion-manner (metaphorical) | go (go) | | | | | | | | | | |
| | | motion-subject-depictive | go | | | | | | | | | | |
| | | motion-result | go | | | | | | | | | | |
| | | | | | | | | | | | | | |

Table 8.5. The general classification of multi-verb sequences regarding the first verb *go*

The characteristics of the first verb *go* in the reduced-structure group are twofold. One concerns the general classification of multi-verb sequences. With respect to the meaning of the first verb, the verb *go* as the first verb is always attenuated in the semi-complement type and is always lexical in the adjunct/oblique type. With respect to the semantic subtype, the attenuated *go* is used in the modality meaning in all of the four multi-verb sequences, and the lexical *go* is used to convey motion-purpose meaning in all of the four multi-verb sequences. The former is exemplified in (7) and the latter in (8).

- (7) a. Don't go thinking it was your fault. (Collins)
 b. Well, he's gone and done it again, hasn't he? (Collins)
 c. He didn't even leave a message. Go figure! (Longman)
 d. Sure nobody would go to kill so handsome and good a creature. (OED)
- (8) a. We went swimming very early. (Collins)
 b. He went and found his bicycle. (CWO)
 c. I desperately need to go buy some new clothes. (CWO)
 d. Nina went to look for Philip. (CWO)

With respect to the *V-Ving* sequence which has the most semantic subtypes, the verb *go* as the first verb occurs in all the semantic subtypes.

The other concerns the meaning of the verb *go* as the first verb used in the four types of multi-verb sequences. We have demonstrated in Chapters through 3 to 5 and Chapter 7 that the meaning of the verb *go* as the first verb in multi-verb sequences always represents either the literal or non-literal meaning of the verb *go* mentioned in Section 2.4.2 in Chapter 2. For instance, in the modality subtype *go* represents the evaluative use of the verb *go*, and in the motion-purpose subtype it represents the deictic motion use of *go*.

Two main points of the above discussion are summed up as follows. One is that the verb *go* as the first verb plays a central role in the reduced-structure group, and the other is that the

meaning of the verb *go* as the first verb always inherits the literal or non-literal use of the verb *go*.

8.2.2 *Come* as the First Verb

Table 8.6 shows the general classification of multi-verb sequences regarding the first verb *come*, and the verb *come* as the first verb occurs in all the four types of multi-verb sequences as a lexical V1.

| function of word sequence after V1 | | sequence | <i>V-Ving</i> sequence | | <i>V-and-V</i> sequence | | <i>V-V</i> sequence | | <i>V-to-V</i> sequence | |
|------------------------------------|--------------------------|-------------------------------|------------------------|---------------|-------------------------|---------------|---------------------|---------------|------------------------|---------------|
| | | | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 |
| group | semantic subtype | meaning of V1 | | | | | | | | |
| | | full-syntactic-structure | catenative complement | | | | | | | |
| reduced-structure | semi-complement | aspect | | | | | | | | |
| | | modality | | | | | | | | |
| | | others | | | | | | | | |
| | adjunct/oblique | motion-purpose (metaphorical) | come (come) | | come | | come | | come | |
| | | motion-manner (metaphorical) | come (come) | | | | | | | |
| | motion-subject-depictive | come | | | | | | | | |
| | motion-result | | | | | | | | | |

Table 8.6. The general classification of multi-verb sequences regarding the first verb *come*

The verb *come* as the first verb as lexical V1 occurs in the motion-purpose subtype in all four of multi-verb sequences, as in (9).

- (9) a. When my boyfriend comes shopping with me, he complains of backache, knee-ache, and sore feet, yet he can happily walk five miles around a golf course! (CWO)
- b. Come and look at this! (Longman)
- c. Come join us. (CWO)
- d. A neighbor's boy comes to mow the grass on Saturdays. (Longman)

In this regard, the first verb *come* is the same as the independent verb *go*. With respect to the *V-Ving* sequence with the most semantic subtypes, the verb *come* as the first verb occurs in three semantic subtypes except the motion-result subtype. Furthermore, with respect to metaphorical extension from the literal meaning of deictic motion to the non-literal meaning, only *come-Ving* sequences in the motion-purpose subtype, and the motion-manner subtype undergo metaphorical extension, as shown in (10a) and (10b).

- (10) a. Trouble came calling.
 b. His ambition to succeed came burning through his dossier. (CWO)

All the evidence shown in Sections 8.2.1 and 8.2.2 points to the conclusion that although the verbs *come* and *go* are complementary in their prototypical uses mentioned in Section 2.4.2 in Chapter 2, *come* as the first verb is quite different from *go* as the first verb in the reduced-structure group. The reason is that the verb *come* as the first verb is restricted to lexical V1.

8.2.3 *Run as the First Verb*

There are only three motion verbs occurring in the reduced-structure group. The two of them are the deictic motion verbs *come* and *go*, and the third verb is *run*. Table 8.7 shows the general classification of multi-verb sequences regarding the first verb *run*.

| function of word sequence group after V1 | | sequence meaning of V1 semantic subtype | <i>V-Ving</i> sequence | | <i>V-and-V</i> sequence | | <i>V-V</i> sequence | | <i>V-to-V</i> sequence | |
|--|-----------------|---|------------------------|---------------|-------------------------|---------------|---------------------|---------------|------------------------|---------------|
| | | | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 |
| reduced-structure | semi-complement | aspect | | | | | | | | |
| | | modality | | | | | | | | |
| | | others | | | | | | | | |
| | adjunct/oblique | motion-purpose | | | | run | | run | | |
| | | motion-manner | | | | | | | | |
| motion-subject-depictive | | run | | | | | | | | |
| | | motion-result | | | | | | | | |

Table 8.7. The general classification of multi-verb sequences regarding the first verb *run*

The verb *run* as the first verb in the reduced-structure group has three features. First, the verb *run* as the first verb never occurs in the *V-to-V* sequence. Second, the verb *run* as the first verb is always attenuated V1 in the *V-and-V* and the *V-V* sequences. Third, the verb *run* as the first verb occurs only in the motion-subject-depictive subtype in the *V-Ving* sequence.

It should be emphasized here that the meaning of the verb *run* as the first verb always inherits the meaning of the verb *run* used as an independent verb. Generally speaking, the verb *run* means ‘to move very quickly, by moving your legs more quickly than when you walk’ in (11).

- (11) Can you run as fast as Mike? (Oxford)

In the motion-subject-depictive subtype with lexical V1, as shown in (12), the meaning of the first verb *run* is the same as the one in (11).

(12) Women ran screaming, with children in their arms. (Longman)

The verb *run* also means ‘to do something or go somewhere quickly’ in (13).

(13) I need to run to the store for some more milk. (Longman)

In the motion-purpose subtype with attenuated V1, shown in (14), the meaning of the verb *run* as the first verb inherits the use of the verb *run* in (13).

(14) a. Run and ask your mother where she’s put the keys. (Longman)
 b. You get ready to run tell Dad. (CWO)

Therefore, it is reasonable to conclude that in multi-verb sequences, the motion verb *run* functions differently from the deictic motion verbs *come* and *go* in that no semantic shift is involved, although all the three verbs express motion.

8.2.4 *Sit and Stand as the First Verb*

There are only two posture verbs, *sit* and *stand*, occurring in the reduced-structure group. Table 8.8 shows the general classification of multi-verb sequences regarding the first verbs *sit* and *stand*.

| function of word sequence group | after V1 | sequence meaning of V1 semantic subtype | <i>V-Ving</i> sequence | | <i>V-and-V</i> sequence | | <i>V-V</i> sequence | | <i>V-to-V</i> sequence | |
|---------------------------------------|-----------------|---|---------------------------|---------------------|--|------------------|------------------------|------------------|---------------------------|------------------|
| | | | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 |
| | | | reduced- structure | semi- complement | aspect ----- modality ----- others | | | | | |
| | adjunct/oblique | motion/posture- purpose ----- motion-manner ----- motion/posture- subject-depictive ----- motion-result | | | | sit | | | | |
| | | | sit stand | | | | | | | |

Table 8.8. The general classification of multi-verb sequences regarding the first verb *sit* and *stand*

In Tables 8.7 and 8.8, the features of the verb *sit* as the first verb is almost identical to those of the verb *run* as the first verb mentioned in Section 8.2.4. The difference between the verbs *sit* and *run* is that the verb *sit* never occurs in the *V-V* sequences.

Table 8.8 shows that the verb *sit* as the first verb occurs in the posture-subject-depictive subtype in the *V-Ving* and in the posture-purpose subtype in the *V-and-V* sequences. The basic

use of the verb *sit* means ‘to be on a chair or seat, or on the ground, with the top half of one’s body upright and your weight resting on one’s buttocks’, as in (15).

- (15) a. I sat on the shore and looked at the sea. (Longman)
 b. Just sit still! (Oxford)

In the posture-subject-depictive subtype with lexical V1, shown in (16), the meaning of the verb *sit* as the first verb is the same as the one in (15).

- (16) They sat sipping their drinks. (Longman)

However, the verb *sit* in the *V-and-V* sequence of the motion-purpose subtype exemplified in (17) does not express the same meaning as the one in (16).

- (17) This is something that we should sit and discuss as a team.

The *sit* in (17) means ‘spend time and give someone attention in order to try to solve a problem or achieve something’. However, this meaning implies a situation that the subject is sitting somewhere, and it is reasonable to conclude that the verb *sit* as the first verb inherits the use of the verb *sit* as an independent verb.

Table 8.8 shows that the first verb *stand* occurs only in the posture-subject-depictive subtype in the *V-Ving* sequence, used in (18).

- (18) We stood watching the rain fall. (Longman)

The verb *stand* basically means ‘to support yourself on your feet or be in an upright position’, as in (19).

- (19) She stood in the doorway. (Longman)

The meaning of the verb *stand* as the first verb in the *stand-Ving* sequence in (18) is the same as the use of the verb *stand* in (19). It should be noted here that the verb *stand* as attenuated V1 in multi-verb sequences is nonexistent.

We need to discuss multi-verb sequences with posture verbs *sit* and *stand* as the first verb from the standpoint of the semantic extensions or grammaticalization. The grammaticalization of posture verbs have been discussed cross-linguistically (cf. Austin 1998, Bybee et al. 1994, Heine 1994, Kuteva 1999, Newman 2002). In particular, Kuteva (1999) discusses the grammaticalization of *sit/stand/lie-and-main verb* into aspectual markers in Bulgarian as well as in a number of other languages. In this connection, there is a possibility that the *sit-and-V* sequence in the reduced-structure group is ripe for grammaticalization, because the first verb *sit*

in this sequence is always attenuated.

Bybee and Hopper (2001) argue that grammaticizing constructions undergo extreme increases in frequency, and it is worthwhile to examine whether the *sit-and-V* sequence shows this change. Figure 8.1 shows instances of the *sit-and-V* sequences per million words in COHA from 1810 to 2009.

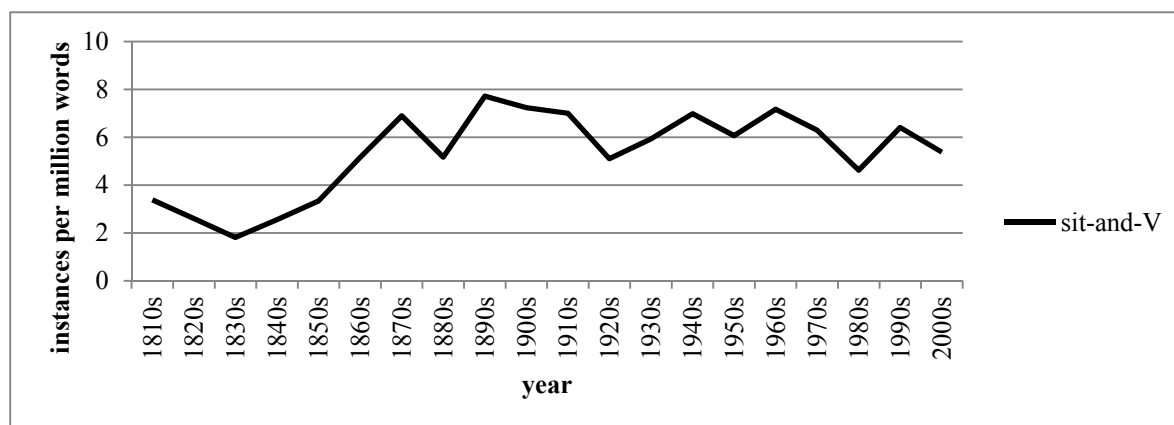


Figure 8.1. Frequency of use in COHA of the *sit-and-V* sequences per million words from 1810 to 2009.

A marked increase in frequency is not observed in Figure 8.1. As a result, it is reasonable to conclude that the *sit-and-V* sequence has not reached a critical threshold which could trigger the grammaticalization.

With respect to the *sit-Ving* and the *stand-Ving* sequence, the first verbs *sit* and *stand* always represent lexical V1. These two sequences have not undergone grammaticalization. With respect to frequency, Figures 8.2 and 8.3 show instances of the *sit-Ving* and the *stand-Ving* sequences per million words in COHA from 1810 to 2009, respectively.

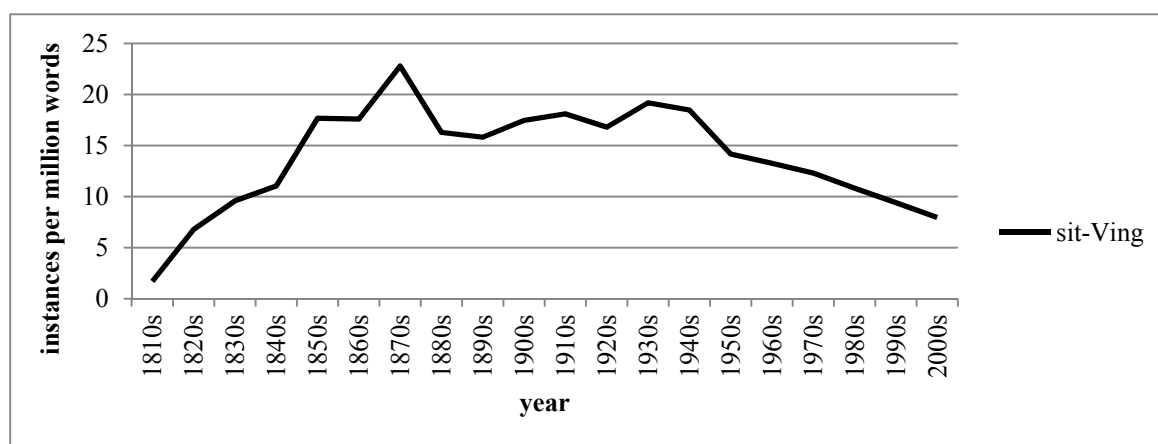


Figure 8.2. Frequency of use in COHA of the *sit-Ving* sequences per million words from 1810 to 2009.

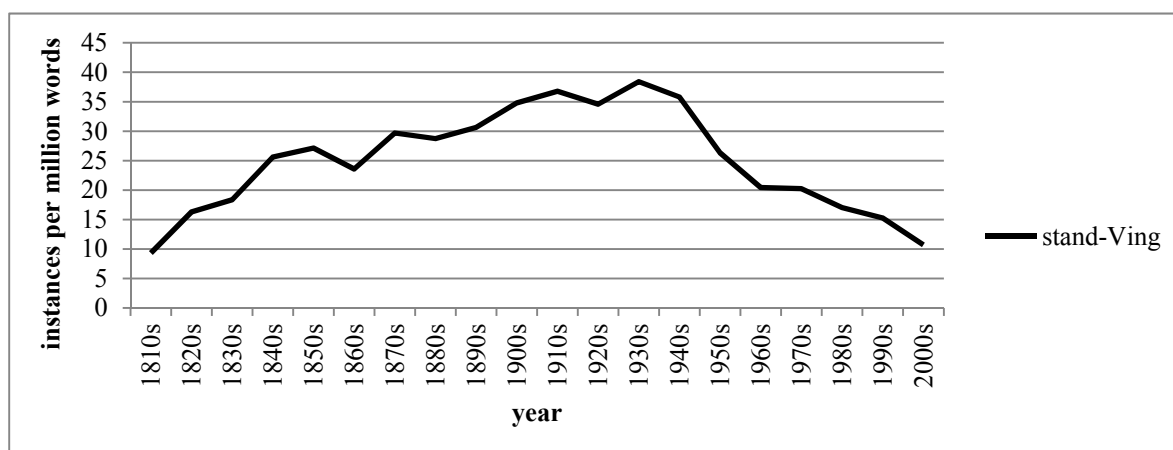


Figure 8.3. Frequency of use in COHA of the *stand-Ving* sequences per million words from 1810 to 2009.

Marked increases in frequency are not observed in Figures 8.2 and 8.3. This reinforces the idea that the *sit-Ving* and the *stand-Ving* sequences have not undergone grammaticalization. We have come to the conclusion that evidence of grammaticalization is lacking in the *sit-and-V*, the *sit-Ving*, or the *stand-Ving* sequence.

8.3 The Nature of the Reduced-Structure Group

8.3.1 Temporality in the Reduced-Structure Group

As we all know now, one defining feature of the reduced-structure group from a syntactic point of view is that the sequence is a part of a single verb phrase. In this section, we identify some key features of the reduced-structure group from a semantic point of view.

Based on the temporal relationship between the first and the second verbs in the multi-verb sequence, we have discussed the semantics of some types of multi-verb sequences. We have described the temporal properties of *to*-infinitive and gerund-participial in Section 2.4.1 in Chapter 2. We have also shown that the *V-to-V* and the *V-Ving* sequences respect the temporal properties of *to*-infinitive and gerund-participial, respectively, at least in most cases, in Chapters 3 and 7. Based on the temporal property of *to*-infinitive and gerund-participial, we redefine the temporal relationship between the first and the second verbs in the *V-Ving* sequence and the *V-to-V* sequence as simultaneity and prospect, respectively. Since we have shown in Chapters 3 and 4 that both the *V-and-V* and the *V-V* sequences imply actual realization of the process represented by the second verb, we define the temporal relationship between the first and the second verbs in such two types of sequences as succession. It is thus possible to talk of variation ranging from simultaneity, through succession, to prospect with respect to the temporal relationship between the first and the second verbs in the multi-verb sequence. Table 8.9 shows the general classification of multi-verb sequences in the reduced-structure group involving the variation of the temporal relationship.

| group | function of word sequence after V1 | temporal relationship | sequence | <i>V-Ving</i> sequence | | <i>V-and-V</i> sequence | | <i>V-V</i> sequence | | <i>V-to-V</i> sequence | |
|-------------------|------------------------------------|--------------------------|-----------------------------------|------------------------|---------------|-------------------------|---------------|---------------------|---------------|------------------------|---------------|
| | | | | simultaneity | | succession | | succession | | prospect | |
| | | | | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 | lexical V1 | attenuated V1 |
| reduced-structure | semi-complement | aspect | | | | | | go | | | |
| | | modality | | go | | go | | go | | | go |
| | | others | | | | | | | | | go |
| | adjunct/oblique | motion-purpose | go come | | go come | run sit | go come | run | go come | | |
| | | motion-manner | go come | | | | | | | | |
| | | motion-subject-depictive | go come run sit stand | | | | | | | | |
| | motion-result | | go | | | | | | | | |

Table 8.9 The general classification of multi-verb sequences in the reduced-structure group involving the variation of the temporal relationship

8.3.2 Distribution of Verbs in the Four Sequences

There are two things to be said of the verbs participating in the multi-verb sequences. First, Table 8.9 serves to illustrate a pattern in which verbs participate in the adjunct/oblique type. We call this constraint the occurrence constraint in (20).

(20) the occurrence constraint:

Verbs tend to participate in the multi-verb sequences in the adjunct/oblique type from the left to the right in Table 8.9

For instance, if a particular first verb occurs in two types of multi-verb sequences, it always occurs in the leftmost two types, the *V-Ving* sequence and the *V-and-V* sequence. The occurrence in the *V-Ving* and the *V-V* sequence or the *V-to-V* sequences is not observed.

Second, we have shown that the verbs occurring as the first verb in the adjunct/oblique type are limited to five verbs, *come*, *go*, *run*, *sit*, and *stand*. Now we will reexamine the first verbs in the reduced-structure group from a typological standpoint, although this dissertation does not take a typological approach to multi-verb sequences. (21) shows that there is a hierarchy of the number of semantic types where a particular verb occurs as the first verb in the reduced-structure group.

(21) *go* > *come* > *run* / *sit* > *stand*

This hierarchy is similar to the hierarchy of serializability of verbs suggested by Foley and Olson (1985) in (22).

- (22) basic motion verbs (e.g., *come, go*) >
 active intransitive verbs (e.g., *wander, crawl*)
 and posture verbs (e.g., *sit, stand, lie*) > verbs (e.g., *sit, stand, lie*) >
 stative or process verbs > transitive verbs

Discussing serial verb constructions in various languages, Foley and Olson (1985: 41) identify the deictic verbs *come* and *go* as the most frequent verbs occurring in serial verb constructions. Thus, multi-verb sequences in English exhibit a hierarchical tendency similar to the one seen in serial verb constructions in various languages.

It is well known in cognitive linguistic research that experiential reality is important to explicate linguistic structures and language uses (see Johnson 1987, Lakoff 1987, Lakoff and Johnson 1980, Lakoff and Turner 1989, Radden and Panther 2004, Sweetser 1990). They argued that our most basic ways of reasoning and understanding are shaped by the earliest experiences of our bodily states and motion and interactions. It is possible to make a hypothesis that our ordinary experience of the world around us plays a fundamental role in shaping language and thought, and in the narrow sense motivating particular multi-verb sequences. It is clear that the first verbs *come, go, run, sit, and stand*, occurring in multi-verb sequences in the reduced-structure group, shown in Table 8.9, are the most basic of basic verbs.

8.4 Conclusion

In this chapter, we have reexamined the general classification of multi-verb sequences. We have shown that the independent adverbs necessitates the distinction of the full-syntactic-structure group and the reduced-structure group. We have also shown that there are three constraints in the reduced-structure group, the integrity constraint, the subject constraint, and the occurrence constraint. In particular, the occurrence constraint restricts first verbs occurring in multi-verb sequences of the adjunct/oblique type in the reduced-structure group.

Chapter 9

Concluding Remarks

This dissertation has been concerned with the explication of the nature of multi-verb sequences in English from syntactic, semantic, functional, and historical points of view. After summarizing the main findings, we discuss one general hypothesis, Bolinger's hypothesis (1968) mentioned in Chapter 1.

9.1 Summary

In this dissertation we have a multi-angled approach to the multi-verb sequences. Based on the general classification schema of multi-verb sequences, we have examined four types of multi-verb sequences in English to recognize why the reduced-structure group involves a single verb phrase despite the fact that a particular multi-verb sequence includes two verbs.

Chapter 2 formed the basis for the study of multi-verb sequences. To facilitate the analysis of multi-verb sequences, we presented four things, our corpus methodology, our definition of catenative complements as one defining characteristics of some subtypes of multi-verb sequences, temporal properties of the *to*-infinitive and the gerund-participial clause based on the temporal relationship between the catenative verb and the catenative complement, and the semantics of the deictic motion verbs *come* and *go* which are used as the first verbs in many of the multi-verb sequences. We also provided a general classification schema of multi-verb sequences, which is vital to the exploration of the multi-verb sequences.

Based on the general classification schema of multi-verb sequences, four types of multi-verb sequences have been dealt with in Chapters through 3 to 5 and 7, respectively. Chapter 3 explored the nature of the *V-to-V* sequence. There are two important characteristics of the *V-to-V* sequence. One is that the *V-to-V* sequence in the full-syntactic-structure group and the one in the reduced-structure group retain the temporal property of *to*-infinitive. The other is that the attenuation of the first verb in the full-syntactic-structure group has resulted in the raising nature of the first verb, at least in some cases.

What we have done in Chapter 4 is twofold. For one thing, we explored the nature of the *V-and-V* sequence. For another, we reexamined the nature of the Coordinate Structure Constraint (Ross 1967). We have demonstrated that there are two types of exceptions to the Coordinate Structure Constraint. In the full-syntactic-structure group, there are genuine exceptions which occur only under specific conditions that are semantically restricted, and in the reduced-structure group, there are apparent exceptions which do not necessitate any specific contextual conditions. Through exploring the nature of the *V-and-V* sequence, we have shown that the Coordinate Structure Constraint is a constraint of a different nature from the one that

Ross supposes, and that the phenomena that it is supposed to explain cannot be satisfactorily accounted for without semantics.

Exploring the nature of the *V-V* sequence, Chapter 5 has demonstrated that unlike other three multi-verb sequences, the *V-V* sequence has one exclusive characteristic. The *V-V* sequence has inflection constraint. The inflection constraint clearly distinguishes the full-syntactic-structure group from the reduced-structure structure group. The *V-V* sequence also has another inherent characteristic. All the semantic subtypes of *V-V* sequences in the reduced-structure group are motivated by the primacy of motion in the human experience.

In Chapter 6, we turned our attention to the interpretation of the quantitative data on these three types of multi-verb sequences by using two corpora, Collins Wordbanks Online (CWO) as a synchronic corpus and the Corpus of Historical American English (COHA) as a diachronic one. From a semantic standpoint, it is not possible to find a satisfactory difference between semantically competing multi-verb sequences: the *help-V* and the *help-to-V* sequence, the *try-to-V* and the *try-and-V* sequence, the *come-V* and the *come-V*, and the *go-V* and the *go-V* sequence. The functional and the historical standpoints make it possible to differentiate between the semantically competing multi-verb sequences. From a functional standpoint, we have seen that the analysis of inflectional categories or fields of discourse play a decisive role in distinguishing between specific types of sequences. From a historical standpoint, we have demonstrated that the *V-V* sequence in Present-Day English is undergoing historical development, but not grammaticalization.

To provide an overall picture of multi-verb sequences, Chapter 7 explored the nature of another sequence, namely, the *V-Ving* sequence, from a syntactic standpoint, a semantic standpoint, and a historical standpoint. There are two important characteristics of the *V-Ving* sequence. One is that the *V-Ving* sequence in the full-syntactic-structure group and the one in the reduced-structure group retain the common temporal property of gerund-participial. The other is that the number of semantic subtypes in the *V-Ving* sequence is larger than any other multi-verb sequence.

Chapter 8 provided an overall discussion of multi-verb sequences. Demonstrating what the general classification of multi-verb sequences signifies, we have shown that there are three constraints on the reduced-structure group, the integrity constraint, the subject constraint, and the occurrence constraint. Observing regularities and irregularities both in the full-syntactic-structure group and in the reduced-structure group, we have shown that ‘irregularities’ in the reduced-structure group are now regularities.

9.2 Bolinger’s Hypothesis

In Chapter 1, we have mentioned Bolinger’s (1968: 127) hypothesis that ‘a difference in syntactic form always spells a difference in meaning’. The hypothesis has been adopted in this dissertation as a working hypothesis. In this section, we stress the importance in testing Bolinger’s hypothesis not only from a semantic standpoint, but also from a functional

standpoint and/or from a historical standpoint.

Discussions of this hypothesis have been carried out mainly from a semantic standpoint. Almost all of previous studies of Bolinger's hypothesis are based on a semantic approach as a single-angled approach. However, we have demonstrated that through such a single-angled approach, the distinction between semantically competing multi-verb sequences, shown in (1) and (2), cannot be achieved.

- (1) a. Come have your dinner.
- b. Come and have your dinner.
- (2) a. Go get me a drink!
- b. Go and get me a drink!

(1) and (2) shows that Bolinger's hypothesis cannot be verified only by a purely semantic approach as a single-angled approach. Therefore, we have emphasized the importance in testing Bolinger's hypothesis from a functional standpoint and/or from a historical standpoint as well as from a semantic standpoint. The differences in 'meaning' that different forms exhibit include functional differences in meaning. One of the functional factors that we have used in this dissertation, fields of discourse, that is to say, the frequency of use of multi-verb sequences per million words in six genres in CWO, is very effective in distinguishing between the semantically competing multi-verb sequences. If the distinction between them cannot be achieved through such a functional approach, a historical approach, which covers current changes that have taken place over relatively short spans of time, over decades rather than centuries, is absolutely necessary. Through testing Bolinger's hypothesis, more specifically differentiating between semantically competing multi-verb sequences, we have made clear the value of our multi-angled approach to the study of language.

9.3 The Last Word

In this dissertation, we have demonstrated that multi-verb sequences in English must be investigated from many different angles, that is to say, from the multi-angled approach. Considering many different aspects of multi-verb sequences, we have disentangled the intricate puzzle of multi-verb sequences. Observing regularities in irregularities or observing irregularities forming new regularities, we have demonstrated apparent irregularities in multi-verb sequences are a normal part of the English language. We have made clear the value of our multi-angled approach to multi-verb sequences. We have also opened up new avenues for further investigation.

References

- Aarts, Bas, Joanne Close, Geoffrey Leech, and Sean Wallis (eds.). 2013. *The Verb Phrase in English: Investigating Recent Language Change with Corpora*. Cambridge: Cambridge University Press.
- Aijmer, Karin. 2002. *English Discourse Particles: Evidence from a Corpus*. Amsterdam/Philadelphia: John Benjamins.
- Aikhenvald, Alexandra Y. 2006. Serial verb constructions in typological perspective. In Alexandra Y. Aikhenvald and Robert M.W. Dixon, eds., *Serial Verb Constructions: A Cross-Linguistic Typology*, 1-68. Oxford: Oxford University Press.
- Aikhenvald, Alexandra Y. 2010. *Imperatives and Commands*. Oxford: Oxford University Press.
- Anderson, Stephen. 1971. On the role of deep structure in semantic interpretation. *Foundations of Language* 7. 387-396.
- Austin, Peter. 1998. "Crow is sitting chasing them": Grammaticalization and the verb "to sit" in the Mantharta languages, Western Australia. In Anna Siewierska and Jae Jung Song, eds., *Case, Typology and Grammar*, 19-35. Amsterdam/Philadelphia: John Benjamins.
- Baker, Mona, Gill Francis, and Elena Tognini-Bonelli (eds.). 1993. *Text and Technology: In Honor of John Sinclair*. Amsterdam/Philadelphia: John Benjamins.
- Berman, Arlene. 1973. Tripl-ing. *Linguistic Inquiry* 4.3. 401-403.
- Biber, Douglas, Stig Johansson, Geoffrey Leech, Susan Contad, and Edward Finegan. 1999. *Longman Grammar of Spoken and Written English*. New York: Longman.
- Boas, Hans C. 2003. *A Constructional Approach to Resultatives*. Stanford: CSLI Publications.
- Boertian, Harmon S. 1979. Towards a unified semantics of aspectual verbs with *to* and *ing* complements. *CLS* 15. 42-52.
- Bolinger, Dwight. 1968. Entailment and the meaning of structures. *Glossa* 2. 119-127.
- Bolinger, Dwight. 1971. *The Phrasal Verb in English*. Cambridge, MA: Harvard University Press.
- Bolinger, Dwight. 1977. *Meaning and Form*. London: Longman.
- Bolinger, Dwight. 1979. The jingle theory of double *-ing*. In David Allerton, Edward Carney, and David Holdcroft, eds., *Function and Context in Linguistic Analysis: A Festschrift for William Haas*, 41-56. Cambridge: Cambridge University Press.
- Bolinger, Dwight. 1983. The *go*-progressive and auxiliary-formation. In Frederick B. Agard, Gerold Kelley, Adam Makkai, and Valerie Becker Makkai, eds., *Essays in Honor of Charles F. Hockett*, 153-167. Leiden: E.J. Brill.
- Borkin, Ann. 1973. *To be* and not *to be*. *CLS* 9. 44-56.
- Borkin, Ann. 1984. *Problems in Form and Function*. Norwood, NJ: Ablex Publishing.
- Borsley, Robert D. 1994. In defense of coordinate structures. *Linguistic Analysis* 24.3. 218-246.
- Bourdin, Philippe. 2003. On two distinct uses of *go* as a conjoined marker of evaluative

- modality. In Roberta Facchinetti, Manfred Krug and Frank Palmer, eds., *Modality in Contemporary English*, 103-128. Berlin/New York: Mouton de Gruyter.
- Bourdin, Philippe. 2009. On the “great modal shift” sustained by *come to VP*. In Raphael Salkie, Pierre Busuttill, and Johan van der Auwera, eds., *Modality in English: Theory and Description*, 349-373. Berlin/New York: Mouton de Gruyter.
- Bresnan, Joan, Anna Cueni, Tatiana Nikitina and R. Harald Baayen. 2007. Predicting the dative alternation. In Gerlof Bouma, Irene Kraemer, and Joost Zwarts, eds., *Cognitive Foundations of Interpretation*, 69-94. Amsterdam: Royal Netherlands Academy of Arts and Sciences.
- Brinton, Laurel J. 1980. The grammatical status of aspectual catenatives in English. *BLS* 6. 268-277.
- Brinton, Laurel J. 1988. *The Development of English Aspectual Systems*. Cambridge: Cambridge University Press.
- Brinton, Laurel J. 2008. *The Comment Clause in English: Syntactic Origins and Pragmatic Development*. Cambridge: Cambridge University Press.
- Bybee, Joan L. 2010. *Language, Usage and Cognition*. Cambridge: Cambridge University Press.
- Bybee, Joan L., Revere Perkins, and William Pagliuca. 1994. *The Evolution of Grammar: Tense, Aspect and Modality*. Chicago: Chicago University Press.
- Bybee, Joan L. and Paul J. Hopper (eds.). 2001. *Frequency and the Emergence of Linguistic Structure*. Amsterdam/Philadelphia: John Benjamins.
- Caidinaletti, Anna and Giuliana Giusti. 2001. “Semi-lexical” motion verbs in Romance and Germanic. In Norbert Corver and Henk van Riemsdijk, eds., *Semi-lexical Categories: The Function of Content Words and the Content of Function Words*, 371-414. Berlin/New York: Mouton de Gruyter.
- Callies, Marcus. 2013. Bare infinitival complements in Present-Day English. In Bas Aarts, Joanne Close, Geoffrey Leech, and Sean Wallis, eds., *The Verb Phrase in English: Investigating Recent Language Change with Corpora*, 239-255. Cambridge: Cambridge University Press.
- Carden, Guy and David Pesetsky. 1977. Double-verb constructions, markedness, and a fake co-coordination. *CLS* 13. 82-92.
- Chomsky, Noam. 1965. *Aspects of the Theory of Syntax*. Cambridge, MA: The MIT Press.
- Chomsky, Noam. 1973. Conditions on Transformations. In Stephen R. Anderson and Paul Kiparsky, eds., *A Festschrift for Morris Halle*, 232-286. New York: Holt, Rinehart, and Winston, Inc.
- Clark, Eve V. 1974. Normal states and evaluative viewpoints. *Language* 50.2. 316-332.
- Collins, Peter C. 1991. *Cleft and Pseudo-Cleft Constructions in English*. London/New York: Routledge.
- Cormack, Annabel, and Neil Smith. 2005. What is coordination? *Lingua* 115. 395-418.
- Culicover, Peter W. and Ray Jackendoff. 1997. Semantic subordination despite syntactic

- coordination. *Linguistic Inquiry* 28.2. 195-217.
- De Vos, Mark. 2005. *The Syntax of Pseudo-Coordination in English and Afrikaans*. Ph.D. Dissertation, University of Leiden Center for Linguistics.
- Deane, Paul. 1991. Limit to attention: A cognitive theory of island phenomena. *Cognitive Linguistics* 2.1. 1-63.
- Deane, Paul. 1992. *Grammar in Mind and Brain Explorations in Cognitive Syntax*. Berlin/New York: Mouton de Gruyter.
- Deignan, Alice. 2005. *Metaphor and Corpus Linguistics*. Amsterdam/Philadelphia: John Benjamins.
- Denison, David. 1998. Syntax. In Suzanne Romaine, ed., *The Cambridge History of the English Language, Vol. IV: 1776-1997*, 92-329. Cambridge: Cambridge University Press.
- Denison, David. 2004. Do grammars change when they leak? In Christian Kay, Simon Horobin, and Jeremy Smith, eds., *New Perspectives on English Historical Linguistics, Volume I: Syntax and Morphology*, 15-29. Amsterdam/Philadelphia: John Benjamins.
- Dirven, René. 1989. A cognitive perspective on complementation. In Dany Jasper, Wim Klooster, Yvan Putseys, and Peter Seuren, eds., *Sentential Complementation and the Lexicon: Studies in Honor of Wim de Geest*, 113-139. Dordrecht: Foris.
- Dixon, Robert M.W. 1984. The semantic basis of syntactic properties. *BLS* 10. 583-595.
- Dixon, Robert M.W. 1991. *A New Approach to English Grammar, on Semantic Principles*. Oxford: Oxford University Press.
- Dougherty, Ray C. 1970. A grammar of coordinate conjoined structures: I. *Language* 46.4. 850-898.
- Duffley, Patrick J. 1992. *The English Infinitives*. London/New York: Longman.
- Duffley, Patrick J. 1994. Need and dare: The black sheep of the modal family. *Lingua* 94. 213-243.
- Duffley, Patrick J. 1999. The use of the infinitive and the -ing after verbs denoting the beginning, middle and end of an event. *Folia Linguistica* 18.3/4. 295-331.
- Duffley, Patrick J. 2000. Gerund versus infinitive as complement of transitive verbs in English: The problem of 'tense' and 'control'. *Journal of English Linguistics* 28.3. 221-248.
- Duffley, Patrick J. 2004. Verbs of liking with the infinitive and the gerund. *English Studies* 84.4. 358-380.
- Duffley, Patrick J. 2006. *The English Gerund-Participle: A Comparison with the Infinitive*. New York: Peter Lang.
- Duffley, Patrick J. and Rachel Tremblay. 1994. The infinitive and the -ing as complements of verbs of effort. *English Studies* 75.6. 566-575.
- Durie, Mark. 1997. Grammatical structures in verb serialization. In Alex Alsina, Joan Bresnan, and Peter Sells, eds., *Complex Predicates*, 289-354. Stanford: CSLI Publications.
- Durie, Mark and Malcolm Ross. (eds.) 1996. *The Comparative Method Reviewed: Regularity and Irregularity in Language Change*. New York and Oxford: Oxford University Press.
- Egan, Thomas. 2008. *Non-Finite Complementation: A Usage-Based Study of Infinitive and -Ing*

- Clauses in English*. Amsterdam/New York: Rodopi.
- Erteschik-Schir, Nomi and Shalom Lappin. 1979. Dominance and the functional explanation of island phenomena. *Theoretical Linguistics* 6. 41-86.
- Faulhaber, Susen. 2011. *Verb Valency Patterns: A Challenge for Semantics-Based Accounts*. Berlin/New York: De Gruyter Mouton.
- Fillmore, Charles J. 1968. The case for case. In Emmon Bach and Robert T. Harms, eds., *Universals in Linguistic Theory*, 1-88. New York: Holt, Rinehart, Winston, Inc.
- Fillmore, Charles J. 1971. *Santa Cruz Lectures on Deixis*. Bloomington, Ind.: Indiana University Linguistics Club.
- Fillmore, Charles J. 1985. Frames and the semantics of understanding. *Quaderni di Semantica*, Vol. VI, No.2, December. 222-254.
- Fillmore, Charles J. 2003. *Form and Meaning in Language*. Stanford: CSLI Publications.
- Fillmore, Charles J. 1992. 'Corpus linguistics' or 'computer-aided armchair linguistics'. In Jan Svartvik, ed., *Directions in Corpus Linguistics*, 35-60. Berlin/New York: Mouton de Gruyter.
- Fillmore, Charles J., Paul Kay, and Mary Catherine O'Connor. 1988. Regularity and idiomaticity in grammatical constructions: The case of *let alone*. *Language* 64.3. 501-538.
- Fischer, Olga. 1997. Infinitive marking in Late Middle English: transitivity and changes in the English system of case. In Jacek Fisiak, ed., *Studies in Middle English Linguistics*, 109-134. Berlin/New York: Mouton de Gruyter.
- Fischer, Olga. 2000. Grammaticalisation: Unidirectional, non-reversible?: The case of *to* before the infinitive in English. In Olga Fischer, Annette Rosenbach, and Dieter Stein, eds., *Pathways of Change: Grammaticalization in English*, 149-169. Amsterdam/Philadelphia: John Benjamins.
- Fischer, Olga. 2007. *Morphosyntactic Change: Functional and Formal Perspectives*. Oxford: Oxford University Press.
- Foley, William A. and Mike Olson. 1985. Clausehood and verb serialization. In Johanna Nichols and Anthony C. Woodbury, eds., *Grammar Inside and Outside the Clause*, 17-69. Cambridge: Cambridge University Press.
- Follett, Wilson. 1966. *Modern American Usage: A Guide*. New York: Hill & Wang.
- Fowler, Henry Watson. 1965. *A Dictionary of Modern English Usage, 2nd edition*. Oxford: Clarendon Press.
- Freed, Alice F. 1979. *The Semantics of English Aspectual Complementation*. Dordrecht: Reidel.
- Gesuato, Sara. 2009a. Encoding of goal-directed motion vs resultative aspect in the COME+infinitive construction. In Antoinette Renouf and Andrew Kehoe, eds., *Corpus Linguistics: Refinement and Reassessments*, 381-400. Amsterdam/New York: Rodopi.
- Gesuato, Sara. 2009b. *Go to V*: Literal meaning and metaphorical extensions. In Andreas H. Jucker, Daniel Schreier, and Marianne Handt, eds., *Corpora: Pragmatics and Discourse, Papers from the 29th International Conference on English Language Research on Computerized Corpora (ICAME 29)*, 343-360. Amsterdam/New York: Rodopi.

- Givón, Talmy. 1991. Some substantive issues concerning verb serialization: Grammatical vs. cognitive packaging. In Claire Lefebvre, ed., *Serial Verbs: Grammatical Comparative and Cognitive Approaches*, 137-184. Amsterdam: John Benjamins.
- Givón, Talmy. 1993. *English Grammar: A Function-Based Introduction II*. Amsterdam/Philadelphia: John Benjamins.
- Gleitman, Lila R. 1965. Coordinating conjunctions in English. *Language* 41.2. 260-293.
- Glynn, Dylan and Kerstin Fischer (eds.). 2010. *Quantitative Methods in Cognitive Semantics: Corpus-Driven Approaches*. Berlin/New York: De Gruyter Mouton.
- Goldberg, Adele E. 1995. *Constructions: A Construction Grammar Approach to Argument Structure*. Chicago/London: The University of Chicago Press.
- Goldberg, Adele E. 2006. *Constructions at Work: The Nature of Generalization in Language*. Oxford: Oxford University Press.
- Goldberg, Adele E. 2013. Backgrounded constituents cannot be “extracted”. In Jon Sprouse and Norbert Hornstein, eds., *Experimental Syntax and Island Effects*, 221-238. Cambridge: Cambridge University Press.
- Goldsmith, John. 1985. A principled exception to the Coordinate Structure Constraint. *CLS* 21. 133-143.
- Goodall, Grant. 1987. *Parallel Structures in Syntax: Coordination, Causatives and Restructuring*. Cambridge: Cambridge University Press.
- Green, Georgia M. 1973. A syntactic syncretism in English and French. In Braj Kachru, Robert B. Lees, Yakov Malkiel, Angelina Pietrangeli, and Sol Saporta, eds., *Issues in Linguistics: Papers in Honor of Henry and Renée Kahane*, 257-278. Urbana: University of Illinois Press.
- Green, Georgia. 1974. *Semantics and Syntactic Regularity*. Bloomington: Indiana University Press.
- Grice, H. Paul. 1975. Logic and conversation. In Peter Cole and Jerry L. Morgan, eds., *Syntax and Semantics, Vol.3: Speech Acts*, 211-131. New York: Academic Press.
- Gries, Stefan Th. 2003. *Multifactorial Analysis in Corpus Linguistics: A Study of Particle Placement*. New York/London: Continuum.
- Gries, Stefan Th. and Anatol Stefanowitsch. 2004. Extending collocation analysis: A corpus-based perspective on ‘alternations’. *International Journal of Corpus Linguistics* 9.1. 97-129.
- Gries, Stefan Th. and Anatol Stefanowitsch (eds.). 2006. *Corpora in Cognitive Linguistics: Corpus-Based Approaches to Syntax and Lexis*. Berlin/New York: Mouton de Gruyter.
- Gries, Stefan Th. and Martin Hilpert. 2010. Modeling diachronic change in the third person singular: A multifactorial, verb- and author-specific exploratory approach. *English Language and Linguistics* 14.3. 293-320.
- Grosu, Alexander. 1973. On the nonunitary nature of the Coordinate Structure Constraint. *Linguistic Inquiry* 4. 88-92.
- Haspelmath, Martin. 1989. From purposive to infinitive – a universal path of

- grammaticalization. *Folia Linguistica Historica* 10/1-2. 287-310.
- Haspelmath, Martin (ed.). 2004a. *Coordinating Constructions*. Amsterdam/Philadelphia: John Benjamins.
- Haspelmath, Martin. 2004b. Coordinating constructions: An overview. In Martin Haspelmath, ed., *Coordinating Constructions*, 3-40. Amsterdam/Philadelphia: John Benjamins.
- Hasselgård, Hilde. 2010. *Adjunct Adverbials in English*. Cambridge: Cambridge University Press.
- Hayase, Naoko. 2011. The cognitive motivation for the case of dangling participles in English. In Klaus-Uwe Panther and Günter Radden, eds., *Motivation in Grammar and the Lexicon*, 89-105. Amsterdam/Philadelphia: John Benjamins.
- Heine, Bernd. 1994. Grammaticalization as an explanatory parameter. In William Pagliuca, ed., *Perspectives on Grammaticalization*, 255-287. Amsterdam/Philadelphia: John Benjamins.
- Heine, Bernd and Tania Kuteva. 2002. *World Lexicon of Grammaticalization*. Cambridge: Cambridge University Press.
- Hinrichs, Lars and Benedikt Szmrecsanyi. 2007. Recent changes in the function and frequency of Standard English genitive constructions: A multivariate analysis of tagged corpora. *English Language and Linguistics* 11.3. 437-474.
- Hoffman, Sebastian. 2005. *Grammaticalization and English Complex Prepositions: A Corpus-Based Study*. London/New York: Routledge.
- Hofmeister, Philip and Ivan A. Sag. 2010. Cognitive constraints on syntactic islands. *Language* 86.2. 366-415.
- Hommerberg, Charlotte and Gunnel Tottie. 2007. *Try to or try and?* Verb complementation in British and American English. *ICAME Journal* 31. 45-64
- Hopper, Paul J. 2002. Hendiadys and auxiliation in English. In Joan L. Bybee and Michael Noonan, eds., *Complex Sentences in Grammar and Discourse: Essays in Honor of Sandra A. Thompson*, 145-173. Amsterdam/Philadelphia: John Benjamins.
- Huddleston, Rodney and Geoffrey K. Pullum. 2002. *The Cambridge Grammar of the English Language*. Cambridge: Cambridge University Press.
- Hunston, Susan and Gill Francis. 2000. *Patter Grammar: A Corpus-Driven Approach to the Lexical Grammar of English*. Amsterdam/Philadelphia: John Benjamins.
- Ishihara, Yuki and Tohru Noguchi. 2000. On the inflection condition of *come/go* + V construction. *CLS* 36. 133-146.
- Jackendoff, Ray. 1975. Morphological and semantic regularities in the lexicon. *Language* 51.3. 639-671.
- Jaeggli, Osvald A. and Mina M. Hyams. 1993. On the independence and interdependence of syntactic and morphological properties: English aspectual *come* and *go*. *Natural Language and Linguistic Theory* 11. 313-346.
- Jespersen, Otto. 1931. *A Modern English Grammar on Historical Principles, Part IV: Syntax, Third Volume*. London: George Allen & Unwin.
- Johnson, Mark. 1987. *The Body in the Mind: The Bodily Basis of Meaning, Imagination, and*

- Reason*. Chicago: University of Chicago Press.
- Kageyama, Taro. 1985. Configurationality and the interpretation of verbal compounds. *English Linguistics* 2. 1-20.
- Kehler, Andrew. 2002. *Coherence, Reference, and the Theory of Grammar*. Stanford: CSLI Publications.
- Kempson, Ruth M. and Randolph Quirk. 1971. Controlled activation of latent contrast. *Language* 47. 548-572.
- Kiparsky, Paul and Carol Kiparsky. 1970. Fact. In Manfred Bierwisch and Karl Erich Heidolph, eds., *Progress in Linguistics*, 143-173. The Hague: Mouton.
- Kirsner, Robert S. and Sandra A. Thompson. 1976. The role of pragmatic inference in semantics: A study of sensory verb complements in English. *Glossa* 10.2. 200-240.
- Kjellmer, Göran. 1985. *Help to/help ø* revisited. *English Studies* 2. 156-161.
- Kjellmer, Göran. 2000. Auxiliary marginalities: The case of *try*. In John M. Kirk, ed., *Corpora Galore: Analyses and Techniques in Describing English*, 115-124. Amsterdam & Atlanta: Rodopi.
- Kortmann, Bernd. 1991. *Free Adjuncts and Absolutes in English: Problems of Control and Interpretation*. London: Routledge.
- Kortmann, Bernd. 1995. Adverbial participial clauses in English. In Martin Haspelmath and Ekkehard König, eds., *Converbs in Cross-Linguistic Perspective: Structure and Meaning of Adverbial Verb Forms – Adverbial Participles, Gerunds –*, 189-237. Berlin/New York: Mouton de Gruyter.
- Krug, Manfred G. 2000. *Emerging English Modals: A Corpus Study of Grammaticalization*. Berlin/New York: Mouton de Gruyter.
- Kruisinga, Etsko. 1931. *A Handbook of Present-Day English, Part II: English Accidence and Syntax*. Groningen: P. Noordhoff.
- Kuno, Susumu. 1976. Subject theme and speaker's empathy: a reexamination of relativization phenomena. In Charles N. Li, ed., *Subject and Topic*, 419-444. New York: Academic Press.
- Kuno, Susumu. 1987. *Functional Syntax: Anaphora, Discourse, and Empathy*. Chicago/London: The University of Chicago Press.
- Kuteva, Tania A. 1999. On 'sit' / 'stand' / 'lie' auxiliation. *Linguistics* 37.2. 191-213.
- Lakoff, George. 1970. *Irregularity in Syntax*. New York: Holt, Rinehart, and Winston, Inc.
- Lakoff, George. 1986. Frame semantic control of the coordinate structure constraint. *CLS* 22. 152-167.
- Lakoff, George. 1987. *Women, Fire, and Dangerous Things: What Categories Reveal about the Mind*. Chicago: University of Chicago Press.
- Lakoff, George and Mark Johnson. 1980. *Metaphors We Live By*. Chicago: University of Chicago Press.
- Lakoff, George and Stanley Peters. 1969. Phrasal conjunction and symmetric predicates. In David A. Reibel and Sanford A. Schane, eds., *Modern Studies in English: Readings in Transformational Grammar*, 113-142. New Jersey: Prentice-Hall.

- Lakoff, George and Mark Turner. 1989. *More Than Cool Reason: A Field Guide to Poetic Metaphor*. Chicago: University of Chicago Press.
- Lakoff, Robin. 1971. If's, and'sm and but's about conjunction. In Charles J. Fillmore and Terence D. Langendoes, eds., *Studies in Linguistic Semantics*, 114-149. New York: Holt, Rinehart and Winston Inc.
- Langacker, Ronald W. 1969. On pronominalization and the chain of command. In David A. Reibel and Sanford A. Schane, eds., *Modern Studies in English: Readings in Transformational Grammar*, 160-186. New Jersey: Prentice-Hall.
- Langacker, Ronald W. 1985. Observations and speculations on subjectivity. In John Haiman, ed., *Iconicity in Syntax*, 109-150. Amsterdam: John Benjamins.
- Langacker, Ronald W. 1986. Abstract motion. *BLS* 12. 455-471.
- Langacker, Ronald W. 1988. A usage-based model. In Rudzka-Ostyn Brygida, ed., *Topics in Cognitive Linguistics*, 127-161. Amsterdam/Philadelphia: John Benjamins.
- Langacker, Ronald W. 1991. *Foundations of Cognitive Grammar, Vol.II: Descriptive Application*. Stanford: Stanford University Press.
- Langacker, Ronald W. 2000. A dynamic usage-based model. In Michael Barlow and Suzanne Kemmer, eds., *Usage-Based Models of Language*, 1-63. Stanford: CSLI Publications.
- Langacker, Ronald W. 2009. *Investigations in Cognitive Grammar*. Berlin/New York: Mouton de Gruyter.
- Leech, Geoffrey. 1983. *Principles of Pragmatics*. London/New York: Longman.
- Leech, Geoffrey. 2003. Modality on the move: The English modal auxiliaries 1961-1992. In Roberta Facchinetti, Manfred G. Krug, and Frank Palmer, eds., *Modality in Contemporary English*, 223-240. Berlin/New York: Mouton de Gruyter.
- Leech, Geoffrey. 2004. Recent grammatical change in English data, description, theory. In Karin Aijmer and Bengt Altenberg, eds., *Advances in Corpus Linguistics: Papers from the Twenty-Third International Conference on English Language Research on Computerized Corpora (ICAME 23)*, 61-81. Amsterdam: Rodopi.
- Leech, Geoffrey, Marianne Hundt, Christian Mair, and Nicholas Smith (eds.). 2009. *Change in Contemporary English: A Grammatical Study*. Cambridge: Cambridge University Press.
- Leech, Geoffrey and Nicholas Smith. 2006. Recent grammatical change in written English 1961-1992: Some preliminary findings of a comparison of American with British English. In Antoinette Renouf and Andrew Kohoe, eds., *The Changing Face of Corpus Linguistics*, 185-204. Amsterdam/New York: Rodopi.
- Leech, Geoffrey and Nicholas Smith. 2009. Change and consistency in linguistic change: How grammatical usage in written English evolved in the period 1931-1991. In Antoinette Renouf and Andrew Kehoe, eds., *Corpus Linguistics: Refinements and Reassessments*, 173-200. Amsterdam/New York: Rodopi.
- Leiber, Rochelle. 1983. Argument linking and compounds in English. *Linguistic Inquiry* 14.2. 251-285.
- Levine, Robert D. 2001. The extraction riddle: Just what are we missing? *Journal of Linguistics*

- 37.1. 145-174.
- Lind, Åge. 1983a. The variant forms *help to/help ø*. *English Studies* 3. 253-273.
- Lind, Åge. 1983b. The variant forms *try and/try to*. *English Studies* 6. 550-563.
- Lindquist, Hans and Christian Mair (eds.). 2004. *Corpus Approaches to Grammaticalization in English*. Amsterdam/Philadelphia: John Benjamins.
- Lohmann, Arne. 2011. *Help vs help to*: a multifactorial, mixed-effects account of infinitive marker omission. *English Language and Linguistics* 15.3. 499-521.
- Los, Bettelou. 1998. The rise of the to-infinitive as verb complement. *English Language and Linguistics* 2.1. 1-36.
- Los, Bettelou. 2005. *The Rise of the To-Infinitive*. Oxford: Oxford University Press.
- McCawley, James D. 1988. *The Syntactic Phenomena of English, Vol.1*. Chicago: The University of Chicago Press.
- McEnery, Anthony and Zhonghua Xiao. 2005. *HELP or HELP to*: What do corpora have to say? *English Studies* 86.2. 161-187.
- McEnery, Tony and Andrew Hardie. 2011. *Corpus Linguistics; Method Theory and Practice*. Cambridge: Cambridge University Press.
- McEnery, Tony, Richard Xiao, and Yukio Tono (eds.). 2006. *Corpus-Based Language Studies: An Advanced Resource Book*. London: Routledge.
- Mahlberg, Michaela. 2005. *English General Nouns: A Corpus Theoretical Approach*. Amsterdam/Philadelphia: John Benjamins.
- Maiden, Martin. 1992. Irregularity as a determinant of morphological change. *Journal of Linguistics* 28.2. 285-312.
- Mair, Christian. 1990. *Infinitival Complement Clauses in English: A Study of Syntax in Discourse*. Cambridge: Cambridge University Press.
- Mair, Christian. 1995. Changing patterns of complementation, and concomitant grammaticalisation, of the verb *help* in present-day British English. In Bas Aarts and Charles F. Meyer, eds., *The Verb in Contemporary English: Theory and Description*, 258-272. Cambridge: Cambridge University Press.
- Mair, Christian. 1997. The spread of the *going-to*-future in written English: A corpus-based investigation into language change in progress. In Raymond Hickey and Stanislaw Puppel, eds., *Language History and Linguistic Modelling: A Festschrift for Jacek Fisiak on his 60th Birthday, Volume II: Linguistic Modelling*, 1537-1544. Berlin/New York: Mouton de Gruyter.
- Mair, Christian. 2002. Three changing patterns of verb complementation in Late Modern English: a real-time study based on matching text corpora. *English Language and Linguistics* 6.1. 105-131.
- Mair, Christian. 2003. Gerundial complements after *begin* and *start*: Grammatical and sociolinguistic factors and how they work against one another. In Günter Rohdenburg and Britta Mondorf, eds., *Determinants of Grammatical Variation in English*, 329-345. Berlin/New York: Mouton de Gruyter.

- Mair, Christian. 2004. Corpus linguistics and grammaticalisation theory: Statistics, frequencies, and beyond. In Hans Lindquist and Christian Mair, eds., *Corpus Approaches to Grammaticalization in English*, 121-150. Amsterdam/Philadelphia: John Benjamins.
- Mair, Christian. 2006. *Twentieth-Century English: History, Variation, and Standardization*. Cambridge: Cambridge University Press.
- Mair, Christian and Geoffrey Leech. 2006. Current changes in English syntax. In Bas Aarts and April McMahon, eds., *The Handbook of English Linguistics*, 318-342. Oxford: Blackwell.
- Matlock, Teenie. 2004. The conceptual motivation of fictive motion. In Günter Radden and Klaus-Uwe Panther, eds., *Studies in Linguistic Motivation*, 221-248. Berlin/New York: Mouton de Gruyter.
- Matsumoto, Noriko. 2013. The historical development and functional characteristics of the *go-adjective* sequence in English. In Ritsuko Kikusawa & Lawrence A. Reid, eds., *Historical Linguistics 2011: Selected Papers from the 20th International Conference on Historical Linguistics, Osaka, 25-30 July 2011*, 243-265. Amsterdam/Philadelphia: John Benjamins.
- Matsumoto, Yo. 1996. Subjective motion and English and Japanese verbs. *Cognitive Linguistics* 7. 124-156.
- Mauri, Caterina and Andrea Sansò. 2011. How directive constructions emerges: grammaticalization, constructionalization, cooptation. *Journal of Pragmatics* 43. 3489-3521.
- Meyer, Charles F. 1992. *Apposition in Contemporary English*. Cambridge: Cambridge University Press.
- Miller, George A. and Phillip N. Johnson-Laird. 1976. *Language and Perception*. Cambridge, Mass.: Harvard University Press.
- Mustanoja, Tauno. 1960. *A Middle English Syntax: Part I Parts of Speech*. Helsinki: Société Néophilologique.
- Na, Younghee and Geoffrey J. Huck. 1992. On extracting from asymmetrical structures. In Diane Brentari, Gary N. Larson, and Lynn A. Macleod, eds. *The Joy of Grammar: A Festschrift in Honor of James D. McCawley*, 251-274. Amsterdam/Philadelphia: John Benjamins.
- Newman, John. 1996. *Give: A Cognitive-Linguistic Study*. Berlin/New York: Mouton de Gruyter.
- Newman, John. 1997. Eating and drinking as sources of metaphor in English. *Cuadernos de Filología Inglesa* 6.2. 213-231.
- Newman, John (ed.). 2002. *The Linguistics of Sitting, Standing, and Lying*. Amsterdam/Philadelphia: John Benjamins.
- Newman, John, and Sally Rice. 2004. Patterns of usage for English SIT, STAND, and LIE: A cognitively inspired exploration in corpus linguistics. *Cognitive Linguistics* 15.3. 351-396.
- Newman, John and Sally Rice. 2008. Asymmetry in English multi-verb sequences: A corpus-based approach. In Barbara Lewandowska-Tomaszczyk, ed., *Asymmetric Events*,

- 3-24. Amsterdam/Philadelphia: John Benjamins.
- Newman, John, and Sally Rice. 2009. English posture verbs: An experientially grounded approach. *Annual Review of Cognitive Linguistics* 7. 30-57.
- Nicolle, Steve. 2007. The grammaticalization of tense markers: A pragmatic reanalysis. *Cahiers Chronos* 17. 47-65.
- Nicholson, Margaret. 1957. *A Dictionary of American English Usage: Based on Fowler's Modern English Usage*. Oxford: Oxford University Press.
- Nordquist, Dawn. 1998. Try and: A discourse analysis. *Proceedings of the First High Desert Linguistic Conference*, April 3-4, 1998. Albuquerque, NM.
- Norvig, Peter and George Lakoff. 1987. Taking: A study in lexical network theory. *BLS* 13. 195-206.
- Oehrle, Richard T. 1976. *The Grammatical Status of the English Dative Alternation*. Ph.D. Dissertation, MIT.
- Palmer, Frank Robert. 1987. *The English Verb, 2nd Edition*. London: Longman.
- Panther, Klaus-Uwe and Linda Thornburg. 2009. From syntactic coordination to conceptual modification: The case of the *nice and Adj* construction. *Constructions and Frames* 1.1. 56-86.
- Partee, Barbara Hall. 1965. *Subject and Object in Modern English*. Ph.D. Dissertation, MIT.
- Partington, Alan. 1998. *Patterns and Meanings: Using Corpora for English Language Research and Teaching*. Amsterdam/Philadelphia: John Benjamins.
- Patten, Amenda L. 2012. *The English It-Cleft: A Constructional Account and a Diachronic Investigation*. Berlin/New York: De Gruyter Mouton.
- Perlmutter, David M. 1971. *Deep and Surface Structure Constraints in Syntax*. New York: Holt, Rinehart and Winston, Inc.
- Pollock, Jean-Yves. 1994. Checking Theory and Bare Verbs. In Guglielmo Cinque, Jan Koster, Jean-Yves Pollock, Luigi Rizzi, and Raffaella Zanuttini, eds., *Paths towards Universal Grammar: Studies in Honor of Richard S. Kayne*, 293-310. Washington, D.C.: Georgetown University Press.
- Postal, Paul M. 1974. *On Raising: One Rule of English Grammar and its Theoretical Implications*. Cambridge, MA: The MIT Press.
- Postal, Paul M. 1998. *Three Investigations of Extraction*. Cambridge, MA: The MIT Press.
- Poustma, Hendrik. 1917a. Hendiadys in English: Together with some observations on the constructions of certain verbs I. *Neophilologus* 2. 202-218.
- Poustma, Hendrik. 1917b. Hendiadys in English: Together with some observations on the constructions of certain verbs II. *Neophilologus* 2. 284-292.
- Poutsma, Hendrik. 1928. *A Grammar of Late Modern English, Part I, Second Half: The Composite Sentences, 2nd Edition*. Groningen: Noordhoff.
- Progovac, Ljiljana. 1998a. Structure for coordination Part I. *Glott International* 3.7. 3-6.
- Progovac, Ljiljana. 1998b. Structure for coordination Part II. *Glott International* 3.8. 3-9.
- Pullum, Geoffrey K. 1990. Constraints on intransitive quasi-serial verb constructions in

- modern colloquial English. *Ohio State University Working Papers in Linguistics*. 218-239.
- Pullum, Geoffrey K. and Arnold Zwicky. 1999. Gerund participles and head-complements inflections conditions. In Peter Collins and David Lee, eds., *The Clause in English: In Honor of Rodneyt Huddleston*, 251-272. Amsterdam/Philadelphia: John Benjamins.
- Putt, S. Gorley. 1939. A suppressed hendiadys is a poem by Surrey. *The Modern Language Review* 34.1. 66-67.
- Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech, and Jan Svartvik. 1985. *A Comprehensive Grammar of the English Language*. London: Longman.
- Radden, Günter. 1996. Motion meraphorized: The case of *coming* and *going*. In Eugene H. Casad, ed., *Cognitive Linguistics in the Redwoods: The Expansion of a New Paradigm in Linguistics*, 423-458. Berlin/New York: Mouton de Gruyter.
- Radden, Günter and Klaus-Uwe Panther. 2004. Introduction: Reflections on motivation. In Günter Radden and Klaus-Uwe Panther, eds., *Studies in Linguistic Motivation*, 1-46. Berlin/New York: Mouton de Gruyter.
- Radden, Günter, Klaus-Michael Köpcke, Thomas Berg, and Peter Siemund (eds.). 2007. *Aspects of Meaning Construction*. Amsterdam/Philadelphia: John Benjamins.
- Riddle, Elizabeth. 1975. Some pragmatic conditions on complementizer choice. *CLS* 11. 467-474.
- Roeper, Thomas and Muffy Siegel. 1978. A lexical transformation for verbal compounds. *Linguistic Inquiry* 9.2. 199-260.
- Rohdenburg, Günter. 2003. Cognitive complexity and *horror aequi* as factors determining the use of interrogative clause linkers in English. In Günter Rohdenburg and Britta Mondorf, eds., *Determinants of Grammatical Variation in English*, 205-250. Berlin/New York: Mouton de Gruyter.
- Rohdenburg, Günter and Britta Mondorf (eds.). 2003. *Determinants of Grammatical Variation in English*. Berlin/New York: Mouton de Gruyter.
- Rohdenburg, Günter and Julia Schlüter. 2009. Introduction. In Günter Rohdenburg and Julia Schlüter, eds., *One Language, Two Grammars?: Differences between British and American English*, 1-12. Cambridge: Cambridge University Press.
- Römer, Ute. 2005. *Progressives, Patterns, Pedagogy: A Corpus-Driven Approach to English Progressive Forms, Functions, Contexts, and Didactics*. Amsterdam/Philadelphia: John Benjamins.
- Rosenbaum, Peter S. 1967. *The Grammar of English Predicate Complement Constructions*. Cambridge, MA: The MIT Press.
- Ross, John Robert. 1967. *Constraints on Variables in Syntax*. Ph.D. Dissertation, MIT.
- Ross, John Robert. 1972. Doubl-ing. *Linguistic Inquiry* 3.1. 61-86.
- Rudanko, Juhani. 2011. *Changes in Complementation in British and American English: Corpus-Based Studies on Non-Finite Complements in Recent English*. Hampshire: Palgrave MacMillan.
- Russell, I. Willis. 1935. The dangling participle: Illustrations of linguistic change. *American*

- Speech* 10.2. 113-118.
- Sag, Ivan A., Gerald Gazdar, Thomas Wasow, and Steven Weisler. 1985. Coordination and how to distinguish categories. *Natural Language and Linguistic Theory* 3. 117-171.
- Salkie, Raphael. 2010. On *going*. In Bert Cappelle and Naoki Wada, eds., *Distinction in English Grammar: Offered to Renaat Declerck*, 169-190. Tokyo: Kaitakusha.
- Schachter, Paul. 1977. Constraints on Coördination. *Language* 53.1. 86-103.
- Schlüter, Julia. 2005. *Rhythmic Grammar: The Influence of Rhythm on Grammatical Variation and Change in English*. Berlin/New York: Mouton de Gruyter.
- Schmerling, Susan F. 1975. Asymmetric conjunction and rules of conversation. In Peter Cole and Jerry L. Morgan, eds., *Syntax and Semantics, Vol.3: Speech Acts*, 211-231. New York: Academic Press.
- Schönefeld, Doris. 2012. *Things going unnoticed* – a usage-based analysis of *go*-constructions. In Stefan Th. Gries and Dagmar Divjak, eds., *Frequency Effects in Language Representation*, 11-50. Berlin/Boston: De Gruyter Mouton.
- Schönefeld, Doris. 2013. *It is ... quite common for theoretical predictions to go untested* (BNC_CMH). A register-specific analysis of the English *go un-V-en* construction. *Journal of Pragmatics* 52. 17-33.
- Shopen, Timothy. 1971. Caught in the Act. *CLS* 7. 254-263.
- Silva, Clare M. 1975. Adverbial –ing. *Linguistic Inquiry* 6.2. 346-350.
- Sinclair, John. 1991. *Corpus, Concordance, Collocation*. Oxford: Oxford University Press.
- Smith, Michael B. and Joyce Escobedo. 2001. The semantics of *to*-infinitive vs. *-ing* constructions in English. *CLS* 37. 549-563.
- Smith, Nicholas. 2002. Ever moving on: Changes in the progressive in recent British English. In Pam Peters, Peter Collins, and Adam Smith, eds., *New Frontiers of Corpus Research*, 317-330. Amsterdam: Rodopi.
- Smith, Nicholas. 2003. Changes in the modals and semi-modals of strong obligation and epistemic necessity in recent British English. In Roberta Facchinetti, Manfred G. Krug, and Frank R. Palmer, eds., *Modality in Contemporary English*, 241-266. Berlin/New York: Mouton de Gruyter.
- Spears, Arthur Keen. 1977. *The Semantics of English Complementation*. Ph.D. Dissertation, University of California, San Diego.
- Spears, Arthur Keen. 1982. The black English semi-auxiliary *come*. *Language* 58.4. 850-872.
- Spolsky, Ellen. 1988. The limits of literal meaning. *New Literary History* 19.2. 419-440.
- Stahlke, Herbert F.W. 1970. Serial verbs. *Studies in African Linguistics* 1.1. 60-99.
- Stefanowitsch, Anatol. 1999. The *go-and-verb* construction in a cross-linguistic perspective: Image-schema blending and the construal of events. In Dawn Nordquist and Catie Berkenfield, eds., *Proceedings of the Second Annual High Desert Linguistic Society Conference*, 123-134. Albuquerque, NM: High Desert Linguistics Society.
- Stefanowitsch, Anatol. 2000. The English *Go-(PRT)-AND-VERB* construction. *BLS* 26. 259-270.

- Stefanowitsch, Anatol and Stephen Th. Gries. 2003. Collostructions: On the interaction between verbs and constructions. *International Journal of Corpus Linguistics* 8.2. 209-243.
- Stefanowitsch, Anatol and Stefan Th. Gries (eds.). 2006. *Corpus-Based Approaches to Metaphor and Metonymy*. Berlin/New York: John Benjamins.
- Stubbs, Michael. 2001. *Words and Phrases: Corpus Studies of Lexical Semantics*. Oxford: Blackwell.
- Sweetser, Eve. 1990. *From Etymology to Pragmatics: Metaphorical and Cultural Aspects of Semantic Structure*. Cambridge: Cambridge University Press.
- Takami, Ken-ichi. 1988. Preposition stranding: arguments against syntactic analyses and an alternative functional explanation. *Lingua* 76. 299-335.
- Taylor, John R. 1993. Some pedagogical implications of cognitive grammar. In Richard A. Geiger and Brygida Rudzka-Ostyn, eds., *Conceptualizations and Mental Processing in Language*, 201-226. Berlin/New York: Mouton de Gruyter.
- Talmy, Leonard. 1983. How language structures space. In Herbert L. Pick, Jr. and Linda P. Acredolo, eds., *Spatial Orientation: Theory, Research, and Application*, 225-282. New York: Plenum Press.
- Tobin, Yishai. 1993. *Aspect in the English Verb: Process and Result in Language*. London/New York: Longman.
- Tognini-Bonelli, Elena. 2001. *Corpus Linguistics at Work*. Amsterdam/Philadelphia: John Benjamins.
- Tummers, Jose, Kris Heylen, and Dirk Geeraerts. 2005. Usage-based approaches in Cognitive Linguistics: A technical state of the art. *Corpus Linguistics and Linguistic Theory* 1.2. 225-261.
- Twaddell, W. Freeman. 1968. *The English Verb Auxiliaries, Second Edition*. Providence: Brown University Press.
- Tyler, Andrea and Vyvyan Evans. 2003. *The Semantics of English Prepositions: Spatial Scenes, Embodied Meaning, and Cognition*. Cambridge: Cambridge University Press.
- van Ek, Jan Ate. 1966. *Four Complementary Structures of Predication in Contemporary British English*. Groningen: J.B. Wolters.
- van Oirsouw, Robert. 1987. *The Syntax of Coordination*. New York: Croom Helm.
- Vendler, Zeno. 1967. *Linguistics in Philosophy*. Ithaca, New York: Cornell University Press.
- Verspoor, Marjolijn. 1996. The story of *-ing*: A subjective perspective. In Martin Pütz and René Dirven, eds., *The Construal of Space in Language and Thought*, 417-454. Berlin/New York: Mouton de Gruyter.
- Verspoor, Marjolijn. 1999. *To* Infinitives. In Leon de Stadler and Christoph Eyrych, eds., *Issues in Cognitive Linguistics: 1993 Proceedings of the International Cognitive Linguistics Conference*, 505-526. Berlin/New York: Mouton de Gruyter.
- Verspoor, Marjolijn. 2000. Iconicity in English complement constructions: Conceptual distance and cognition. In Kaoru Horie, ed., *Complementation: Cognitive and Functional Perspectives*, 199-225. Amsterdam: John Benjamins.

- Visser, Frederik Theodoor. 1969. *An Historical Syntax of the English Language, Part Three, First Half, Syntactical Units with Two Verbs*. Leiden: E.J. Brill.
- Vosberg, Uwe. 2003. The role of extractions and *horror aequi* in the evolution of *-ing* complements in Modern English. In Günter Rohdenburg and Britta Mondorf, eds., *Determinants of Grammatical Variation in English*, 305-328. Berlin/New York: Mouton de Gruyter.
- Wald, Benji and Lawrence Besserman. 2002. The emergence of the verb-verb compound in twentieth century English and twentieth century linguistics. In Donak Minkova nad Robert Stockwell, eds., *Studies in the History of the English Language: A Millennial Perspective*, 417-447. Berlin/New York: Mouton de Gruyter.
- Wierzbicka, Anna. 1982. Why can you have a drink when you can't *have an eat? *Language* 58.4. 753-799.
- Wierzbicka, Anna. 1988. *The Semantics of Grammar*. Amsterdam: John Benjamins.
- Wood, Frederick T. 1956. Gerund versus infinitive. *English Language Teaching* 11. 11-16.
- Wood, Frederick T. 1962. *Current English Usage: A Concise Dictionary*. New York: St.Martin's.
- Wulff, Stefanie. 2006. *Go-V vs. go-and-V in English: A case of constructional synonymy?* In Stefan Th. Gries and Anatol Stefanowitsch, eds., *Corpora in Cognitive Linguistics: Corpus-Based Approaches to Syntax and Lexis*, 101-125. Berlin/New York: Mouton de Gruyter.
- Zhang, Niina Ning. 2010. *Coordination in Syntax*. Cambridge: Cambridge University Press.
- Zwicky, Arnold M. 1969. Phonological constraints in syntactic description. *Papers in Linguistics* 1. 411-463.
- Zwicky, Arnold M. 1990a. Syntactic words and morphological words, simple and composite. In Geert Booij and Jaap van Marle, eds., *Yearbook of Morphology* 3, 201-216. Dordrecht: Foris Publications.
- Zwicky, Arnold M. 1990b. What are we talking about when we talk about serial verbs? *Ohio State University Working Papers in Linguistics*. 1-13.
- Zwicky, Arnold M. 1992. Some choices in the theory of morphology. In Robert Levine, ed., *Formal Grammar: Theory and Implementation*, 327-371. New York/Oxford: Oxford University Press.
- Zwicky, Arnold M. 2003. Go look at the modern language to test hypotheses about the past. Abstract. Stanford University. <http://www.stanford.edu/~zwicky/lsaabst.qsv.pdf>. (December 8th, 2014)