

Title	A Contrastive Study of Japanese Compound Verbs and English Phrasal Verbs : Building Toward a Typology of Linguistic Construal Operations Involved in Processes of Semantic Extension		
Author(s)	Moehle, Ashlyn Michelle		
Citation	大阪大学, 2016, 博士論文		
Version Type	VoR		
URL	https://doi.org/10.18910/59634		
rights			
Note			

The University of Osaka Institutional Knowledge Archive : OUKA

https://ir.library.osaka-u.ac.jp/

The University of Osaka

A Contrastive Study of Japanese Compound Verbs and English Phrasal Verbs: Building Toward a Typology of Linguistic Construal Operations Involved in Processes of Semantic Extension

A Thesis Submitted for the Degree of Doctor of Philosophy, Studies in Language and Culture, Graduate School of Language and Culture, Osaka University

by

MOEHLE, Ashlyn Michelle

June 2016

本論文では、英語における out を含む 374 の句動詞を翻訳及び定義するのに使 用される日本語の述語を考察する。英語の句動詞とそれに対応する日本語の述語 のペアを抽出し、それを日本語の述語の種類によって7つのカテゴリーに分類する。 それに基づいて、out の多義的ネットワークにおける複数の関連した意味の中で、ど の意味が「出る」又は「出す」を用いて表現が可能かの検討を行い、out で表現され るいくつかの意味領域が「出る/出す」では表現されないことを明らかにする。このよう な意味拡張のあり方の違いは out のそれぞれの用法を基盤となりそれを動機づける イメージスキーマの変化に由来することを示す。最後にそのイメージスキーマに起き る変化は特定の認知操作が適用されることによって生じるということを論証する。ここ で述べる認知操作とはある事象を言語で表現するために行われるプロセスであり、 特に話し手によるその事象の捉え方についての情報を伝達する手段として定義され ている(Croft and Cruse 2004)。本研究では、このような意味拡張に関わる認知操作 の観点から言語の類型的特徴を分析する枠組みを作るための基礎を提供すること を試みる。

句動詞とは動詞と前置詞、副詞、不変化詞(まとめて小辞と呼ばれるもの) が組み合わされた構文を指す。Lindner (1983) は point out や tie up などのよ うな句動詞を 1,800 件分析し out と up が句動詞の意味へどのように貢献して いるかを考慮しながら out と up の多義的ネットワークを明らかにしている。 Lindner の分析に基づき、本論文では out の多義的ネットワークを日本語の 「出る」と「出す」のそれと比較し、意味拡張のあり方に関する共通点と相 違点を明らかにする。out の諸用法を「出る/出す」の意味と比較するために、 英語における句動詞と日本語における複合動詞、それぞれ二つの構文におい

第1章では本論文の目的を述べ理論的な方向性を示す。本論文では、意味 拡張に関する様々な現象を分析する際に、認知言語学の方法論に従う立場を 取る。第1章の後半では論文概略について述べる。

て out と「出る/出す」がどのような意味で使われているかを考察する。

第2章前半では英語における句動詞の先行研究を参照しながら、句動詞と 形式的にそれに類似する構文を区別するために使われる統語的な基準を紹介

i

する。第2章後半では本論文における句動詞の分類を再定義する。本論文で 扱う句動詞の分類はLindner(1983)のverb-particle construction(動詞-不変化 詞構文)の分類と大部分重複しているが、Lindner とは異なり break out of a bad habit のような of を主要部とする前置詞句を補部として取る out の句動詞 も考慮に入れる。

第3章では近年の日本語における複合動詞についての主な文献を再検討す る。テ形複合動詞と区別する基準を紹介した上で、「統語的」「語彙的」と いう二つの種類の複合動詞を区別するための基準を検討する。その上で、語 彙的複合動詞を(句動詞と共に)特定の文法形式として、本論分の対照分析 の対象とする。

第4章では英語の句動詞と日本語の複合動詞の対照研究が可能となる根拠 について論じる。まず、これらの構文が Talmy(2000)の移動表現の類型の 中で特徴づけられることを主張する。Talmy は移動という出来事が成り立つ ために必要な要素と、それがどのように具現化されるかを調査し、移動動詞 の語彙化の類型を提案している。 それに基づいて、ある言語において『様態』 『経路』『移動』という三つの意味的な要素を同時に表す場合、経路が動詞 に融合して表現される場合と動詞以外の要素によって表現される場合がある ことを論じる。前者は verb-framed language、後者は satellite-framed language と呼ばれており、日本語と英語はそれぞれの代表的な言語である。それぞれ の言語において複合動詞と句動詞は同様に『様態』『経路』『移動』という 移動事象における三つの意味要素を同時に表現する手法として共通している。 さらに Talmyの類型論は移動事象に限らず状態変化など様々な複雑事象に適 用できるとされている。英語の句動詞と日本語の複合動詞を明示的に比較す る研究は数少ないが、代表的な研究を二つ紹介する(Taniwaki and Tono 2009、 Kageyama 1999)。最後に out を含む句動詞と「出る/出す」が V2 として現 われる語彙的複合動詞に検討の焦点を絞る。out も「出る」も基本義で表され る空間における外部への移動という意味が容器スキーマに由来することを論 証する。「出る」が複合動詞の V2 として機能する場合「出る」が単独動詞 として機能する際の意味と概ね同じ意味を表わしていると Himeno(1999)は 述べている。さらに、多くの場合、V2の「出る」とV2の「出す」は相互置

ii

換可能である。これらの根拠に基づき、句動詞における out と語彙的複合動 詞における「出る/出す」の間の意味的な対応を規定することができる。

第5章では out の句動詞とそれに対応する日本語の述語を 1,957 のペアで分 析した結果を紹介する。まず、データの引用元と収集する方法を紹介する。 対応ペアは「出る/出す」が何らかの形で含まれているか否か、さらに、こ こで扱う日本語の述語の種類によって 7 つのカテゴリーに分類される。分析 の結果として「出る/出す」以外の単独動詞が最多のカテゴリーであり対応 ペアの 50.8%を占めることを示す。複合動詞は全体の 23.6%を占め、その半 分(11.8%)が「出る/出す」が V2 として現われる複合動詞である。この結 果は第4章の前半で論じた対応とは一致しておらず、そのような結果がなぜ 生じたかについて検討する。第一に、対応ペアの分布に影響を与える理由と してイディオム表現と日本語の述語に前置される要素を事例と共に挙げる。 最後に最も頻出する日本語の単独動詞と複合動詞の V2 を列挙し同義である が「出る/出す」によって表現されない句動詞 のグループがいくつかあるこ とを指摘する。

第6章では、第5章の終わりで指摘された残りの非対応ペアについて触れ る。非対応ペアとは「出る/出す」が単独動詞、複合動詞の V2、あるいは 漢語における「出」という形で登場していない述語を指す。第5章の検討で は説明できない非対応ペアは全て偶然生じたわけではなく、むしろその多く が out の拡張した意味での用法であるのに対して「出る/出す」の意味がそ こまで拡張していないためであることを主張する。再帰型(reflexive type)、 「接近不可能化」型(change to inaccessibility type)、詐取型(bamboozle type) という三つの「出る/出す」によって表現されない out を含む句動詞の分類 を挙げる。第4章では out と「出る/出す」の基本義は共通で空間的な外部 への移動を表わし、いずれの場合も容器スキーマというイメージスキーマに 基づいていることを示したが、本章で挙げる各類型での out の意味は容器ス キーマにおける根本的な変化から生じることを議論する。さらにこの変化は 「総括スキャニングと順次スキャニング」や「視点」などの認知操作による 変化であることを主張する。例えば「接近不可能化」型に関して言えば、 Lindner (1983)に述べられているように out に見られる「接近可能化」の意

iii

味の基となるイメージスキーマにおける「視点」の変化によって「接近不可 能化」の意味が派生する。「接近可能化」の意味は Hiratsuka and Imai (2000)が単独動詞「出る」の意味用法の一つとして提示しており、 「認識、 知覚、コミュニケーションなどが可能になること」を表すような状態変化と して定義されている。複合動詞後項の「出る/出す」についても Himeno (1999)が「表だった場への出現」「顕在化」として挙げている意味用法が それに当たると考えられる。すなわち、単独動詞の「出る」に見られる「接 近可能化」の意味が複合動詞後項(V2)の「出る/出す」にも見られると考 えることができる。したがって、「接近可能化」のみについては、英語の out についても、日本語の複合動詞後項「出る/出す」についても同様に存在す ることが分かる。このことは、「外部への移動」から「接近可能化」への意 味拡張が日本語にも英語にも見られる共通のプロセスであるということを示 している。しかし、Lindner は out に関して「接近可能化」という意味の一方 で、接近可能であったものが接近不可能になることを表す out の例も見られ ることを指摘している。一方、「出る/出す」の意味には「接近可能化」し かない点で out とは異なっている。

(1) 接近可能化

The writer kept <u>grinding out</u> more stories until the magazine agreed to accept three of the best ones.

その作家はさらに続々と作品を<u>作り出し</u>、ついにその雑誌は最も優れ たものの中から3作を掲載することに同意した。

(2) 接近不可能化

Grind out your cigar.

葉巻を<u>もみ消して</u>下さい。

(Kenkyusha-Longman Dictionary of Phrasal Verbs)

このように英語の out を含む句動詞と「出る/出す」を後項とする日本語 の複合動詞に見られる意味拡張のありかたの違い(「接近不可能化」の意味 の有無)はoutの「接近可能化」の意味の基となるイメージスキーマにおけ る「視点」の取り方の違いによるものであると主張してきたが、「視点」と は何を指しているか Linder では明確にされていないことを指摘する。 最終章では、out と「出る/出す」の意味拡張のあり方の違いは out の多義的 ネットワークに現われる新しい用法を創出する認知操作に由来するという主 張がどのような含意を持つかについて述べる。Croft and Cruse(2004)は「視 点」を認知操作の一つとして挙げているが、認知操作に関わる「視点」と Lindner が用いている意味拡張に関わる「視点」はどのように関係しているの かが明らかではない。しかし、「接近不可能化」型の句動詞とともに再起型

(reflexive type)、詐取型(bamboozle type)の句動詞の意味もoutの意味の 基盤となる容器スキーマにおける変化を及ぼすあらゆる認知操作に由来する と考えられる点では、意味拡張に関わる認知操作が様々な言語においてどの ように出現し作用しているかをより体系的に記述するための枠組みが必要で あると考えられる。意味拡張の過程を促進する上で重要な要素である認知操 作がどのように言語の中で、あるいは様々な言語に渡って互いに作用するか という現象の理解を深めることに貢献できる研究が今後の課題である。

Abstract

A Contrastive Study of Japanese Compound Verbs and English Phrasal Verbs: Building Toward a Typology of Linguistic Construal Operations Involved in Processes of Semantic Extension

Ashlyn Michelle Moehle

In this dissertation, I consider the Japanese predicates used to translate and define 374 individual phrasal verbs with *out* and analyze the correspondence pairs into categories based on the type of Japanese predicate involved. I investigate which of the multiple, related senses attributed to *out* may be expressed by *deru/dasu* and identify several semantic domains to which *out*'s meaning has been extended but *deru/dasu*'s has not. I show that these differences in patterns of semantic extension result from changes to the image schemas that underlie and motivate the use of *out* in each of these senses. Finally, I argue that these changes are generated through the application of one or more construal operations, or processes of framing an experience in a way that conveys information about the speaker's conceptualization of that experience. In doing so, I hope to provide an important building block in the foundation of a potential future framework for analyzing the typological character of languages in terms of the construal operations involved in processes of semantic extension.

Lindner (1983) analyzes the semantic networks of *out* and *up* by considering how they contribute to the meaning of over 1,800 verb-particle constructions in English, such as *point out* and *tie up*. Drawing on Lindner's analysis of *out*, I compare the ways in which *out*'s network of related meanings overlap and diverge with those of the Japanese verbs *deru* and *dasu*, an intransitive/transitive pair that roughly translate to "go out" and "put out," respectively. I use two constructions—the phrasal verb in English and the lexical V-V compound in Japanese—as templates for observing the range of related meanings that *out* and *deru/dasu* are capable of contributing.

Chapter 2 reviews the literature on English phrasal verbs and introduces several syntactic criteria employed by researchers to distinguish between phrasal verbs and other superficially similar constructions. At the end of Chapter 2, I redefine the category "phrasal verb" as it will be used in this dissertation. Although my category of phrasal verbs overlaps significantly with the verb-particle construction of Lindner (1983), I include instances in which a phrasal verb with *out* takes a prepositional phrase complement headed by *of*, as in *break out of a bad habit*.

Chapter 3 reviews the literature on Japanese V-V compounds and identifies lexical V-V compounds as the particular grammatical form that will serve (along with phrasal verbs) as the object of this dissertation's contrastive analysis.

Chapter 4 argues for the feasibility of a contrastive study featuring English phrasal verbs and Japanese V-V compounds. First, these constructions are characterized according to how they figure in Talmy's (2000) typology of complex event integration. Phrasal verbs and V-V compounds are alike in that they both offer a means for simultaneously encoding the three semantic elements of manner, path, and motion. The next part of Chapter 4 introduces two previous studies that have explicitly compared English phrasal verbs and Japanese V-V compounds in terms of parallel semantic and syntactic features. The final part of Chapter 4 narrows the focus of the investigation to phrasal verbs with *out* and Japanese V-V compounds in which *deru/dasu* function as V2. I demonstrate that *out* and *deru* both derive their spatial meaning from the container schema. Himeno (1999) states that *deru* functioning as a simplex verb, and in an overwhelming majority of cases, V2 *deru* and V2 *dasu* are interchangeable. On these grounds, I establish a preliminary semantic correspondence between *out* in phrasal verbs and *deru/dasu* as V2 in V-V compounds.

Chapter 5 presents the findings from an analysis of 1,957 pairs of a phrasal verb with *out* and a Japanese predicate. Correspondence pairs, which consist of a phrasal verb and a Japanese predicate used in its translation or definition, are categorized into seven groups according to the type of Japanese predicate and whether or not it involves *deru* or *dasu* in some form. Japanese simplex verbs other than *deru/dasu* make up the largest category and represent 50.8% of the total correspondence pairs. Japanese V-V compounds represent 23.6% of the total, one half (11.8%) of which consists of V-V compounds featuring *deru/dasu* as V2. I discuss some possible explanations for the distribution of predicate types observed, including the role of idiomatic expressions and preceding elements. Finally, I look at the most frequently occurring simplex verbs and V2s in V-V compounds and identify several clusters of verbs that express similar meanings but are not capable of being encoded by *deru/dasu*.

In Chapter 6, I argue that the remaining non-correspondence pairs—that is, pairs of a phrasal verb with *out* and a Japanese predicate not featuring *deru/dasu* as either a simplex verb, a V2 in a V-V compound, or an element in a Sino-Japanese compound—do not exist at random, but rather can be shown to participate in several broad semantic domains to which *out*'s meaning has been extended but *deru/dasu*'s has not. I posit three categories of phrasal verbs with *out* that denote a meaning *deru/dasu* cannot be used to express: the reflexive type, the change to inaccessibility type, and the bamboozle type. I show that in each case, the sense in question derives from a fundamental change to the image schema sanctioning the use of *out*. I argue that this fundamental change can be associated with one or more linguistic construal operations, such as summary/sequential scanning and viewpoint.

In the concluding chapter, I lay out the implications for my claim that the diverging patterns of semantic extension observed for *out* and *deru/dasu* can be traced back to the construal operations that give rise to new branches in *out*'s polysemous network. I end by calling for further studies that could contribute to a richer and more profound understanding of how linguistic construal operations work together within and across languages as driving forces of processes of semantic extension.

Table of Contents

Japanese Abstract	i
Abstract	vi
List of Abbreviations	xi
Chapter 1 Introduction	1
1.1 Aim	1
1.2 Organization	4
Chapter 2 English Phrasal Verbs	8
2.1 Introduction	8
2.2 Characterization of Phrasal Verbs Based on Syntactic Criteria	8
2.2.1 Particle or Preposition	8
2.2.2 Particle or Adverb	13
2.3 Characterization of Phrasal Verbs Based on Semantic Criteria	18
2.3.1 Encoding Path	18
2.3.2 Metaphorization of Multifunctional Prepositions	20
2.3.3 Systematic and Figurative Combinations	23
2.4 Phrasal Verb Redefined	25
Notes to Chapter 2	28
Chapter 3 Japanese Lexical Compound Verbs	29
3.1 Introduction	29
3.2 Multi-Verb Predicates in Japanese	29
3.2.1 TE Compounds and V-V Compounds	29
3.2.2 Syntactic and Lexical V-V Compounds	34
3.3. Classification of Lexical V-V Compounds	40
3.3.1 Classification Based on Argument Structure	41
3.3.2 Classification of V-V Compounds Based on Semantic Criteria	46
3.4 Conclusion	49
Notes to Chapter 3	52
Chapter 4 Basis for Contrastive Analysis	54
4.1 Introduction	54
4.2 Talmy's Typology of Event Integration	54
4.2.1 Macro-Event, Framing Event, and Core Schema	55
4.2.2 Satellite-Framed and Verb-Framed Languages	57
4.3 Previous Studies Comparing Japanese V-V Compounds and English	
Phrasal Verbs	62

4.3.1 Introducing a New Direct Object	63
4.4 Comparing Basic Sense	
4.4.1 Image Schemas	70
4.4.2 The Container Schema	72
4.4.3 Image Schematic Analyses of Japanese Verbs	75
4.4.3.1 Deru/Dasu Based on the Container Schema	77
4.5 Conclusion	79
Notes to Chapter 4	
Chapter 5 Analysis	
5.1 Introduction	
5.2 Data	
5.3 Findings	
5.3.1 Sino-Japanese Compounds with 出 <i>shutsu</i>	
5.3.2 Distribution of Correspondence Pairs	
5.3.2.1 Predicate Types: Simplex Verbs	
5.3.2.2 Predicate Types: V-V Compounds	
5.4 Conclusion	
Notes to Chapter 5	
Chapter 6 Discussion	
6.1 Introduction	
6.2 Reflexive Trajector	
6.2.1 Summary and Sequential Scanning	
6.3 Change to Inaccessibility	
6.4 Bamboozle Type	
6.5 Conclusion	
Notes to Chapter 6	
Chapter 7 Conclusions and Implications	
7.1 Summary	
7.2 Implications	
7.2.1 Construal Operations	
References	
Dictionaries	

List of Abbreviations

1SG	First person singular
2SG	Second person singular
ACC	Accusative
CAUS	Causative
COLL	Colloquial
CONT	Continuative
DAT	Dative
GEN	Genitive
HON	Honorific
HUM	Humble
IMP	Imperative
LOC	Location
NEG	Negative
NOM	Nominative
PASS	Passive
PAST	Past tense
PL	Plural
POL	Polite
POT	Potential
Q	Question particle
QUOT	Quotative
SA	Standard American
ТОР	Topic
VOL	Volitional

Chapter 1 Introduction

1.1 Aim

English and Japanese represent two languages for which the stark and multitudinous differences in typological character are perhaps surpassed only by the deep rifts in worldview and social machinery that perpetuate the cultures of their respective communities of speakers. Yet the circumstances of history have given rise to numerous contexts that bring English and Japanese into close proximity. Despite the gulf of incoherency that leads many to claim that "Japanese is one of the hardest languages" for English speakers to learn (Erickson 2012: 274), those with a dynamic understanding of either language will undoubtedly begin to notice patterns of systematic similarities that transcend their structural differences.

Although they may not share a common ancestry, by virtue of being natural languages, English and Japanese are both products of the spectrum of cognitive faculties with which all humans are endowed. In this dissertation, I take a theoretical position that is congruent with the guiding principles of cognitive linguistics, two of which I will briefly outline below. The first states that conceptual structure is embodied, and the second equates semantic structure with conceptual structure (Evans 2007).

The first of these principles is encapsulated in the thesis of embodied cognition, which states that our experience is necessarily structured by our physical and neurological anatomy. The reality that we experience is mediated by the sensory, motor, and cognitive apparatuses that define our organism. Furthermore, the conceptual structure that allows us to navigate our surroundings is a product of the specifically human interactions we have with our environment. Second, language is a means for expressing conceptual structure rather than objective categories of entities that exist in a world "out there." Lexical items represent conceptual categories that have an experiential basis—they are formed via our spatio-physical interactions with

our environment and are therefore limited to what we are capable of perceiving and internalizing.

English spatial particles like *over*, *away*, *out*, and *up* offer a particularly opportune point of entry into a discussion on the relationship between experience, conceptual structure, and language, because the experiential basis of spatial particles is relatively transparent. Moreover, as polysemous morphemes, they tend to have a wide variety of meanings that ostensibly stem from their basic, spatial sense (Tyler and Evans 2003). Accounting for the mechanisms involved in the processes of semantic extension that result in these polysemous networks has proven to be a descriptively challenging exercise for researchers.

Two works in particular laid the groundwork for studies investigating the semantic networks of English spatial particles from a cognitive linguistics-oriented approach. Lindner (1983) analyzes the semantic networks of *out* and *up* by considering how they contribute to the meaning of over 1,800 verb-particle constructions, such as *point out* and *tie up*. Brugman (1988) is a reprinted edition of her 1981 master's thesis in which she analyzes the complex network of senses associated with *over* and explores the implications this has for an image schemata-based model of polysemy.

Lakoff (1987) extends Brugman's analysis by providing a detailed account of the spatial senses of *over*, how they are related, and how these senses are regularly extended through metaphor to denote non-spatial relations. Finally, Tyler and Evans (2003) promote a model of "principled polysemy" in their comprehensive analysis of the semantics of several English prepositions. This dissertation draws heavily on the findings from these analyses and is inspired in particular by the work of Lindner (1983).

A contrastive study of English and Japanese not only stands to enrich our understanding of the polysemous nature of English spatial particles, but also to help establish a framework for cross-linguistic comparisons of patterns of semantic extension between lexical items that function as translational equivalents. Based on Lindner's (1983) analysis of *out*, I compare the ways in which *out*'s network of related meanings overlap and diverge with that of the Japanese verbs *deru* and *dasu*, an intransitive/transitive pair that roughly translate to "go out" and "put out," respectively. *Out* and *deru/dasu* share the basic spatial sense of "removal from a bounded region." However, they are both used to express a range of non-spatial senses as well. Some of these abstract senses are shared, indicating that similar patterns of semantic extension are operative in either language. There are, however, many abstract senses of *out* that cannot be expressed by *deru/dasu*.

On the one hand, this points to the rather obvious conclusion that not all lexical items follow an identical route in acquiring new senses. On the other hand—and more importantly—by analyzing the image schematic bases for these non-overlapping senses, we can begin to identify patterns regulating the construal operations that motivate their emergence. Linguistic construal operations like profiling, metaphor, and viewpoint are conceptualization processes that structure an experience to be expressed through language. As instances of more general cognitive processes, linguistic construal operations serve as a nexus where the interaction between language and cognition can be clearly observed.

A comparison of the semantic networks of *out* and *deru/dasu* poses several challenges. These lexical items rarely, if ever, appear in isolation; rather, they participate in a variety of grammatical constructions. Furthermore, the grammatical dissimilarity of English and Japanese does not lend itself to an easy, straightforward comparison. To this end, I have chosen two constructions—the phrasal verb in English and the lexical V-V compound in Japanese—that function as templates for observing the range of related meanings that *out* and *deru/dasu* are capable of contributing.

Researchers have already pointed out the striking similarities between Japanese V-V compounds and English phrasal verbs. Kageyama (1999) offers several examples of pairs that express similar or identical meaning.

a. *kiri-taosu* (cut-topple) and *cut down*b. *oshi-akeru* (push-open) and *push open*

- c. donari-komu (yell-go.into) and storm into
- d. hare-wataru (clear.up-cross.over) and clear up
- e. tsukai-hatasu (use-do.completely) and use up

In this dissertation, I consider the Japanese predicates used to translate and define 374 individual phrasal verbs with *out* and analyze the correspondence pairs into categories based on the type of Japanese predicate involved. I investigate which of the multiple, related senses attributed to *out* may be expressed by *deru/dasu* and identify several semantic domains to which *out*'s meaning has been extended but *deru/dasu*'s has not. Finally, I frame these differences in patterns of semantic extension as resulting from differences in the image schemas that underlie and motivate the use of *out* in each of these senses.

1.2 Organization

The chapters of this thesis are organized as follows. Chapter 2 reviews the literature on English phrasal verbs and introduces several syntactic criteria employed by researchers to distinguish between phrasal verbs and other, superficially similar constructions. I adopt the view that in many cases, the inclusion of a particular combination of verb-plus-particle in the category "phrasal verb" (or, alternatively, verb-particle construction) is a matter of degree. Nevertheless, there are several defining characteristics that distinguish phrasal verbs as a unique class of items, and Chapter 2 discusses each of these in turn. Several analyses that characterize phrasal verbs according to semantic criteria are also reviewed. At the end of Chapter 2, I redefine the category "phrasal verb" as it will be used in this dissertation. Although my category of phrasal verbs overlaps significantly with the verb particle construction of Lindner (1983), I include instances in which the phrasal verb with *out* takes a prepositional phrase complement headed by *of*.

Chapter 3 reviews the literature on Japanese V-V compounds and identifies lexical V-V compounds as the particular grammatical form that will be serve (along

with phrasal verbs) as the object of this dissertation's contrastive analysis. First, V-V compounds are distinguished from TE compounds, both of which are productive means for creating multi-verb predicates in Japanese. Then, V-V compounds are discussed in detail. First, evidence for two distinct groups of V-V compounds—lexical compounds and syntactic compounds—is reviewed. Next, the Transitivity Harmony Principle (Kageyama 1993) is introduced as a framework for determining the combinatory possibilities of V1 and V2 in lexical V-V compounds based on argument structure. An alternative approach argued for by Matsumoto (1996) is also briefly reviewed. The final part of Chapter 3 introduces classifications of V-V compounds based on the semantic relationship holding between V1 and V2.

Chapter 4 argues for the feasibility of a contrastive study featuring English phrasal verbs and Japanese V-V compounds. First, these constructions are characterized according to how they figure in Talmy's (2000) motion verb typology. The schematic "core" of a motion event is mapped onto different syntactic elements in English and Japanese, but phrasal verbs and V-V compounds are alike in that they both offer a means for simultaneously encoding the three semantic elements of manner, path, and motion. Talmy's typology can be extended to events of a nonmotion kind as well, such as change of state. The next part of Chapter 4 introduces two previous studies that have explicitly compared English phrasal verbs and Japanese V-V compounds. These studies explore the semantic similarities of these two types of complex predicate and identify a parallel syntactic phenomenon by which a new direct object is introduced that was not selected for by the verb(s) when used in isolation. After reviewing evidence that aligns phrasal verbs and V-V compounds at the more general level of the construction, the final part of Chapter 4 narrows the focus of the investigation to phrasal verbs with out and Japanese V-V compounds in which *deru/dasu* functions as V2. I demonstrate that *out*, whose basic sense is defined as "the removal or departure of one concrete object from within another object or place" (Lindner 1983: 60-61), and deru, whose basic sense expresses "movement to an external region in physical space" (Hiratsuka and Imai 2000: 1), both derive their spatial meaning from the container schema. Chapter 4

concludes by establishing a preliminary semantic correspondence between *out* in phrasal verbs and *deru/dasu* as V2 in V-V compounds.

Chapter 5 presents the findings from an analysis of 1,957 pairs of a phrasal verb with out and a Japanese predicate. The first part of Chapter 5 identifies the data source and explains the method of collection. Correspondence pairs, which consist of a phrasal verb and a Japanese predicate used in its translation or definition, are categorized into seven groups according to the type of Japanese predicate and whether or not it involves deru or dasu in some form. Japanese simplex verbs other than deru/dasu make up the largest category and represent 50.8% of the total correspondence pairs. Japanese V-V compounds represent 23.6% of the total, one half (11.8%) of which consists of V-V compounds featuring deru/dasu as V2. Next, I discuss some possible explanations for the distribution of predicate types observed. Counter to the evidence laid out in Chapter 4, which argued that V-V compounds are a readily available means in Japanese for encoding the meaning of English phrasal verbs, Japanese simplex verbs were the most common predicate type used to define and translate phrasal verbs in the data. Idiomatic expressions and the role of preceding elements are discussed as two factors contributing to this result. Finally, I look at the most frequently occurring simplex verbs and V2s in V-V compounds and identify several clusters of verbs that express similar meanings but are not capable of being encoded by deru/dasu.

In Chapter 6, I argue that the remaining non-correspondence pairs—that is, pairs of a phrasal verb with *out* and a Japanese predicate not featuring *deru/dasu* as either a simplex verb, a V2 in a V-V compound, or an element in a Sino-Japanese compound—do not exist at random, but rather can be shown to participate in several broad semantic domains to which *out*'s meaning has been extended but *deru/dasu*'s has not. I posit three categories of phrasal verb that denote a meaning *deru/dasu* cannot be used to express: the reflexive type, the change to inaccessibility type, and the bamboozle type. Each of these categories is discussed in turn. I show that in each case, the sense in question derives from a fundamental change to the image schema sanctioning the use of *out*. The reason why this change has occurred in the case of *out* but not in the case of *deru/dasu* remains unclear. Although I am unable to provide a full account explaining the reasons for this finding, I do point out that in each case, the fundamental change that sanctions this distinct sense of *out* can be associated with one or more linguistic construal operations, or processes of conceptualization that are critical to all aspects of language use.

The concluding chapter, Chapter 7, first provides a summary of the preceding chapters. Then, I lay out the implications for my claim that the diverging patterns of semantic extension observed for *out* and *deru/dasu* can be traced back to the construal operations that give rise to new branches in *out*'s polysemous network. I discuss the notion of viewpoint as critical to *out*'s "change to inaccessibility" sense and point out the lack of a clear definition explaining how viewpoint used in this regard relates to viewpoint as a factor influencing other linguistic phenomena. I end by calling for further studies that could contribute to a richer and more profound understanding of how linguistic construal operations work together within and across languages as driving forces of processes of semantic extension.

Chapter 2 English Phrasal Verbs

2.1 Introduction

This chapter identifies and characterizes the English phrasal verb, which will later be analyzed alongside a comparative construction in Japanese, the V-V lexical compound (see Chapter 3), with regard to patterns of semantic extension. The English phrasal verb has been studied extensively, and a vast amount of literature seeks to ascertain and describe its syntactic characteristics, primarily by distinguishing it from formally similar constructions, such as the verb-preposition phrase. Many of these studies also aim to classify combinations based on whether they express literal or figurative meanings. The first two sections of this chapter provide an overview of a small number of representative studies in order to gain a clearer picture of what types of constructions have traditionally been singled out for description under the label "phrasal verb." These findings will be grouped according to whether they address the phrasal verb's syntactic features, discussed in Section 2.2, or the semantic relationship between the particle and the verb, discussed in Section 2.3. This will provide a backdrop against which the category phrasal verb will be redefined according to the present study's purposes in Section 2.4.

2.2 Characterization of Phrasal Verbs Based on Syntactic Criteria

2.2.1 Particle or Preposition

There are several syntactic criteria offered as evidence of a distinct class of multi-word verb, referred to by different researchers as the phrasal verb (Mitchell 1958, Bolinger 1971), verb-particle construction or VPC (Lipka 1972, Lindner 1983), or verb-particle combination (Fraser 1974).

On the surface, the multi-word verbs in (1)–(4) are indistinguishable. Each contains a verb and a non-verbal element, both of which are emphasized in italics.

- (1) a. He *sped up* the processb. He *sped up* the pole
- (2) a. Harry will *look over* the clientb. Harry will *look over* the fence
- (3) a. The man *reeled in* the lineb. The man *reeled in* the street
- (4) a. She *ran off* the pamphletsb. She *ran off* the stage

(Fraser 1974: 1-2)

However, the (a) and (b) examples in (1)–(4) may be distinguished according to several syntactic and phonological criteria. The most distinctive feature of the (a) examples is that the word order of the particle and the noun phrase that follows can be switched. This is not true of the (b) examples.

- (5) a. He *sped* the process *up*b. *He *sped* the pole *up*
- (6) a. Harry will *look* the client *over*b. *Harry will *look* the fence *over*
- (7) a. The man *reeled* the line *in*b. *The man *reeled* the street *in*
- (8) a. She *ran* the pamphlets *off*b. *She *ran* the stage *off*

(Fraser 1974: 2)

The possibility of alternate word order serves as widely accepted evidence for the claim that the lexical items *up*, *over*, *in*, and *off* in (1–8a) belong to a different word class than their formerly identical counterparts in (1–8b). The (a) items exhibit adverbial function and are often referred to as "particles," while the (b) items are labeled "prepositions." The result is that the verbal constructions in which they participate are also differentiated; the particles in (a) serve as constituents in verbparticle constructions, or phrasal verbs, while the preposition sequences. Therefore, although the transitive multi-word verbs in (1)–(4) are superficially similar, the particle of a verb-particle construction can appear in one of two positions: either directly following the verb and preceding the direct object noun phrase (NP), as in the (1)–(4) examples, or following both the verb and the direct object NP, as in (5)–(8). Following Dirven (2001), who draws on Gries (1999), I will adopt the following labels for these two word order alternations:

(9)He looked over the client.Post-verb positionHe looked the client over.Post-DO position

The preposition of a verb-preposition sequence cannot assume a post-DO position. Rather, it requires—per the rules of English grammar—an object noun phrase to immediately follow. A noun phrase such as *the fence* in *Harry will look over the fence* functions as the object of the prepositional phrase headed by *over*. As a result, the preposition and its object NP are more closely linked syntactically than either is with the preceding verb. Indeed, the key difference between verb-particle combinations and verb-preposition sequences is captured by the notion of syntactic constituent hierarchies—the particle of a transitive verb-particle combination forms a syntactic unit with the verb that takes a noun phrase as its direct object. A preposition is more closely linked syntactically to the noun phrase with which it forms a syntactic unit, the prepositional phrase, which serves as a whole to modify the verb.

Along these lines, Fraser lists four additional criteria, three of which are considered below, used to distinguish between verb-particle combinations and verbpreposition sequences. These examples are meant to highlight the relative strength of the syntactic association between the preposition and the noun phrase of verbpreposition sequences in contrast to the particle and direct object NP of verb-particle combinations. The prepositional phrases of the verb-preposition sequences in (a) are emphasized in italics, and the verb-particle combinations in (b) are emphasized in bold.

- (10) Insertion of short adverbial elements
 - a. Harry looked furtively over the fence.
 - b. *Harry looked furtively over the client.

(Fraser 1974: 2)

In (10a), the verb *look* in combination with the prepositional phrase *over*-NP denotes "peer above the top of (NP)." The prepositional phrase *over the fence* allows a short adverbial to precede it. The verb-particle combination *look over* ("examine") in (10b) does not allow an adverbial to precede the particle and direct object NP.

- (11) Fronting
 - a. In the street, the man reeled as if drunk.
 - b. **In* the line, the man **reeled** as if drunk.

(Fraser 1974: 2)

Prepositional phrases may be moved to the beginning of the sentence, or fronted, as in (11a). The particle and direct object NP of a verb-particle combination cannot be fronted, hence the ungrammaticality of (11b).

(12) Gapping

- a. He ran up the hill, and she up the road.
- b. *He ran up the bill, and the company, up the prices.

In (12a), the prepositional phrase up-NP serves as a syntactic unit that remains intact after the verb is gapped in the second clause. In (12b), the verb *run* cannot be gapped because the particle and the direct object NP do not function as a cohesive unit in the same way that a preposition and its object NP do. Note the acceptability of (13), where the entire verb-particle combination *run up* is gapped in the second clause.

(13) He ran up the bill, and the company, the prices.

The syntactic tests in (10)–(12) are meant to illustrate the relatively tight syntactic bond between a preposition and its object NP, in contrast to a particle and the direct object NP of the phrasal verb. Some tests are purported to show the opposite—that the verb-plus-particle forms a tighter syntactic unit than the verb-plus-preposition. For example, the action nominalization test demonstrates that the verb-particle combination and not the verb-preposition sequence allows *of* to be inserted between the nominalized verb-plus-particle and the following noun.

- (14) a. He looked up the information.b. His looking up of the information.
- (15) a. He looked into the information.b. *His looking into of the information

In (14b), the phrasal verb *look up* can be nominalized with *of* interceding between the particle and the following noun. In (15b), the verb-preposition sequence *look into* does not permit action nominalization, suggesting that the verb-plus-particle

of (14a)–(b) forms a more tightly bound unit than the verb-plus-preposition of (15a)– (b).

2.2.2 Particle or Adverb

Based on Fraser's (1974) analysis, we have thus far limited our discussion to evidence for distinguishing between verb-particle combinations and verb-preposition sequences. Fraser goes one step further, however, in citing evidence for an additional class of verbal construction distinct from the verb-particle combination and the verb-preposition sequence. *Off, out,* and *on* in both the (a) and (b) pairs of (16)–(18) can occur in either post-verb or post-DO position, do not allow modification by most degree adverbials, cannot be fronted, and do not form a constituent with the following NP when the verb is gapped.

- (16) a. Jones pulled off the deal ("succeeded")b. Jones pulled off the tablecloth ("yanked")
- (17) a. The debater drew out his opponent ("elicited")b. The debater drew out the lucky number ("took")
- (18) a. Johnson carried on the family tradition ("continued")b. Johnson carried on the extra prop ("conveyed")

(Fraser 1974: 3)

The (a) and (b) sentences pattern identically when subjected to the syntactic operations used in (10)–(12) to distinguish verb-particle combinations from verb-preposition sequences, making it appear as if they were instances of the same multi-verb category. Fraser argues, however, that one may further distinguish between these pairs based on how each responds to a different group of syntactic operations, listed in (19)–(22).

- (19) Action nominalization (particle/adverb in post-DO position)
 - a. *His throwing of his dinner up (instead of down) was stupid.
 - b. His throwing of the ball up (instead of down) was stupid.

(20) Gapped sentence

- a. *Jones pulled the deal off, and Peters the money in.
- b. Jones pulled the tablecloth off, and Peters, the new one on.

(21) Modification by degree adverbial

- a. *The debator drew his opponent only part of the way out.
- b. The debator drew the lucky number only part of the way out.

(22) Contrastive stress

- a. *I said to carry the deception ON, not OFF.
- b. I said to carry the prop ON, not OFF.

(Fraser 1974: 3)

According to Fraser, the difference in grammaticality of the (a) sentences versus the (b) sentences in (19)–(22) suggests that another class of object, the verb-adverbial combination, should be distinguished from the verb-particle combination. Fraser classifies the (a) sentences as instances of verb-particle combinations and the (b) sentences as instances of verb-adverbial combinations.

The examples thus far have all dealt with transitive verbs, but Fraser extends his classification to intransitive instances as well. Fraser uses the same criteria in (19)–(22) to distinguish between intransitive verb-adverbial combinations and intransitive verb-particle combinations, with the exception of action nominalization (in the absence of a direct object). In (20')–(22'), the (a) sentences are classified as verb-adverbial combinations, and the (b) sentences as verb-particle combinations.

(20') Gapped sentence

- a. The boy looked down and the girl, up.
- b. *The varnish coat wore down, and the undercoat away.
- (21') Modification by degree adverbial
 - a. The man climbed all the way up.
 - b. *The car slowed all the way up.

(22') Contrastive stress

- a. The light was left ON, not OFF
- b. *The hippies want to turn ON, not OFF

(Fraser 1974: 4)

Additionally, among intransitive instances, the verb-adverbial sequence may be preceded by a short adverbial, as in (23a).

(23) a. All the dogs ran quickly in.b. *The mine caved quickly in.

(Fraser 1974: 4)

Fraser's classification, which makes a three-way distinction between verbparticle combinations, verb-preposition sequences, and verb-adverbial sequences, constitutes one of the finer-grained classifications of English multi-word verbs. Not all researchers adopt such a specific classification, and as a result, categories of multiword verb differ across individual analyses. For example, Fraser's verb-particle combination differs significantly from the verb-particle construction (VPC) of Lindner (1983). Working within the framework of space grammar, a precursor to Langacker's cognitive grammar, Lindner analyzes clusters of related meanings attributed to VPCs containing *out* and *up*. One of the primary differences between Lindner's and Fraser's classifications is that Lindner includes "literal" verb-adverbial combinations in her treatment of VPCs, which she describes as "complex verbs consisting (typically) of motion verbs with particles denoting paths in space" (1983: 2). For example, Lindner considers (24) a VPC, which according to Fraser's classification is a verb-adverbial combination.

(24) The kite floated up.

(Lindner 1983: 1)

Lindner also includes as VPCs instances of what Fraser calls "prepositional phrase reduction" (1974: 46), which can be paraphrased using a full prepositional phrase.

(25) John tossed the cat out (of the house) before going to bed.

(Lindner 1983: 2)

In his category of verb-particle construction, Lipka (1972) also includes what he terms "reduced prepositional phrases," which typically contain a verb of motion and a particle denoting a path in space. The particle may be elaborated to flesh out a full prepositional phrase, as in (26a), or combine with an additional preposition and object NP, as in (26b)–(c).

(26) a. He ran up (the stairs).

- b. She took a book out (of her purse).
- c. She brought dinner up (to his room).

(Lipka 1972: 17)

Fraser analyzes examples like *take out* in (26b) as involving what he calls "compound prepositions." Compound prepositions consist of more than one morpheme (P_1 , P_2 , etc.) but can be reduced to the leftmost morpheme (P_1) through prepositional phrase reduction. Therefore, *out* in (26b) derives from the compound

preposition *out of*, and the remaining preposition functions syntactically like a particle. Fraser adds that PP reduction explains why the simple structure of *take out* "implies some unspecified object" (Fraser 1974: 46). In past treatments, verbal constructions like those in (26) were often analyzed as intransitive verbs with locative or directional adverbs and therefore excluded from the category "phrasal verb." On these grounds, Lipka adopts the term "verb particle construction" in lieu of "phrasal verb" to signify a broader category in which such verb-adverbial combinations are included. In this respect, Lipka's verb-particle construction is closely aligned with the VPC of Lindner. Both Lindner's VPC and Lipka's verb-particle construction are close equivalents of the "phrasal verb" in Mitchell (1958), who sets up a three-way distinction between ① prepositional verbs, ② phrasal verbs, and ③ prepositional-phrasal verbs.

(27)	non-phrasal	non-prepositional	take it to someone
		① prepositional	take to someone ("admire")
	phrasal	2 non-prepositional3 prepositional	<pre>put up with someone ("lodge") put up with someone ("endure") (adapted from Mitchell 1958: 106)</pre>

Building off of Mitchell's classification, Bolinger (1971: 5) identifies ② as synonymous with his class of phrasal verb, which he characterizes as a continuum rather than a discrete category. At one end of the continuum are verbs in combination with "independent adverbs," and at the other end are Fraser's verb-particle combinations or verbs in combination with "bound adverb-particles" (Bolinger 1971: 12).

In sum, there are a number of ways in which researchers have attempted to distinguish between combinations of verb-plus-particle and verb-plus-preposition or verb-plus-adverbial. While Fraser maintains a three-way distinction between verbpreposition sequences, verb-particle combinations, and verb-adverbial combinations, other researchers lump verb-adverbial combinations and verb-particle combinations into a single category. Furthermore, although variable word order is considered the most reliable criterion for distinguishing between transitive phrasal verbs and verbpreposition sequences, no syntactic test is without exception. This has prompted many researchers to conclude that the "syntactic line" between prepositions and particles is far from clear-cut (Lindner 1983: 15). Bolinger concludes that the phrasal verb cannot be discretely defined; rather, "being or not being a phrasal verb is a matter of degree" (1971: 6).

2.3 Characterization of Phrasal Verbs Based on Semantic Criteria

The previous section offered a condensed overview of how English phrasal verbs are classified into one of several categories of multi-word verbs in English. More specifically, it focused on the division between verb-particle constructions, verb-preposition sequences, and verb-adverbial sequences in terms of their syntactic features, as evidenced by variable word order as well as the permissibility or rejection of various syntactic operations. This section reviews several studies, some already mentioned in Section 2.2, in which phrasal verbs are characterized based on semantic and pragmatic criteria.

2.3.1 Encoding Path

Talmy (2000) uses the term "satellite" to denote "the grammatical category of any constituent other than a noun-phrase or prepositional-phrase complement that is in a sister relation to the verb" (102). One justification for positing satellite as a distinct grammatical category is that it captures an observable commonality among verb particles in English and comparable forms with similar function in different languages.

Talmy argues that satellites encode path, while prepositional phrases specify ground, which comprises source, medium, and goal. The prepositional phrase is often omitted, as in (28b), when its nominal is either a deictic or an anaphoric pronoun, meaning that the ground object, which is expressed via the nominal head of the prepositional phrase, is easily inferred by the hearer.

(28) a. I ran *out of* the house.

b. (After rifling through the house,) I ran out [i.e., ... of it].

(Talmy 2000: 104)

There are, however, a few cases in English where "a satellite can express at once both a particular Path and the kind of object acting as Ground for the Path" (Talmy 2000: 110). For example, when *home* is used as a satellite, it also incorporates the meaning "to his/her/...*home*," thereby providing complete, rather than deictic or anaphoric, information with respect to ground.

- (29) a. She drove *home*. (path+ground)
 - b. She drove *into* the garage. (path+ground)
 - c. She drove in. (path)

Still, the categories satellite and particle are not entirely synonymous. Although categorizing *home* as a satellite may prove unproblematic, it is less likely to be readily accepted as a particle. In fact, Lindner (1983) critiques Bolinger's criteria for distinguishing between particles and certain adverbials on the grounds that they admit *home* as a particle. Bolinger (1971) states that only particles (and not adverbials) can precede a short, definite NP.

- (30) a. He did the work neatly. / *He did neatly the work.b. Why don't you bring John here? / *Why don't you bring here John?
- (31) a. Why don't you bring John over? / Why don't you bring over John?b. He brought home the bacon. / He brought the bacon home.

Lindner points out that because *home* in (31b) can occur before a short, definite NP, according to Bolinger, *home* is a particle. While the conclusion that satellites like *home* be recognized dually as particles may seem intuitively unpalatable, the converse goes unchallenged—particles can be classified as satellites insofar as they are capable of encoding path. The semantic characterization of particles as satellites encoding path will feature prominently in Chapter 4, which provides evidence for the legitimacy of a contrastive study involving phrasal verbs and Japanese V-V compounds.

2.3.2 Metaphorization of Multifunctional Prepositions

Some prepositions have dual functions, whereby they feature in syntactic combinations as either prepositions or particles. Dirven (2001) uses the terms monofunctional and multifunctional to distinguish elements that function exclusively as prepositions on the one hand, and elements that doubly function as particles and prepositions on the other.

Monofunctional items

-at, to, from, into, onto, out of, between, amongst
-above, below, under, beneath, underneath
-against, beside, near, next to, with

Multifunctional items:

-on, in, out, off, up, down, by, over -along, through, about, around, across

(Dirven 2001: 5)

A multifunctional item like *in* exhibits dual function, as seen in previous examples.

(32) a. The man reeled in the street. (preposition)b. The mine caved in. (particle)

Generally speaking, multifunctional items like *in*, *out*, *up*, *down*, *over*, and *across* express path when they appear with a motion verb. According to Dirven, because multifunctional items encode spatial relations of objects in two- and threedimensional space (lines, surfaces, containers, etc.), they can be more readily used to encode both physical and abstract motion, which is then regularly extended via metaphor to denote relations in abstract, non-spatial domains, such as change of state. Consider the multifunctional item *off*, which profiles the end point of an A/B trajectory starting at point A and ending at point B.

- (33) a. She brushed the crumbs off the table.
 - b. She brushed the crumbs off.
 - c. She brushed off the crumbs.

In (33a), *off* invokes the entire A/B trajectory, and the point of origin is made explicit by *the table*. (33b) is a blend of two scenes: the action expressed by the verb *brush* and the resultant state as a consequence of that action ([the crumbs are] *off*). (See Fauconnier and Turner 1996.) This characterization is reminiscent of Bolinger's claim that phrasal verbs typically "denote an action and at the same time a result" (1971: 81). (33c) represents the final stage of semantic extension in which *off* has been lexicalized along with the verb *brush* into a single, integrated form.

One of the most salient differences argued in Section 2.2 to distinguish between transitive verbal constructions in which a lexical item like *up*, *over*, or *out* functions as a particle versus a preposition is whether or not the construction allows for variable word order. In cases where the lexical item functions as a particle, it may appear in either post-verb or post-DO order. Prepositions, on the other hand, allow only post-verb order, in which an object NP follows the preposition. This alternation in word order has often been referred to as particle movement, a term suggestive of the theoretical framework from which it emerged. Dirven takes a different approach, arguing that the preference of post-verb over post-DO word order reflects a "gradual abstracting process" by which the adverbial status of multi-functional items like *off* is

reinterpreted, resulting in a conceptually integrated, lexically autonomous phrasal verb (2001: 7). The phrasal verb exhibits different possibilities and constraints than the verb-plus-preposition or verb-plus-adverb, including the ability to incorporate a secondary landmark as the direct object.

- (34) a. She brushed the snow off the shoulders of her coat.
 - b. She brushed off the shoulders of her coat.
 - c. *She brushed the shoulders of her coat off.

(Dirven 2001: 8)

(34a) is a verb-preposition sequence, where the primary landmark, *snow*, is the direct object of the verb and the secondary landmark, *shoulders of her coat*, appears as the object of the prepositional phrase. In (34b), the primary landmark is no longer profiled; *off* is integrated with *brush* and lexicalized as the phrasal verb *brush off*, and a secondary landmark is substituted in place of the primary landmark and incorporated as the direct object. According to Dirven, the conceptual integration resulting in the phrasal verb *brush off* is contingent on its post-verb word order. In contrast, the post-DO order in (34c) means that *off* retains its adverbial status. Dirven claims that the clash between an unmovable secondary landmark and the resultant state denoted by the adverb *off* results in the ungrammaticality of (34c). Thus, Dirven concludes that the post-DO and post-verb word orders are in fact different constructions altogether rather than just alternations. Constructions with post-DO order focus on "a resultant state so that the particle retains an adverbial status," whereas constructions with post-verb order reflect "a strong integration of the particle with the verb" (2001: 10).

The advantage of Dirven's argument is that it neatly tracks the process by which phrasal verbs acquire increasing levels of autonomy and idiomaticity, resulting in what he calls "particle verbs," which, Dirven argues, demonstrate a strong preference for post-verb order. In this way, Dirven attempts to explain an apparent variation in syntactic form as a corollary of semantic integration. While the inclusion of semantic criteria no doubt provides useful recourse to additional analytic tools, the grammaticality judgments that form the basis of Dirven's argument are subject to scrutiny.

(35) Go and brush your shoulders off.

This line from the 2003 hit song "Dirt Off Your Shoulder" by iconic rapper and music industry mogul Jay-Z contradicts Dirven's assertion that the newly lexicalized brush off in (34c) does not permit post-DO word order. Neither is (35) an isolated example of marginally accepted speech. The expression "brush your shoulders off" has increasingly been used in American speech since it was popularized by the lyrics of "Dirt Off Your Shoulder" to signal a blithe dismissal of unsolicited negative commentary. In fact, United States President Obama referenced the song during a speech at one of his 2008 campaign rallies by gesturing a brushing action in which he cleans his shoulders of metaphorical "dirt" cast by political opponents (trainwreckpolitics 2008). The phrasal verb "brush off" to mean "dismiss" can indeed assume post-DO word order and take an unmovable secondary landmark as the direct object. This fact illustrates that post-DO and post-verb constructions do not align as systematically with the semantic characterizations of lexical integrity attributed to verb-adverbial sequences and particle verbs as Dirven would have one assume. It is clear, however, that by nature of allowing a secondary landmark to be incorporated as the direct object, the phrasal verb brush off in (35) is categorically distinct from the verb-preposition sequence in (34a). As Dirven rightly points out, prepositions, adverbs, and particles occupy a continuum along which non-compositionality is instantiated in varying degrees.

2.3.3 Systematic and Figurative Combinations

Fraser (1974) provides another example of how phrasal verbs are categorized based on semantic criteria. Having identified the syntactic character of his three classes of multi-word verb, Fraser goes on to posit two further subtypes of verbparticle combinations: systematic combinations and figurative combinations. Systematic combinations include those in which the particle has retained, to a greater or lesser degree, its adverbial meaning. Examples are *hang up*, *hide away*, and *hand over*. Thus, if one *hangs up* a picture, then the picture is *up*. Systematic combinations also include those instances in which the particle serves to modify the meaning of the verb itself, often by adding a completive sense.

- (36) a. beat up, churn up, mix up, shake up, stir up
 - b. bunch up, coil up, curl up, wind up
 - c. die out, fade out, broaden out, flatten out, lengthen out, spread out, stretch out, widen out

(Fraser 1974: 7)

In contrast to *hang up*, if one *stirs up a martini*, the *martini* is not *up* as a result. Fraser adds that all such systematic combinations actually amount to a small percentage of total verb-particle combinations. More often, we encounter figurative combinations in which the particle contributes to the meaning of the phrasal verb in unpredictable ways.

(37) play back, simmer down, drown out, cave in, show off, look up

(adapted from Fraser 1974: 7)

Bolinger (1971) also points out that although the resultant condition expressed by the particle is a feature essential to phrasal verbs, "not all phrasal verbs embody something quite so explicit as outright resultant condition" (96). Bolinger refers to the "quasi-aspectual" meaning of some particles like *out* in *write out a memo*, where *out* denotes a perfective meaning rather than the resultant state of *a memo* as a result of writing. Ultimately, although the notion of adding aspectual meaning can be applied to a range of phrasal verbs in which the meaning of the particle has deviated from its original spatial sense, Bolinger calls for explicit treatment of individual particles and characterizes the question of aspectual meaning as one "inseparable from that of phrasal verbs as a means of lexical entrenchment" (1971: 97).

In this section, we have examined several studies that aim to characterize phrasal verbs according to semantic criteria. They approach this issue from different angles, including the semantic contribution of the particle, the lexical integrity of the phrasal verb, and the basis for distinguishing between literal and idiomatic combinations. Aside from purely literal combinations of verb-plus-preposition, there is scant evidence that distinguishing between verb-particle combinations and verbadverbial combinations is possible or even necessary.

2.4 Phrasal Verb Redefined

This dissertation focuses specifically on phrasal verbs involving the particle *out*. The term "phrasal verb" used herein is closely aligned with the VPC of Lindner (1983) and the verb-particle construction of Lipka (1972). However, there are additional types of multi-word verbs that do not fall within the concentrated scope of these studies but will be taken into account when performing a contrastive analysis with Japanese V-V compounds involving *deru/dasu*. Thus, it will be helpful to redefine the category "phrasal verb" as it is used in this study's analysis.

As mentioned previously, the two classes of items that Fraser identifies as verbadverbial combinations and verb-particle combinations both fall under Lindner's category of VPC. I also include such verb-adverbial sequences in my category "phrasal verb," as well as so-called "reduced prepositional phrases" or combinations of a verb-plus-particle like *toss out*, to which a prepositional phrase can optionally be added (see (25)). This dissertation departs, however, from previous classifications in that it also includes verb-particle combinations in which the particle takes a prepositional phrase complement, as in (38)–(39).

(38) I'm trying to break out of the habit of heavy drinking.

(39) You intend to bamboozle me out of a beefsteak.

Unlike *toss out*, for which the prepositional phrase *of the house* is optional, *break out* and *bamboozle out* require a prepositional phrase complement. Phrasal verbs that require a PP complement are listed under Mitchell's (1958) classification as ③ phrasal prepositional verbs (see (27)) and are excluded from the VPC of Lindner, the verb-particle construction of Lipka, and the phrasal verb of Bolinger. However, the focus of this dissertation is to contrast patterns of semantic extension rather than define and describe a particular class of multi-word verb in English, and therefore there is no compelling reason not to include phrasal prepositional verbs in the analysis. Furthermore, in the case of *out* versus *out of* NP, the distinction between multifunctional *out* and monofunctional *out of* is further complicated by an ongoing process in modern English whereby *of* is omitted but its object NP is retained.¹

(40) I would kick him out the house.

Ordinarily, *the house* would be preceded by *of*, forming a prepositional phrase that could optionally be used to elaborate the phrasal verb *kick out*, much like the *toss out* example in (25). Because *kick out* is transitive and takes a direct object, *the house* is not likely to be reinterpreted as the direct object of the phrasal verb. However, in the case of (38), one could imagine that if *of* were omitted and *break out the habit* became standard, what previously functioned as the object NP of the PP headed by *of* could be reinterpreted as the direct object of the phrasal verb *break out*. In fact, a quick Google search reveals that there are already hundreds of thousands of instances online of *break out the habit*. This phenomenon is clearly complex and deserves separate treatment elsewhere; however, its brief mention here aims to illustrate that, like the distinction between phrasal verbs and phrasal prepositional verbs is not so clear-cut. The inclusion of phrasal prepositional verbs in my definition of phrasal verbs therefore poses no serious threat to the integrity of the contrastive semantic

analysis with *deru/dasu*. Rather, as demonstrated in Chapter 6 with regards to "bamboozle type" phrasal verbs, such inclusion results in additional, meaningful findings.

Notes to Chapter 2

¹ It should be noted that in the case of *out of*, only post-DO position is permitted. This is consistent with Dirven's (2001) classification of *out of* as a monofunctional item that functions exclusively as a preposition.

Chapter 3 Japanese Lexical Compound Verbs

3.1 Introduction

The goal of this chapter is to identify and characterize Japanese V-V lexical compounds as a particular kind of multi-verb predicate in Japanese. Chapter 2 painted a broad picture of the characteristics of English phrasal verbs as they have been studied within the literature, and this chapter similarly draws on previous studies to provide a general overview of Japanese compound verbs in terms of their morphological, syntactic, and semantic characteristics. Section 3.2 reviews the two main methods of forming multi-verb predicates in Japanese: TE-linkage and I-linkage. As English lacks such multi-verb constructions, special attention is paid to explaining the process of their formation in Japanese in detail. Differences regarding permissibility of certain syntactic operations as well as semantic restrictions are explored. From there, the latter half of Section 3.2 focuses specifically on those predicates formed via I-linkage, or "V-V compound verbs." V-V compound verbs are further categorized into two classes: lexical and syntactic. The evidence supporting this classification is explained along with relevant examples. Section 3.3 examines lexical V-V compound verbs in detail. Section 3.3.1 explores the nature of the syntactic relationship between the two component verbs in terms of argument structure, and Section 3.3.2 introduces different frameworks for classifying lexical compounds according to semantic criteria.

3.2 Multi-Verb Predicates in Japanese

3.2.1 TE Compounds and V-V Compounds

There are two strains of Japanese compounds composed solely of verbal elements: those joined by TE-linkage and those joined by I-linkage (Himeno 1999: 3–4). A compound verb joined by TE-linkage, or a TE compound, is made by combining a verb (V1) in TE-form with a second verb (V2), which is inflected for tense in *shūshikei* "end form" or "perfective form." TE compounds are sometimes

referred to as "complexes" (Matsumoto 2011), reflecting a relatively loose coordination of two verbs.

(1) Compound formed via TE-linkage
 V1 kakeru "run" V2 iku "go"
 TE-form kake-TE End form it-ta

saka o kakete itta slope ACC run-TE go-PAST "ran up the slope"

(adapted from Matsumoto 2011)

A compound verb joined via I-linkage, or V-V compound, is made by joining a verb (V1) in *renyōkei* ("conjunctive" or "continuative form") with a second verb (V2) in end form.

(2) Compound formed via I-linkage

V1 aruku "walk"V2 mawaru "turn, revolve; visit several places"Continuative form arukiEnd form mawat-ta "visit several places-PAST"

V-V compound aruki-mawatta "walked around"

Himeno (1999) observes that V2s in TE compounds have often been referred to as "complement verbs" (*hojo dōshi*), while those in V-V compounds are referred to as "compound verb V2s." She points out, however, that the term "complement verb" is also used to refer to a highly productive strain of V-V compound V2s, e.g., *hajimeru* "begin," *tsuzukeru* "continue," and *oeru* "finish," many of which convey information regarding the temporal contour of the event expressed by V1. So-called complement verbs joined by TE-linkage, however, behave very different from highly productive compound verb V2s. Therefore, the term complement verb in this dissertation will be reserved for the latter type of highly productive V-V compound verb V2s, and compound verbs joined by TE-linkage will be referred to as TE compounds.

Himeno also notes that compounds formed through TE-linkage have been referred to previously as "joint verbs" (*setsugō dōshi*) and those formed through I-linkage as "melded verbs" (*yōsetsu dōshi*) (1999: 4). Himeno argues that melded verbs, as their name suggests, are fused lexically to the extent that they reject the insertion of particles like *wa* "topic marker," *mo* "also," and *nanka* "something like..." in contrast to joint verbs (TE compounds), which do allow insertion of such particles. The different ways in which V-V compounds and TE compounds respond to morphosyntactic operations such as this are used to argue the relative strength of the bond between V1 and V2 in V-V compounds. Several of these criteria are laid out in Table 3.1.

	TE compound	V-V compound
Particle insertion	o ya-[t]te-wa-iru do TOP be "be doing (it)"	× *yari-wa-hajimeru do-TOP-begin
Negation of V1	 yaranaide-iru do.NEG-be "not be doing" 	× *yaranaide-hajimeru do.NEG-begin
Preservation of V1 lexical meaning	• Lexical meaning is preserved	Type 1: Lexical meaning of V1 is preserved (<i>yari-hajimeru</i> lit. "do- begin" = "begin doing") Type 2: Includes cases where lexical meaning of V1 is not preserved (<i>yari- komeru</i> lit. "do-put.into" = "talk down, corner," <i>tori-shimaru</i> lit. "take-close" = "crack down")
Nominalization	× *ya-[t]te-i	 ○ <i>yari-hajime</i> "beginning of doing"

Table 3.1. Criteria differentiating TE compounds and V-V compounds

Additionally, the differences between TE compounds and V-V compounds are analyzed by contrasting the characteristics of their respective V2s. First, V2s of TE compounds can combine with a vast array of V1s, and thus their productivity is high compared to V2s of V-V compounds. This is related to the fact that the meaning of the V2 in TE compounds is often semantically bleached, and thus, according to Himeno (1999: 6), they constitute established, grammatical forms (*bunpō keishiki*).

With regard to the lexical meaning of V2s in V-V compounds, oftentimes their meaning is not preserved, leading to a non-compositional or idiomatic meaning of the compound as a whole, or in Kageyama's (1993) terms, one that has been conventionalized (*imi no shūkan ka*). Himeno also recognizes the tendency for some V2s in V-V compounds to function as grammatical forms by expressing aspect (e.g., *hajimeru* "begin," *tsuzukeru* "continue," *owaru* "complete"), voice (e.g., *au* "do reciprocally"), and subjectivity (referring to the instrumental role a subject noun plays in the action expressed by V1, e.g., *sokonau* "fail, miss"). She cites Teramura (1984), who posits a continuum along which grammatical forms (V2s in TE compounds), grammatical form-like V2s in V-V compounds, and V2s belonging to lexicalized V-V compounds can be arranged.

Although an exhaustive analysis of the semantic implications resulting from compounds formed via TE-linkage versus those formed I-linkage exceeds the scope of this study, Himeno (1999) provides an illustrative example of the differences regarding semantic restrictions on V-V compounds compared to TE compounds that involve identical V1 and V2s.

- (3) a. kantan-na memo [detarame-na kotoba] o <u>kai-TE-oku</u> simple note [haphazard word] ACC write-TE-leave "jot down a note"
 - b. ?*kantan-na memo* [*detarame-na kotoba*] o <u>kaki-oku</u> simple note [haphazard word] ACC write-leave "?record a simple note [scribbled message]"

c. *kisho* [*dengon*] *o* <u>*kaki-oku*</u> letter-POL [message] ACC write-leave "record a letter [message]"

(adapted from Himeno 1999: 8)

In (3a), *kaku* "write" (in TE form *kaite*) is combined with *oku* "put, place" to form the TE compound *kaite-oku* "write down." Himeno explains that when the TE compound *kaite-oku* is replaced by the V-V compound *kaki-oku*, as in (3b), co-occurrence with the direct object *kantan-na memo* "simple note" is unnatural. In other words, while the TE compound *kaite-oku* may be used to express the hastily jotting down of a note, the corresponding V-V compound *kaki-oku*, which features an identical pair of V1 (*kaku*) and V2 (*oku*), is reserved for cases in which an important verbal or written message is reliably conveyed to a recipient, as in (3c), and appears in more literary contexts (Himeno 1999: 8). As such, the meaning of the V-V compound is more restricted, or conventionalized, in contrast to the meaning of the TE compound.

Based on these observations, several key differences between TE compounds and V-V compounds are summarized in Table 3.2.

	TE compounds	V-V compounds
Productivity	high	low
Conventionalized meaning	low	high
Lexical integrity	low	high

Table 3.2. Key differences between TE compounds and V-V compounds

The following sections focus exclusively on V-V compounds—and in particular, compare "lexical" and "syntactic" compound verbs.

3.2.2 Syntactic and Lexical V-V Compounds

Historically, classifications of V-V compound verbs have taken several approaches. The following provides a brief overview of one representative study made by Kageyama (1993).

One of the most important contributions to the study of Japanese compound verbs is the distinction between V-V compounds of the kind observed in (4a) versus those in (4b).

- a. *tobi-agaru* (jump-go.up) "jump up," *naki-sakebu* (cry-shout) "scream," *aruki-mawaru* (walk-go.around) "walk around"
 - b. *tabe-tsuzukeru* (eat-continue) "continue eating," *shaberi-makuru* (talk-do.a.lot¹) "talk on and on," *tabe-kakeru* (eat-be.about.to) "begin eating"

Kageyama classifies the compounds in (4a) as "lexical compounds" and those in (4b) as "syntactic compounds." The distinction between lexical and syntactic refers to the grammatical level at which the compound is formed. These terms are derived from their initial use within the framework of generative grammar, which posits discrete modules that dictate the formation of certain classes of lexical items. As such, lexical compounds are formed within the lexicon and syntactic compounds within the domain of syntax. However, the distinction between lexical and syntactic in the case of Japanese compound verbs has surpassed the bounds of being a theoretical issue exclusive to generative grammar. As such, the distinction between lexical and syntactic V-V compounds will be maintained in the present study's analysis. However, this does not imply a commitment to the theoretical orientation from which these terms originally emerged. Rather, it simply acknowledges the existence of empirical evidence to support the notion of categorizing V-V compounds into two (more or less) distinct groups, which can be observed to respond differently with regard to several morpho-syntactic phenomena. In the following, these phenomena and their consequences for the two groups of V-V compounds are explored.

Generally speaking, lexical and syntactic compounds can be compared along three broad parameters: semantic transparency, productivity, and ordering. A greater number of lexical compounds have opaque or non-compositional meanings compared to syntactic compounds, which tend to be semantically transparent. Therefore, lexical compounds must often be learned individually, as the meaning of the compound is not easily predictable based on the meaning of its component parts. On the other hand, the majority of syntactic compounds, which designate aspectual or complementation relations, adhere to a more regularized pattern when integrating the meaning of V1 and V2. Take, for example, the following pair of compounds in which *nomu* "drink" functions as V1.

(5) a. *nomi-aruku* (drink-walk) "go around drinking (alcohol)"

b. nomi-hajimeru (drink-begin) "begin drinking (any kind of liquid)"

(Kageyama 1993: 78)

In (5a), *nomu* "drink" is combined with *aruku* "walk" to form the lexical compound *nomi-aruku* "go around drinking (alcohol)." In (5b), *nomu* "drink" is combined with *hajimeru* "begin" to form the syntactic compound *nomi-hajimeru* "begin drinking (any liquid)." As is clear from the English translations, these two compounds differ in terms of the selectional restrictions placed on their object NPs. In (5a), *nomi-aruku* can only refer to the consumption of alcoholic beverages, whereas *nomi-hajimeru* in (5b) may refer to the consumption of any liquid, including alcohol.

The fact that selectional restrictions are placed on *nomu* "drink" in the case of *nomi-aruku* suggests that the meaning of *nomu* when appearing in this compound has become narrowed to a greater extent. That is to say, *nomu* in *nomi-aruku* refers to a more particular instance than the general activity *nomu* usually refers to outside of the compound. The absence of selectional restrictions in (5b) is of course also true of the independent verb, *nomu*. This suggests that there is something about the V2s *aruku* and *hajimeru* that determines whether or not the narrower lexicalized meaning of *nomu* is operative or not. In traditional analyses, this "something" is the component of

the grammar in which the compounds with either V2 are formed: V2 *aruku* is lexical, while V2 *hajimeru* is syntactic.

Furthermore, the non-compositional, non-transparent meaning of many lexical compounds is consistent with the fact that they tend to be less productive than syntactic compounds. This is predictable based on the fact that syntactic compounds exhibit virtually no lexical idiosyncrasies when it comes to combinations of V1 and V2. Only the second element, V2, need be specified, while any number of verbs may appear as V1 so long as the combination is semantically congruent.²

Finally, there is an asymmetry in the ordering relation of the two subtypes of V-V compound. In combinations of [lexical + syntactic] compound verbs, lexical compound verbs always appear on the inside of syntactic compound verbs.

- (6) a. [[nomi-aruki]_{LEXICAL}-hajimeru]_{SYNTACTIC} (drink-walk-begin)
 "begin walking around drinking"
 - b. *[[*nomi-hajme*]_{SYNTACTIC}-*aruku*]_{LEXICAL} (drink-begin-walk)

(Intended meaning) "walk around while beginning to drink"

Kageyama (1993) concludes that these discrepancies in semantic transparency, productivity, and ordering provide preliminary evidence for distinguishing between two classes of V-V compounds. In other words, semantically opaque, less productive compounds are listed individually in the lexical component of the grammar and termed lexical compounds; semantically transparent compounds exhibiting greater productivity are derived in the syntactic component of the grammar and termed syntactic compounds. However, Kageyama addresses the need for additional criteria in order to definitively argue that the lexical and syntactic categories of V-V compounds derive from different components of the grammar. To this end, he appeals to the fact that when V1 of V-V compounds is subject to certain syntactic operations such as honorification or passivisation, an asymmetry emerges between the set of V-V compounds that allow such operations and those that do not.

In (7), the verbal proform $s\bar{o}$ suru "so do" is used in place of V1.

(7)	a. naki-sakebu \rightarrow	*sō shi-sakebu	
	cry-shout	so do-shout	
	"scream"		
	kaki-komu $ ightarrow$	* sō shi-komu	
	write-put.into	so do-put.into	
	"fill out"		
	b. <i>tabe-tsuzukeru</i> \rightarrow	sō shi-tsuzukeru	
	eat-continue	so do-continue	
	"continue eating"	"continue doing so"	
	$tasuke$ - $au \rightarrow$	sō shi-au	
	help-do.reciprocally	so do-do.reciprocally	
	"help each other"	"do so to each other"	

(adapted from Kageyama 1993: 80)

In (7a), V1s *naku* and *kaku* cannot be replaced with $s\bar{o}$ suru, presumably because the V2s with which they combine, *sakebu* and *komu*, do not allow this type of replacement. Moreover, it is difficult to imagine even what the meaning of such expressions would be. In (7b) however, V2s *tsuzukeru* and *au* are free to combine with the verbal proform $s\bar{o}$ suru.

Next, consider the case of honorific verbs in position V1.

(8) a. [*o-kaki-ni-nari]-komu
[HON-write]-put.into
(Intended meaning) "fill out (a form) (honorific)"
*(tegami-o) [o-uke-ni nari]-toru
(letter-ACC) [HON-get]-take
(Intended meaning) "receive (honorific)"

b. [o-utai-ni nari]-hajimeru
[HON-sing]-begin
"begin to sing"
(densha-ni) [o-nori-ni-nari]-sokoneru
(train-on) [HON-ride]-miss
"miss the train"

(adapted from Kageyama 1993: 84)

In (8a), V2s *komu* and *toru* resist compounding with a V1 in honorific form. V2s *hajimeru* and *sokoneru* in (8b), however, may combine with an honorific V1.

Lexical V-V compounds also resist passivization of V1.

(9)	a. * <i>kak-are-komu</i> (cf. <i>kaki-komu</i>)	*os-are-aku
	write-PASS-put.into	push-PASS-open
	b. ai-sare-tsuzukeru	koro-sare-kakeru
	love-PASS-continue	kill-PASS-be.about.to
	"continue being loved"	"be on the verge of being killed"
		(adapted from Kageyama 1993: 87)

Furthermore, lexical compound verbs do not allow a nominalized verb of the form VN-*suru* "VN-do" to function as V1. Syntactic compounds, on the other hand, do allow VN-*suru* verbs to function as V1.

(10) a. *tōnyū-shi-komu (cf. nage-komu "throw into") deposit (VN)-do-put.into

b. <i>kyōryoku-shi-au</i>	tōkan-shi-wasureru
cooperate (VN)-do-do.reciprocally	post (VN)-do-forget
"cooperate with one another"	"forget to mail"

Finally, lexical V-V compounds cannot participate in what is called the "reduplicative construction."

- (11) a. *Kodomotachi ni aijō o sosogi-ni-sosogi-konda.
 children DAT love ACC pour.and.pour-put.into-PAST
 (Intended meaning) "(I) poured heaps of love into (my) children."
 - b. Senshutachi wa, kōshikisen no kaimaku o hikaete
 players TOP official.game GEN curtain ACC prepare.for
 hashiri-ni-hashiri-konda
 run.and.run-go.into-PAST
 "In preparation for the first game of the season, the players did numerous

hard training runs."

(adapted from Kageyama 1993: 91)

Table 3.3 summarizes the argument illustrated by examples (7)–(11).

Syntactic operation	Lexical compounds	Syntactic compounds
Verbal proform <i>sō suru</i> as V1	×	0
Honorification of V1	×	0
Passivization of V1	×	0
VN- <i>suru</i> as V1	×	0
Reduplicative construction as V1	×	0

Table 3.3. Criteria distinguishing le	exical and syntactic V-V	compounds
---------------------------------------	--------------------------	-----------

To summarize, compound predicates that do not accommodate syntactic operations such as passivization and honorification of V1 are classified as lexical, and compound predicates that do accommodate them are syntactic. Again, this is based on

the premise that no syntactic operation may result in the movement, separation, or deletion of any part of a *word*. Any linguistic unit that allows such movement, separation, or deletion is therefore not a word in this sense. Thus, a word demonstrates a high level of lexical integrity characteristic of units formed at the grammatical level of the lexicon. Lexical integrity is also related to semantic transparency and productivity. In particular, low levels of lexical integrity and, contrastingly, high levels of semantic transparency and productivity are associated with syntactic compounds, while high levels of lexical integrity and low levels of semantic transparency and productivity are associated with lexical compounds. This is consistent with Kageyama's argument for distinguishing lexical and syntactic compounds as outlined above.

The present study does not attempt to isolate the component of grammar responsible for the formation of lexical versus syntactic compounds, nor does it operate on the premise of a necessary division of grammar into the components of "lexicon" and "syntax." However, because *dasu* functions as V2 in both lexical and syntactic compounds and the present study is concerned only with lexical V-V compounds, I adopt Kageyama's framework for distinguishing between the two and exclude syntactic V-V compounds with *dasu* as V2 from the analysis.

3.3. Classification of Lexical V-V Compounds

This section looks specifically at lexical V-V compounds and discusses the relationship between V1 and V2 as a criterion for further classification. A primary reason for excluding syntactic compounds from this discussion is due to the fact that syntactic compounds, characterized by semantic transparency, exhibit a relatively straightforward relationship between the meaning of V1 and V2 and the meaning of the compound; generally speaking, V2 takes the action expressed by V1 as its object. As a result, there is less variation in terms of the semantic relationship between V1 and V2 and therefore less of a priority in developing further classification systems. First, in what follows, the argument structure of V1 and V2 is examined in the context

of Kageyama's (1993) Transitivity Harmony Principle as a means for determining what combinations of V1 and V2 are permissible. Then, a brief overview of the mapping between argument and semantic structure with reference to Matsumoto (1996) is introduced. Finally, classifications of lexical V-V compounds based on the semantic relationship between V1 and V2 are discussed.

3.3.1 Classification Based on Argument Structure

V-V compounds have been classified based on analyses of how the argument structure of V1 and V2 contributes to the argument structure of the compound as a whole. In one such approach, Kageyama (1993) posits the Transitivity Harmony Principle (*tadōsei chōwa gensoku*) as a morphological constraint conditioning the formation of lexical V-V compounds.

(12) The Transitivity Harmony Principle

Given the three argument structures in (a)–(c), Japanese lexical compound verbs are built by combining two verbs of the same type of argument structure.³

- (a) transitive ($x, \langle y \rangle$)
- (b) unergative intransitive (x < >)
- (c) unaccusative intransitive (<*y*>)

In (12a)–(c) above, x represents an external argument and y represents an internal argument. Both transitive and unergative intransitive verbs feature an external argument (x); therefore, they constitute the same type. However, unaccusative intransitive verbs feature only an internal argument (y) and therefore constitute a separate type. In this way, only verbs of the same type may combine in V-V lexical compounds, creating the combinatory possibilities diagrammed in Figure 3.1.

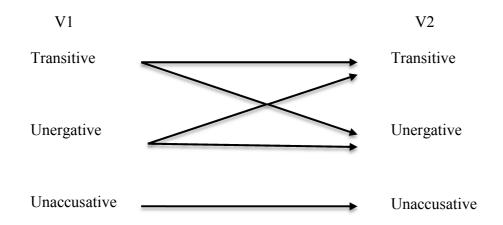


Figure 3.1. Combinatory possibilities under the Transitivity Harmony Principle

(13) provides examples of the different types of combinations sanctioned by the Transitivity Harmony Principle. (14) offers examples of would-be combinations that are not sanctioned.

- (13) a. transitive V1 + transitive V2 (*ubai-toru* "rob, seize" from *ubau* "steal" and *toru* "take"; *oi-harau* "drive away, disperse" from *ou* "chase" and *harau* "clear away")
 - b. transitive V1 + unergative V2 (*sagashi-mawaru* "look around" from *sagasu* "search" and *mawaru* "turn, revolve"; *mochi-aruku* "carry" from *motsu* "hold" and *aruku* "walk")
 - c. unergative V1 + unergative V2 (*ii-yoru* "woo, make advances" from *iu* "say" and *yoru* "approach"; *tobi-oriru* "jump down/off/out" from *tobu* "fly, jump" and *oriru* "descend")
 - d. unergative V1 + transitive V2 (*naki-harasu* "weep one's eyes out" from *naku* "cry" and *harasu* "cause to swell"; *fushi-ogamu* "kneel and worship" from *fusu* "prostrate oneself" and *ogamu* "pray")

- e. unaccusative V1 + unaccusative V2 (*suberi-ochiru* "slip down/off" from *suberu* "slip, slide" and *ochiru* "fall down"; *nagare-ochiru* "run down/off (fluid)" from *nagareru* "stream, flow" and *ochiru* "fall down")
 (adapted from Ho 2010: 28)
- (14) a. *transitive V1 + unaccusative V2 (**arai-ochiru* from *arau* "wash" and *ochiru* "fall down")
 - b. *unergative V1 + unaccusative V2 (*hashiri-korobu from hashiru "run" and korobu "fall down/over"
 - c. *unaccusative V1 + transitive V2 (*yure-otosu from yureru "shake" and otosu "drop")
 - d. *unaccusative V1 + unergative V2 (**itami-naku* from *itamu* "hurt, ache" and *naku* "cry")

(Kageyama 1993: 201)

While the Transitivity Harmony Principle can account for a large majority of felicitous as well as infelicitous combinations of V1 and V2, there are some V-V compounds that appear to violate its prescriptions. Matsumoto (1996) cites the following compounds as exceptions to the Transitivity Harmony Principle.

- (15) unaccusative V1 + unergative V2 (*yopparai-aruku* "walk, being drunk" from *yopparau* "become intoxicated" and *aruku* "walk")
- (16) unaccusative V1 + transitive V2 (*mai-ageru* "whirl up" from *mau* "dance, flutter" and *ageru* "raise")

(17) transitive or unergative V1 + unaccusative V2 (*yaki-agaru* "be burnt completely" from *yaku* "burn, roast" + *agaru* "rise"; *uchi-agaru* "be hit up high in the air" from *utsu* "hit" and *agaru* "rise"; *hashiri-tsukareru* "become tired from running" from *hashiru* "run" and *tsukareru* "become tired")

(Matsumoto 1996: 229)

With regard to the transitive-unaccusative compounds in (17) such as *yaki-agaru* and *uchi-agaru*, Kageyama argues that these are derived from corresponding transitive-transitive compounds through a process of intransitivization. In other words, *yaki-agaru* is derived from *yaki-ageru*, a transitive-transitive compound featuring the verbs *yaku* "burn, roast" and *ageru* "raise." Likewise, in this view, *uchi-agaru* (hitrise) is derived from *uchi-ageru*, a transitive-transitive compound featuring *utsu* "hit" and *ageru* "raise." However, there are also transitive-unaccusative and unergative-unaccusative compounds for which a transitive form of V2 does not exist, thereby ruling out the possibility of back-formation. For example, *yomi-tsukareru* (read-become.tired) "become tired by reading" and *hashiri-tsukareru* (run-become.tired) "become tired by running" are both instances of an unaccusative V2 combining with any other than an unaccusative V1 (a transitive V1 in the case of *yomi-tsukareru* and an unergative V1 in the case of *hashiri-tsukareru*) (Ho 2010). These compounds clearly violate the Transitivity Harmony Principle. However, in both cases, V2 *tsukareru* has no transitive counterpart from which it could have been derived.

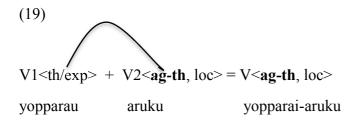
Thus, Matsumoto (1996) concludes that the Transitivity Harmony Principle overreaches in its attempt to delineate all of the possible combinations and none of the impossible combinations of V1 and V2 in V-V compounds. As the examples in (15)–(17) illustrate, there are attested combinations of V1 and V2 that lie outside the combinatory possibilities diagramed in Figure 3.1. In order to resolve the problem these and other exceptions pose, Matsumoto proposes the Shared Participant Condition as well as several other well-formedness constraints on particular groups of lexical V-V compounds as an alternative to the Transitivity Harmony Principle.

The Shared Participant Condition serves as a general constraint to which the semantic structures of predicates featuring a simplex argument structure, like lexical V-V compounds, are held.

(18) The Shared Participant Condition

Each of the component verbs forming a compound must have at least one argument that is semantically linked to an argument of the other component verb.

In the V-V compound *yopparai-aruku*, an unaccusative, non-agentive V1, *yopparau* "become intoxicated," combines with an unergative, agentive V2, *aruku* "walk." According to the Transitivity Harmony Principle, an unaccusative verb can only felicitously combine with another unaccusative verb. However, as shown in (18), the semantic structure of each verb features a salient participant that is referentially identical.



(Matsumoto 1996: 211)

In (18), the curved line represents the semantic linking of the thematic relations of V1 *yopparau* and V2 *aruku*. The theme (th) or experiencer (exp) role of V1 is referentially identical to the agent (ag) or theme role of V2.

Likewise, *hashiri-tsukareru*, which features an unergative V1 in combination with an unaccusative V2, is in violation of the Transitivity Harmony Principle but adheres to the Shared Participant Condition.

(20) Taro ga hashiri-tsukareru.Taro NOM run-become.tired"Taro becomes tired from running."

The semantic structure of the compound comprises two events—that expressed by V1 *hashiru* "run" and that expressed by V2 *tsukareru* "become tired." When integrated, the compound expresses the meaning "become tired by running."

(21) $[(Taro ga) hashiru]_{Event 1} + [(Taro ga) tsukareru]_{Event 2}$ $[(Taro NOM) run]_{Event 1} + [(Taro NOM) becomes tired]_{Event 2}$

The most salient participant in Event 1 [(*Taro ga*) *hashiru*] is the agent, *Taro*, which surfaces as the syntactic subject. In Event 2, the most salient participant is the theme or experiencer, *Taro*, which is co-referentially identified with *Taro* of Event 1. Thus, a V-V compound that combines V1 of Event 1 (*hashiru*) with V2 of Event 2 is judged to be felicitous and in accordance with the Shared Participant Condition.

Matsumoto (1996) also proposes several constraints on the complex semantic structure of V-V compounds according to which semantic type they belong. While I do not delve into the particular claims made by Matsumoto regarding well-formedness in this respect, the next section introduces two frameworks for classifying V-V compounds according to the semantic relationship holding between V1 and V2.

3.3.2 Classification of V-V Compounds Based on Semantic Criteria

Kageyama (1999), building on previous analyses, offers a comprehensive classification of five categories of V-V lexical compound based of the type of semantic relationship holding between V1 and V2.

(22) a. Means: By means of V1, V2

kiri-taosu (cut-topple) "cut down"; *fumi-tsubusu* (step.on-smash) "trample"; *oshi-taosu* (push-topple) "push down"

b. Manner: While V1ing, V2

koroge-ochiru (roll.over-fall.down) "fall off, tumble down"; *asobi-kurasu* (play-live) "idle away one's time"; *mai-agaru* (flutter-rise) "whirl up"

- c. Cause: As a result of V1, V2 aruki-tsukareru (walk-become.tired) "become tired by walking"; nukeochiru (fall.out-fall.down) "fall out, collapse, be omitted"; obore-shinu (drown-die) "die by drowning"
- d. Pair: V1 and moreover, V2
 naki-wameku (cry-shout) "bawl"; *imi-kirau* (detest-dislike) "abhor"; *nare-shitashimu* (grow.accustomed.to-be.intimate.with) "become familiar with"
- e. Complement: The action or event expressed by V1 serves as the subject or object of V2

mi-nogasu (see-miss) "overlook"; *hare-wataru* (clear.up-go.across) "clear up"; *tsukai-konasu* (use-be.good.at) "handle, master"

(Kageyama 1999: 195)

Several of the means, manner, and cause compounds in (22) (or variations thereof) were introduced in the previous section (e.g., *mai-agaru*, *aruki-tsukareru*) regarding the Transitivity Harmony Principle and classifications based on argument structure. However, the categories in (22) are meant to represent purely semantic relationships and bear no consequences for syntactic structure.

Tagashira and Hoff (1986) take a slightly different approach. They point out that, generally speaking, the majority of Japanese compound verbs have the structure [activity verb + process verb]. A process verb denotes a change of state or change of location. Japanese *aku/akeru* "open (intransitive/transitive)" and *hairu/ireru* "go in/put in" are examples of process verbs. Contrastingly, an activity verb represents an action that does not result in a change of state or change of location. For example, *yomu* "read" is an activity verb. The object of *yomu* (e.g., *hon* "book") may be affected by the action of the verb but not to the extent it would be affected by the action of a process verb such as *akeru* or *ireru*.

Compounds such as oshi-akeru "push open" and fuki-dasu "spout out, emit" are instances of the formula [activity verb + process verb]. Tagashira and Hoff thus broadly define Japanese V-V compounds as "the expression of a process of changeof-state or change-of-location, or an action that brings about these changes in a person or an object, which involves a certain activity" (3). They note that in addition to [activity verb + process verb], the combinations [activity verb + activity verb], [process verb + activity verb], and [process verb + process verb] are also conceivable. The combination of two activity verbs corresponds to Kageyama's (1999) "pair" compound in (22d). Tagashira and Hoff refer to this as "two similar activities." Examples include naki-sakebu "cry and shout, scream" and tobi-haneru "jump and leap." The remaining combinations of [process verb + activity verb] and [process verb + process verb], Tagashira and Hoff argue, actually function as [activity verb + activity verb] or [activity verb + process verb]. That is, a process verb functioning as V1 in a V-V compound behaves like an activity verb, representing "an activity which does not involve a change-of-state or change-of-location" (1986: 16). For example, nagashi-komu contains two verbs that function as process verbs when used independently: nagasu "drain, pour" and komu "go/put into." However, in the compound, nagasu denotes "an activity of letting something flow" rather than the process of draining or pouring that results in a change of location of the object being drained or poured.

Tagashira and Hoff identify another basic property of Japanese compound verbs as the tendency for process verbs (V2) to exhibit varying levels of abstraction in their contribution to the meaning of the compound. In fact, they state that the "phenomenon of increasing abstraction can be observed in every one of the process verbs which occur as a second verb in a compound" (1986: 4). Take, for example, the process verb *tsukeru*, which loosely means "attach" and appears in the following compounds.

(23) a. *nui-tsukeru* (sew-attach)

"attach (something to something) by means of sewing"

b. *hari-tsukeru* (paste-attach)"paste (something) onto (something)"

c. *ue-tsukeru* (plant-attach)

"plant (something), instill"

d. shikari-tsukeru (scold-attach)

"scold harshly"

(Tagashira and Hoff 1986: 3)

While the semantic contribution of *tsukeru* in (23a) to the meaning of the compound as a whole is related in a more or less transparent way to the meaning of the independent verb, this cannot necessarily be said of *tsukeru* in (23c) or (23d).

3.4 Conclusion

This chapter has aimed to characterize Japanese lexical V-V compounds in two ways: first, by distinguishing them from other multi-verb predicates in Japanese, and second, by describing the syntactic and semantic features of the component verbs in their relation to the compound as a whole. Section 3.2 compared V-V compounds and TE compounds formed via I-linkage and TE-linkage, respectively. It was demonstrated that TE compounds exhibit greater flexibility in the type of V1 that can combine with V2, and thus their productivity is high compared to that of V-V compounds. TE compounds also allow a particle like *wa* "topic marker" or *mo* "also" to interpolate between the two verbs, whereas V-V compounds do not. Therefore, V-V compounds are distinguished from TE compounds on the grounds that they exhibit a higher degree of lexical integrity and often express conventionalized meanings (e.g., *nomi-aruku* vs. *nonde aruku*).

Section 3.3 explored V-V compounds in further detail, beginning by introducing the distinction between "lexical" and "syntactic" compounds. Among V-V compounds, there is an observable contrast between those that permit a V1 in honorific or passive form—as well as the verbal proform $s\bar{o}$ suru or a nominalized verb to function as V1—and those that do not. The former are categorized as syntactic

and the latter as lexical. Compared to lexical compounds, syntactic compounds are more semantically transparent and productive. This dissertation focuses exclusively on lexical V-V compounds, which may be further categorized according to several syntactic and semantic criteria.

The latter half of Section 3.3 examined classifications of lexical V-V compounds according to their combinatory possibilities based on argument structure as well as the semantic relationship between V1 and V2. Kageyama (1993) posits the Transitivity Harmony Principle as a means of determining the types of V1 that may combine with certain types of V2. Verbs are classified into three types-transitive, unergative, and unaccusative-depending on whether they feature an internal argument, an external argument, or both. Transitive and unergative verbs, which both feature an external argument, are of the same type and may therefore combine freely. Unaccusative verbs feature only an internal argument; therefore, they may only combine with other unaccusative verbs. Matsumoto (1996) posits a different framework for determining the combinatory possibilities of V1 and V2, citing several exceptions to the Transitivity Harmony Principle as indications that a less restrictive, more descriptively adequate tool is needed. The Shared Participant Condition serves this end by stipulating simply that "each of the component verbs forming a compound must have at least one argument which is semantically linked to an argument of the other component verb" (Matsumoto 1996: 230).

The final part of Section 3.3 introduced two classifications of V-V compounds based on the semantic relationship holding between V1 and V2. Kageyama (1999) assembles a list of five main categories based on a comprehensive review of previous classifications: 1) means compounds, 2) manner compounds, 3) cause compounds, 4) pair compounds, and 5) complement compounds. In more general terms, Tagashira and Hoff (1986) characterize the vast majority of V-V compounds as a combination of activity verb and process verb, which results in typical combinations like *oshi-akeru* "push open." Tagashira and Hoff also point out that nearly all process verbs functioning as V2 in V-V compounds exhibit varying levels of abstraction in terms of meaning.

By providing an in-depth characterization of lexical V-V compounds, this chapter has served to properly identify one of the two main constructions that will feature in the contrastive analysis presented in the chapters to follow.

Notes to Chapter 3

¹ V2 *makuru* is glossed as "do a lot," but *makuru* as a simplex verbs means "turn up" or "roll up (e.g., sleeves)." Similarly, *kakeru* in *tabe-kakeru* is glossed as "be about to," but *kakeru* as a simplex verb expresses a range of meanings, the most typical of which is "hang" as in *hang a picture on the wall*. It is often the case that the meaning of a component verb when it appears outside the V-V compound is not recognizable (save a significant stretch of imagination) within the meaning of the compound as a whole. The question of how a verb like *makuru* "roll up" comes to mean "do a lot" when functioning as V2 in a V-V compound is an interesting one, but this discrepancy will not be discussed further with regard to specific V2s other than *deru* and *dasu* (see Chapter 4 Section 4.4.3.1).

² Kageyama (1993: 78) offers *umare-tsuzukeru* (be.born-continue) "continue being born" as an example of a semantically incongruous syntactic V-V compound in the context of (i).

(i) ?Watashi no chōjo ga umare-tsuzuketa.
 1SG GEN eldest.daughter NOM be.born-continue-PAST
 "?My eldest daughter continued being born."

However, when placed in a different context, this combination may become acceptable.

(ii) Onna no ko bakari ga nan-nin mo umare-tsuzuketa.
 girl GEN child only NOM several.people also be.born-continue-PAST
 "Several girls continued being born (all in a row)."

³ Kageyama (1999) points out that [transitive + unaccusative]-type V-V compounds are attested in Chinese as well as Bantu serial verb constructions. The resultative

52

construction in English also features a similar pattern of [transitive verb + (unaccusative) adjective/particle] (e.g., *strike down, push open*).

Chapter 4 Basis for Contrastive Analysis

4.1 Introduction

Chapters 2 and 3 provided a contextual background against which the categories "English phrasal verb" and "Japanese V-V compound" are defined, keeping in mind the specific goals of this dissertation. Chapter 4 introduces several criteria that support a cross-linguistic contrastive analysis of these two constructions. This chapter draws on evidence from different approaches and will be discussed in three parts. Section 4.2 explains how Japanese compound verbs and English phrasal verbs figure within Talmy's (2000) typology of event integration. Section 4.3 explores the parallel semantic and syntactic characteristics that have been identified in studies explicitly comparing phrasal verbs and V-V compounds. Finally, Section 4.4 focuses on English *out* and Japanese *deru/dasu* in particular, showing how each derives its basic sense from the container schema and thereby establishes a correspondence between these two representative elements of the categories phrasal verb and V-V compound, which will be explored regarding patterns of semantic extension in the chapters to follow.

4.2 Talmy's Typology of Event Integration

Talmy (2000) explores the question of how complex events are conceptualized across languages. He introduces the term "macro-event" to describe a pervasive pattern of complex event conceptualization in which two simple events may be fused or conflated and, as a result, made amenable to expression in a single clause. Earlier iterations of Talmy's event integration typology focused on the conflation of motion events in particular, but the analysis was later extended to apply to other types of event complexes as well, not just those involving expressions of motion. Talmy (1985) includes "change of state" as an additional event type that bears similarity to motion in terms of parallel semantic and syntactic properties; later, events of "temporal contouring," "action-correlating," and "realization" were added to the list of event complexes grouped under the general category of macro-event.

By utilizing Talmy's concept of macro-event, the present analysis and discussion are not limited only to constructions that express motion events—they can be extended to include those that encode change of state, aspect, etc. This is crucial because this dissertation seeks to compare patterns of semantic extension between *out* in English phrasal verbs and *deru/dasu* in Japanese compound verbs, where the main goal is to compare meanings ascribed to each of these two elements that deviate from their basic, spatial senses. Indeed, upon examining the data, we observe many uses of *out* and *deru/dasu* that are most aptly characterized as encoding complex events of the non-motion kind.

4.2.1 Macro-Event, Framing Event, and Core Schema

A macro-event is a complex event that can be broken down into a main event and a subordinate event. These two components—together with the relation that binds the subordinate event to the main event—constitute the key features that internally structure the macro-event. Each of these components, conceptualized analytically, may be expressed separately within a complex sentence, as in (1).

(1) The candle blew out because something blew on it. (Talmy 2000: 217)

When these individual components are conceptualized as a cohesive, unitary event, the resulting macro-event may be expressed in a single clause. Compare the complex sentence in (1) with the single-clause sentence in (2), which expresses the same act of non-agentive causation.

(2) The candle blew out. (Talmy 2000: 217)

(2) contains nearly identical content, structure, and interrelation of components as (1) but presents them in a more unified way.¹

55

The main event within the macro-event is called the "framing event." This term is intended to capture the schematic nature of the main event when it is examined across different conceptual domains, including those involving motion or location, change in state, temporal dimensions of an action unfolding through time (temporal contouring, or aspect), correlation among related actions (action correlating), and fulfillment or completion of an action (realization).

A framing event consists of four structural components: figure, ground, activating process, and association function. Of these four components, ground and association function are primarily responsible for determining the specific character of the framing event, allowing it to be distinguished from other framing events. First, the ground is defined as a reference entity, a backdrop against which the condition of the figure is characterized. Second, the association function "sets the figural entity into a particular relationship with the ground entity" (Talmy 2000: 218). Because the figural entity is said to be largely determined by context and the activating process can have only one of two values—transition or fixity—it is the association function alone or the association function taken together with the ground that is responsible for the identity of the framing event. Thus, these two identifying components—ground and association function—are considered the schematic "core" of the framing event, which is also referred to as the "core schema."

In the case of motion events, the core schema corresponds to the path of motion; in state-change events, the core schema is the changed property. Temporal contouring, action correlating, and realization event types each feature a core schema as well. In the following English examples, the word in italics represents the core schema of the event type listed in (a)–(e).

(3) a. Path in an event of motion

The ball rolled *in*.

b. Changed property in an event of state change The candle blew *out*.

- c. Aspect in an event of temporal contouring They talked *on*.
- d. Correlation in an event of action correlating She sang *along*.
- e. Fulfillment or confirmation in an event of realization The police hunted the fugitive *down*.

(Talmy 2000: 214)

4.2.2 Satellite-Framed and Verb-Framed Languages

In (3), the core schema is expressed by an element outside the verb, which highlights an important finding and key feature of Talmy's typology of event integration. Languages can be roughly divided into two typological categories depending on where the core schema of an event complex is typically expressed within a sentence. Based on this mapping of conceptual structure—the schematic core of the framing event-to syntactic elements, languages are categorized as "verbframed" or "satellite-framed" languages. Verb-framed (V-framed) languages characteristically express the core schema of a framing event in the verb, whereas satellite-framed (S-framed) languages map the core schema onto a satellite (Talmy 2000: 222). Recall from Chapter 2 the definition of "satellite" as "any constituent other than a nominal or prepositional-phrase complement that is in a sister relation to the verb root" (Talmy 2000: 102). The grammatical category "satellite" includes English particles such as out, in, and on (see Chapter 2 Section 2.3.1), which function as the loci of expression of the core schema across several types of framing events. In English, the core schema is expressed in a satellite rather than the main verb, and thus English is categorized as an S-framed language. In contrast, Japanese expresses the core-schema in the main verb and is therefore categorized as a V-framed language. The following examples illustrate these two modes of event integration in the case of a motion-framing event, where the core schema corresponds to path.

(4) a. *English* (satellite-framed)

Every time the wind blows, cherry blossom petals $flutter_{MANNER+MOTION}$ down_{PATH}.

b. Japanese (verb-framed)

Kaze ga fuku tabi-ni, sakura no hanabira ga wind NOM blow each time, cherry GEN petals NOM mai_{MANNER}-ochiru_{PATH+MOTION}. flutter-descend

As mentioned previously, a macro-event consists of a main event and a subordinate event. In addition to the main event (the framing event), the macro-event includes a co-event that is subordinate to the framing event and serves to elaborate on it in some way. The support relation the co-event bears to the framing event may be realized in a variety of forms, including precursion, enablement, cause, manner, concomitance, purpose, and constitutiveness. Cause and manner are the most frequently occurring types of support relations (Talmy 2000: 220). In (4), the co-event bears the support relation of manner to the framing event. That is, the co-event elaborates the manner of motion of the flower petals descending to the ground. This aspect of the complex motion event, however, is mapped onto different syntactic elements in English and Japanese. In this example, the framing event is an event of motion, so the core schema corresponds to path. In English, the particle down serves as the locus for the mapping of path. This leaves the verb open to encode the co-event, so *flutter* encodes the manner of motion. Japanese, a V-framed language, maps the core schema (path) of the complex motion event onto the verb ochiru, "descend." The co-event—if it is expressed at all—must then be expressed by an element outside the verb. In the case of (3), manner is expressed by the first verb (V1) mai in the V-V compound mai-ochiru.

One consequence of the satellite- versus verb-framed dichotomy is that satelliteframed languages are equipped with a readily available means for expressing manner. More specifically, because path is expressed by an element outside the verb, the verb is available to encode some other element of meaning. As mentioned before, this element of meaning often takes the form of a co-event bearing the support relation of manner to the main verb. Languages in which manner is easily expressible tend to encode manner more frequently and develop more means for encoding manner. Slobin (2005) compares English, an S-framed language, with Spanish and Turkish, two V-framed languages of different types, in terms of the frequency with which users encode manner in descriptions of motion events. When Slobin considered narratives elicited from picture stories and novels depicting hundreds of motion scenarios, he found that manner is encoded more than twice as frequently among users of English than among users of Spanish and Turkish. This result is consistent when including adverbial expressions of manner in all three languages. Moreover, S-framed languages typically have more types of manner verbs than V-framed languages. The difference in diversity of manner verbs can ultimately be attributed to the relative ease with which manner is encoded in S-framed languages. Over time, this can result in an expanded lexicon of manner verbs, and consequently, users of S-framed languages become accustomed to making fine-grained distinctions between different types of motion.

Based on these results, one would predict that Japanese, a V-framed language, contains fewer manner verbs than English, an S-framed language. This hypothesis is confirmed by Ohara (2002), who compares the use of motion verbs in English and Japanese. She finds that 35% of the total motion verbs in English are verbs conflating motion and manner. In contrast, only 11% of Japanese motion verbs are manner-of-motion verbs. However, although Japanese may contain fewer manner-of-motion verbs, it diverges from the characterization of most V-framed languages as lacking diverse means for expressing manner. Ohara points out that while Spanish translators choose to omit manner information roughly half of the time when translating from English (S-framed) to Spanish (V-framed), Japanese translators preserve manner information most of the time. This is presumably due to the wider range of available methods for encoding manner in Japanese compared to other V-framed languages. Ohara (2004) identifies six means for encoding manner in Japanese:

- I. V-V Compound Verbs *achi-kochi <u>hane-mawari</u>-mashita* there-here jump-circle-POL-PAST "jumped around here and there"
- II. Ideophones <u>tobo-tobo</u> aruku totteringly walk "plod along"

III. Complex Predicates

(sora o) <u>burasaga[t]-te-iku</u>
(sky ACC) swing-TE-go
"swing (in the air)"

IV. -I Continuative Form

bannintachi o <u>yari-sugoshi</u>, gokuri no ue o <u>odori-koe</u>, guards ACC dodge-pass-CONT Gollum GEN top ACC jump-cross-CONT <i>mon o <u>suri-nukete</u>-kita. gate ACC squeeze-exit-come-PAST "dodged guards, jumped over Gollum, and squeezed through the gate"

V. TE-Linkage

to[*n*]*-de-kuru* fly-TE-come "come flying"

VI. Adverbial Clauses

garagara ii nagara hairu rattling say while enter "rattle into"

The first two means for expressing manner, V-V compound verbs and ideophones, are the focus of Sugiyama's (2005) investigation into how Japanese accommodates manner in expression of motion events. Sugiyama contends that English manner verbs in combination with a satellite are most commonly translated into Japanese using a V-V compound consisting of a manner verb (V1) and path verb (V2) (2005: 306).

(6) Manner verb + Satellite \rightarrow Manner-path compound

[wolves] run about \rightarrow hashiri-mawaru (run-go.around) "run around"

(Sugiyama 2005: 305)

(6) describes a scene from Chapter 6 of *The Hobbit* in which the protagonist and his friends attack a pack of wolves by hurling burning pine cones at them. The wolves' coats catch fire, and they begin to run around in a panic trying to extinguish the flames. In the English original, the verb *run* conflates manner and motion, and the satellite *about* denotes the path of motion. This is translated into Japanese as the V-V compound *hashiri-mawaru*, where V1 (*hashiru* "run") conflates manner and motion and V2 (*mawaru* "go around") denotes path.

(6) is a fairly straightforward example of how English manner-of-motion verbs in combination with a satellite expressing path are mapped onto V1 and V2 of a Japanese V-V compound. Obviously, this is not the only option for encoding manner in Japanese, a language predominated by path verbs (Tanaka and Matsumoto 1997). Indeed, as Ohara (2004) points out, there are several options for encoding manner, and ideophones or mimetic expressions also play an important role (Ohara 2002, Sugiyama 2005). However, the link between combinations of manner verb and path satellite in English and manner-path V-V compounds in Japanese can be generalized to extend beyond the description of motion events. Verb-particle combinations like *run about* were analyzed in Chapter 2 as phrasal verbs, a category encompassing a range of verb-plus-particle combinations with both literal and figurative meanings. Likewise, Japanese V-V compounds also exhibit a range of meanings, reflecting the various types of semantic relationships between V1 and V2. Based on the correspondence established between manner verbs in combination with path particles in English and manner-path V-V compounds in Japanese used to express motion events, this dissertation seeks to investigate how and to what extent this correspondence is upheld when non-literal meanings, as a product of processes of sematic extension, are considered.

4.3 Previous Studies Comparing Japanese V-V Compounds and English Phrasal Verbs

Although there are few in-depth studies to date focusing specifically on the comparison of English phrasal verbs and Japanese V-V compounds, similarities between the two constructions have been noted among some researchers. Taniwaki and Tono (2009) echo Ohara (2004) and Sugiyama (2005) in pointing out that when an English phrasal verb is translated into Japanese, it often requires the use of a V-V compound.

a. cut down → *kiri-taosu* (cut-topple)
b. push aside → *oshi-nokeru* (push-move.aside)

(Taniwaki and Tono 2009: 320)

Taniwaki and Tono add that this is by no means the only option, offering examples where a phrasal verb is translated into a complex predicate featuring a deictic verb (8a) or a simplex verb in combination with a mimetic adverbial phrase (8b). (8) a. take along → *tsure-te-iku* (take-TE-go)
b. idle away → *burabura sugosu* (idly spend)

(Taniwaki and Tono 2009: 320)

Section 3.3.2 of Chapter 3 introduced a framework proposed by Kageyama (1999) for analyzing the types of semantic relationships between V1 and V2 of Japanese lexical compound verbs. This framework posits five major types of lexical compound verb: 1) means, 2) manner, 3) cause, 4) pair, and 5) complement. Taniwaki and Tono compare the English phrasal verbs and V-V compounds that correspond to each of these categories (with the exception of pair compounds²).

Table 4.1. Meaning relationships of Japanese V-V compounds and English phrasal verbs (adapted from Taniwaki and Tono 2009: 321)

	Japanese	English
Means	<i>kiri-taosu</i> cut-topple	cut down
Manner	<i>koroge-ochiru</i> roll-fall	roll down
Cause	<i>fuki-koboreru</i> blow-spill	boil over
Complement	<i>tsukai-hatasu</i> use-do.completely	use up

4.3.1 Introducing a New Direct Object

One interesting parallel between phrasal verbs and V-V compounds is the phenomenon by which a new direct object is introduced to the complex predicate. Here, "new" refers to the fact that the direct object of the complex predicate is not selected for by the verb of the phrasal verb or V1 of the V-V compound when used in

isolation. In the case of V-V compounds, the introduction of a new direct object is explained by appealing to the notion that the argument structure of the V-V compound is inherited from the argument structure of V2 rather than V1. In the case of phrasal verbs, particles are not considered to have an argument structure like verbs; therefore, the same logic cannot be applied. However, a different approach may offer a more comprehensive explanation for this parallel syntactic phenomenon.

As discussed in Chapter 3 Section 3.3.1, the Transitivity Harmony Principle dictates the possible transitive and intransitive combinations of V1 and V2 in V-V compounds. Generally speaking, a transitive V-V compound is made up of a transitive V1 and a transitive V2. The direct object of V2 and V1 may be referentially identical, as in (9),

(9) Shōnen jidai, Washinton wa sakura no ki o kiri-taoshita. youth period Washington TOP cherry GEN tree ACC cut-topple-PAST "In his youth, Washington cut down a cherry tree."

or the direct objects of V1 and V2 may refer to different entities, as in (10).

(10) a. *fuku* o arau + fuku no yogore o otosu
clothes ACC wash + clothes GEN dirt ACC remove
[wash_{V1} clothes] + [remove_{V2} the clothes' dirt]
b. *haha* wa {fuku no yogore / *fuku} o arai-otoshita.
mother TOP {clothes GEN dirt / *clothes} ACC wash-remove-PAST
[wash-remove]_{V-V Compound} {clothes' dirt / *clothes}

(adapted from Kageyama 1993: 104)

V-V compounds are right-headed, meaning that the argument structure of V2 is mapped onto the argument structure of the compound. When the direct object of V1 and V2 refer to different entities, the direct object of V2 is selected as the direct object of the compound. In (10), the direct object of V1 *arau* "wash" is *fuku* "clothes," and

the direct object of V2 *otosu* "remove" is (*fuku no*) *yogore* "clothes' dirt." When V1 and V2 are integrated into the V-V compound *arai-otosu*, only *yogore* can be taken as the direct object. Similarly, in (11), the V-V compound *shigoki-dasu* "squeeze-put.out" takes the direct object *hamigakiko* "toothpaste," which is not the object selected for by V1 when used as an independent verb.

(11)

	1						
V1	V2						
shigoku "squeeze"	dasu "put out"						
*hamigakiko o shigoku	hamigakiko o dasu						
toothpaste ACC squeeze	toothpaste ACC put.out						
	"extract toothpaste"						
chūbu o shigoku	*chūbu o dasu						
tube ACC squeeze	tube ACC put.out						
"squeeze a tube"							
V-V compound							
shigok	shigoki-dasu						
hamigakiko _{OBJ(V2)} o shigoki-dasu							
toothpaste A	toothpaste ACC squeeze-put.out						
"squeeze out some toothpaste"							

In an analogous situation, when the verb component of a phrasal verb functions as an intransitive verb when used independently, the particle can introduce a new direct object, resulting in a transitive phrasal verb. Alternatively, when the verb is transitive, the particle can introduce a direct object that was not selected for by the verb when used independently. Examples of the former type are listed under Group 1 and the latter under Group 2.

Group 1

(12) a. *sweat {the fever/the weight}b. sweat *out* {the fever/the weight}

(13) a. *sleep the hangoverb. sleep *off* the hangover

Group 2

- (14) a. *wash the dirtb. wash *out* the dirt
- (15) a. *rub the ointment
 - b. rub *in* the ointment

(Taniwaki and Tono 2009: 318–319)

Taniwaki and Tono add that the phenomenon by which a new direct object is introduced to the phrasal verb also applies to phrasal verbs in post-DO order (e.g., *wash the dirt out*). In this regard, they draw a parallel with the resultative constructions in (16).

- (16) a. She sang the baby to sleep. (*sing the baby)
 - b. They laughed the actor off the stage. (*laugh the actor)
 - c. They shouted themselves hoarse. (*shout themselves)

(Taniwaki and Tono 2009: 319)

Thus, the particle as well as the resultative phrase has the ability to contribute a new direct object that was not associated with the independent verb to the complex predicate. Taniwaki and Tono conclude that in this way, particles serve a similar role to V2 in Japanese V-V compounds.

Kageyama (1999) also draws a comparison between V-V compounds and English phrasal verbs and includes the resultative construction in his comparison. He analyzes the set of phrasal verbs and resultatives that correspond to the four major categories of meaning between V1 and V2.

(17) a. Means

- i. He cut the tree down.
 kiri-taosu "cut_{V1}-topple_{V2}"
- ii. She pushed the window open.oshi-akeru "pushy1-openy2"

b. Cause

She cried her eyes out.

me o naki $_{V1}$ *-harasu* $_{V2}$

eye ACC cry-cause.to.swell

"weep one's eyes out"

c. Manner

He stormed into the house.

*donari*_{V1}-*komu*_{V2} "yell-go.into"

d. Complement (aspectual meaning)

The sky cleared up.

*hare*_{V1}-*wataru*_{V2} "clear.up-cross.over"

(adapted from Kageyama 1999: 197)

Kageyama points out that the items corresponding to means and cause compounds are traditionally classified as resultatives. A resultative phrase (RP) is defined by Levin (1993) as "an XP which describes the state achieved by the referent of the noun phrase it is predicated of as a result of the action performed by the verb" (101). However, by this definition, a phrase that describes a position—rather than a state—of the referent of the noun phrase does not qualify as "resultative." Broccias (2007) argues that by Levin's definition, (18) is not a resultative construction because the resultative phrase *out of the room* describes a position, not a state. In fact, there is disagreement among researchers over how to analyze sentences like (18). Broccias takes a resultative phrase to mean one referring either to states or positions, "provided that they can be linked causally to the event designated by the verb" (104). Here we see a striking similarity between the resultative construction of (18) and the phrasal verb of (19), which is also sometimes analyzed as a "reduced prepositional phrase" (see Chapter 2).

(19) John tossed the cat out (of the house) before going to bed.

(Lindner 1983: 2)

By taking phrasal verbs and resultatives together and comparing them with Japanese V-V compounds, Kageyama concludes that those cases in which the particle or adjective directly follows the verb most closely resemble V-V compounds in both form and meaning. Following Bolinger (1971: 82), Kageyama argues that in post-verb position, the particle or adjective is more tightly knit semantically to the verb, resulting in a slight difference in meaning compared to its post-DO counterpart.

(20) a. He knocked out his opponent. (knock out = defeat)b. He knocked his opponent out. (out = unconscious)

(Kageyama 1999: 198)

(21) a. He pushed open the door and went in.b. He pushed the door open and went in.

(Bolinger 1971: 83)

Bolinger (1971) states that in (21a), where the particle directly follows the verb, there is a sense that the action of pushing the door open and the action of entering the room happen in swift succession. In (21b), the interpretation is that the door was pushed open, and after waiting a moment, the subject entered the room. That is, when the adjective *open* stands separate from the verb, the open state of the door functions as an independent stage in the chain of events being portrayed. Kageyama equates *push open* in (21a) with the Japanese V-V compound *oshi-akeru*, in which the action expressed by V1 (*osu* "push") and the action expressed by V2 (*akeru* "open") are seamlessly integrated into a single complex event.

Taniwaki and Tono (2009) and Kageyama (1999) both explore the similarities between phrasal verbs (and resultative constructions) and Japanese V-V compounds with regard to their syntactic and semantic characteristics. These two studies together with Talmy's typology of event integration provide a preliminary foundation upon which this dissertation's contrastive analysis is built. Working off the parallels bridging phrasal verbs and V-V compounds in general, the next section aims to establish a correspondence between two items in particular that are representative of either construction: the English particle *out* and the Japanese verbs *deru/dasu*.

4.4 Comparing Basic Sense

Polysemy refers to the linguistic phenomenon by which a single phonetic form is used to encode a range of distinct but related meanings, or senses. Polysemy has been largely ignored in semantic research stemming from more traditional approaches, which viewed the lexicon as a repository for anything that did not follow from more general syntactic principles. In this view, the lexicon functions as a list of exceptions, or arbitrary deviations from the regularity and productivity governing syntactic operations. Researchers working within a cognitive linguistics framework have adopted a rather different perspective regarding the mental lexicon and polysemy, however, and this has led to a number of significant findings. In what follows, I describe some of the key features of the cognitive linguistics approach and explain how they are applied to the objects of this study's analysis—English *out* and Japanese *deru/dasu*.

4.4.1 Image Schemas

Lakoff (1987), Johnson (1987), Langacker (1987), and others pioneered the idea that conceptual categories are embodied, meaning that they arise from our unique human interaction with the environment. "Experientialism," as this approach to the study of semantics later became known, argues that an undercurrent of dynamic, gestalt-like organizing precepts, or image schemas, is pervasive throughout language. Image schemas generalize upon our diverse sensory-motor experience, creating a conceptual network of imagistic domains (e.g., containers, paths, links, forces, balance). Partnered with the powerful tool of conceptual metaphor, the structure of well-trodden, imagistic domains encountered repeatedly in our day-to-day experience can be mapped onto non-imagistic domains and used to reason about abstract concepts.

Image schemata exist at a level of generality and abstraction that allows them to serve repeatedly as identifying patterns in an indefinitely large number of experiences, perceptions, and image formations for objects or events that are similarly structured in relevant ways. Their most important feature is that they have a few basic elements or components that are related by definite structures, and yet they have a certain flexibility. As a result of this simple structure, they are a chief means for achieving order in our experience so that we can comprehend and reason about it. (Johnson 1987: 28)

Johnson refers to the "few basic elements" of image schemas and the "definite structures" by which they are related. These constitute the two essential halves of any image schema equation: *parts* and *relations*. Various researchers employ slightly different terminology and systems of classification to analyze and describe the structure of image schemas, but their analyses are coherent with respect to the fundamental nature ascribed to these two components. As Lindner (1983) points out, "relations do not exist independently of objects" (59).

70

The "objects" or parts of an image schema's structure are based on the notion of figure-ground organization. The terms "figure" and "ground" originate in Gestalt psychology, where they are used to distinguish the focus of (visual) perception, the figure, from the background, the ground. A classic example of figure-ground orientation at work is illustrated by psychologist Edgar Rubin's "vase," shown in Figure 4.1. Depending on whether the viewer construes the white portion as the figure and dark portion as the ground or vice-versa, he or she will perceive either a chalice-like vase or two faces looking at one another.

Figure 4.1. Rubin vase



The perceptual act of distinguishing figure from ground when presented with a two- or three-dimensional image such as that in Figure 4.1 is analogous to the process of spatial structuring by which an objective spatial scene is rendered fit for expression via the grammatical structures available in a language. Talmy (2000) refers to the "primary" and "secondary" objects that figure in the linguistic schematization of spatial relations. The primary and secondary reference objects are artifacts of the imposition of language's spatial system on an objective scene. It is the primary object that receives special focus and whose spatial disposition is calculated relative to a secondary (and sometimes tertiary) object. Here, spatial disposition can refer to the primary object's position or path, depending on whether it is stationary or moving, and its orientation in either state.

The perceptual phenomenon of figure-ground organization is reflected in the relation between "trajector" and "landmark," two concepts central to the framework

of cognitive grammar. Langacker (1987) uses "trajector" to refer to the "figure within a relational profile" (217)—that is, an entity that is given privileged focus within a relational predication. The landmark may be any secondary, salient entity within a predicate's relational profile with reference to which the trajector's orientation or location is calculated.

As their name implies, image schemas are schematic; they incorporate only certain relevant aspects of a complex scene and disregard others. These relevant features are abstracted and assembled into a rough "mold" specifying only the most common characteristics shared among a series of specific instances. As long as a particular spatial scene includes (at least some of) the relevant features of an image schema, the scene in question may be judged to fit the mold well enough to qualify as a specific instance. Moreover, image schemas may undergo image schema transformations, whereby one image schema is mapped onto another (Clausner and Croft 1999: 23), producing new assemblages of structural components that sanction novel uses of linguistic items.

4.4.2 The Container Schema

The container schema is one of the most frequently recurring and thus wellinstantiated image schemas. This may be due in part to the fact that our bodies themselves functions as containers; one of our most vital functions, respiration, is a continuous cycle of taking air *in* and breathing it *out*. Lakoff (1987, 1989) identifies the three structural elements essential to the container schema as interior, boundary, and exterior. In addition to its structural components, the container schema abides by a basic internal logic:

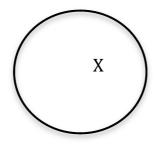
1. Everything is located either inside or outside the container (P or not P).

2. If container A is located in container B and X is located in container A, then X is located in container B.

The basic logic outlined in 1 and 2 above is said to follow from the container schema's configuration as a gestalt (i.e., its non-compositionality) that is inherently meaningful to people based on their lived bodily experience. In other words, although we may describe the structure and basic logic of the container schema using meaning postulates that rely, for example, on the concept of an inclusive set, it is not these postulates and their interpretation that endow image schemas with meaning; "rather, meaning postulates themselves only make sense given schemas that are inherently meaningful because they structure our direct experience" (Lakoff 1987: 273).

The meanings of the English prepositions *in* and *out* are understood within the matrix of the container schema. That is, our constant physical encounters with containers such as rooms and bodies generate a relatively small number of image schemas that are embodied as the conceptual structure of containment, as depicted in Figure 4.2.

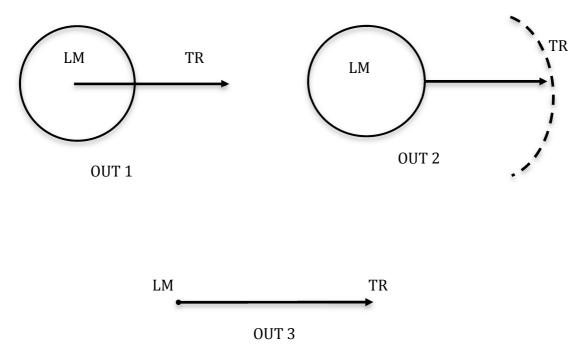
Figure 4.2. Containment schema



(Johnson 1987: 23)

Lindner (1983) utilizes the notion of containment in her description and analysis of the polysemous network of *out* participating in English verb-particle constructions. In Lindner's analysis, senses of *out* are clustered around three main subschemas, which she terms OUT 1, OUT 2, and OUT 3.





(Johnson 1987: 32)

It was mentioned previously that image schemas may undergo transformations. For example, OUT 2 is the result of an image schema transformation or "transformational link" tethering it to the core schema of *out*, from which the basic sense of *out* is derived. Image schema transformations are mental operations applied to image schemas, analogous to physical operations applied to objects in space. The term "transformational link" is associated with Lakoff's (1987) detailed description of the polysemous network of English *over* (based on Brugman's (1988) analysis), in which he identifies three types of links—instance links, similarity links, and transformational links—by which the multiple senses attributed to *over* are related.

This approach in which the central schema generates multiple, fully-specified schemas is termed the "full specification interpretation." Conversely, the "minimal specification interpretation" views the central schema as adequately representative of the meaning of a lexical item in all of its senses. For example, in the minimal specification interpretation, characteristics attributed to *over* in Lakoff's account such as "non-contact between figure and ground" and "extended landmark" that generate

separately linked image schemas are instead thought to be contributed by other overt elements in the sentence, e.g., the object and verb. As Lakoff points out, there is no empirical difference between the minimal specification interpretation and the full specification interpretation. Both views, though, recognize the fact that English prepositions like *over* and *out* can be used to encode a wide variety of non-spatial meanings. Furthermore, this potential arises from the application of construal operations like profiling and metaphor, as well as image schema transformations to the particular spatial configuration a lexical item is used to encode in its basic sense.

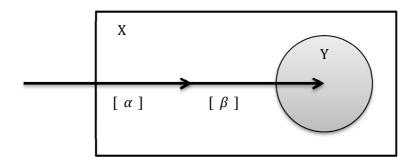
4.4.3 Image Schematic Analyses of Japanese Verbs

In this section, I argue that—like English *out*—the basic sense of Japanese *deru/dasu* is also based on the container schema. In doing so, I aim to establish a fundamental correspondence between *out* and *deru/dasu* in their basic, spatial sense. Furthermore, by having designated *out* and *deru/dasu* as representative components of the phrasal verb and V-V compound constructions, respectively (which this chapter has argued are viable targets for a contrastive analysis), the remainder of this dissertation seeks to investigate to what extent the polysemous networks of *out* and *deru/dasu* overlap and diverge.

There is little research to date in Japanese that utilizes the notion of image schema to analyze the polysemous networks of Japanese verbs. And, as such, there are even fewer studies using image schemas to represent the semantic structure of V2s in V-V compounds. I will briefly introduce one such study that focuses on the V2 *komu*, "go into," before moving on to an image schematic analysis of the simplex verb *deru*.

Matsuda (2004) conducts a thorough investigation into the semantic nature of *komu* "go into" as the second component in V-V compounds. Her study is framed within the context of Japanese language education and language acquisition by non-native speakers. She proposes a core schema for V2 *komu* that includes multiple structural elements, illustrating how *komu* in V-V compounds is used to express "stay fixed in place" in addition to "go/put [smthg] inside."





(Matsuda 2004: 75)

In Figure 4.4, X and Y represent two domains into which a trajector moves along the paths represented by α and β : the α path leads into domain X, and the β path leads into domain Y. Domain Y does not exist as physically independent from domain X; instead, it represents a space from which extraction becomes difficult once entered.

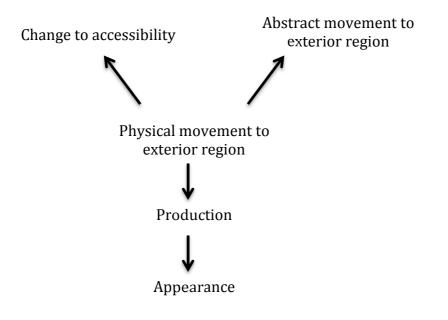
The two paths represented by α and β are intended to capture the different senses *komu* is capable of encoding, from "go/put [smthg] inside" (α path; as in *tobikomu* "jump in") to "stay fixed in place" (β path; as in *nemuri-komu* "sleep deeply"). In this way, the core schema in Figure 4.4 is designed to represent the most fundamental semantic components shared by a wide range of instances, both typical and atypical, and functions as an abstract organizing precept underlying and motivating their use.

Matsuda's main goal is to create a tool for learners that will facilitate the internalization of image schematic structures that sanction the use of *komu* as V2. In her view, acquiring the cognitive basis for word usage is the most important aspect in the process of lexical acquisition (Matsuda 2004: 148). It is hoped that an image schematic analysis of *komu*'s polysemous network will provide learners with a means to accelerate the process of building the conceptual structure necessary to effectively use and understand Japanese V-V compounds, which are essential to fluent and expressive Japanese speech.

4.4.3.1 Deru/Dasu Based on the Container Schema

Hiratsuka and Imai (2000) define the basic sense of the simplex Japanese verb *deru* as "movement to an external region in physical space," adding that *deru* is in fact used to encode a wide range of spatial scenes. Working within the framework of cognitive grammar, they posit a central schema from which *deru*'s multiple related senses derive and postulate various sub-schemas that result in the polysemous network shown in Figure 4.5.

Figure 4.5. Polysemous network of *deru*



(Hiratsuka and Imai 2000: 21)

The basic sense of *deru* or "movement to an external region in physical space" is exemplified by (22).

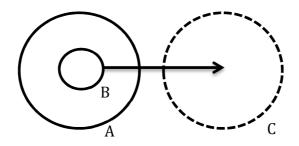
(22) a. *Tarō ga heya kara (niwa ni) deta*.
Taro NOM room from (garden to) go.out-PAST
"Taro went out of the room (into the garden)."

b. *Kuruma ga shako kara (dōro ni) deta.*car NOM garage from (street to) go.out-PAST
"The car went out from the garage (into the street)."

(Hiratsuka and Imai 2001: 1)

Figure 4.6 represents the core schema from which *deru*'s basic sense derives.

Figure 4.6. Deru core schema



(Hiratsuka and Imai 2000: 2)

In Figure 4.6, A represents a bounded region in which the trajector, B, is initially located, thereby functioning as an origin or source. *Deru* encodes the movement of B from inside to outside the bounded region of A. As a result of moving outside the bounded region of A, B becomes located within the bounded region of C, which functions as the end point or goal. The dotted line of C represents the optional encoding of the end point with the dative marker *ni* or *e*. Alternatively, the end point can remain implicit, as in (23).

(23) Tarō ga heya o deta.
Taro NOM room ACC go.out-PAST
"Taro left the room."

If we compare the core schema of *deru* in Figure 4.6 to the core schema posited by Lindner for OUT 1 in Figure 4.3, we find that they are strikingly similar. Both are clearly based on the notion of containment, whereby an object (the trajector) that is located within the boundary of a container (the landmark) comes to be located outside the boundary of the container.³ The characterization of *deru*'s core schema as a simplex verb may be extended to *deru/dasu* when functioning as V2 in a lexical compound verb. Himeno (1999) states that *deru* functioning as V2 retains to a large degree the core sense expressing "movement from within another object or boundary of space to outside." Additionally, *deru* as V2 may express "appearance on the surface" (Himeno 1999: 84). *Dasu* as V2 typically expresses "movement to an outside region, region in front, or surface," although it is also capable of expressing "manifestation," "creation (of an artifact)," and "discovery." In an overwhelming majority of cases, V2 *dasu* and V2 *deru* are interchangeable (Himeno 1999: 89-90). On these grounds, we may establish a preliminary semantic correspondence between *deru/dasu* as V2 in V-V compounds and *out* in phrasal verbs.

4.5 Conclusion

This chapter served to establish a basis for the contrastive analysis that will be the focus of this dissertation. First, Section 4.2 introduced Talmy's typology of event integration, which provides a framework within which English phrasal verbs and Japanese V-V compounds may be compared based on their ability to simultaneously encode the three semantic elements of motion, manner, and path. One possibility in an S-framed language like English is for path to be encoded by the particle of a phrasal verb, while manner and motion are conflated in the verb itself. As a V-framed language, Japanese tends to conflate path with motion inside the verb. A path verb can then be combined with a manner verb in a V-V compound, where V1 expresses manner and V2 expresses path. The number of studies explicitly comparing these two constructions—English phrasal verbs and Japanese V-V compounds—is limited. Section 4.3 provided an overview of two studies (Taniwaki and Tono (2009) and Kageyama (1999)) that investigate the similarities between phrasal verbs and Japanese V-V compounds with regard to parallel semantic and syntactic characteristics, such as the ability to introduce a new direct object. Building off the analogy comparing phrasal verbs and V-V compounds in general, Section 4.4 refined the focus to two items in particular: the English particle *out* and the Japanese verb *deru/dasu*. By appealing to the notion of image schemas, which are thought to underlie the use of lexical items to encode particular spatial configurations, it was argued that both *out* and *deru/dasu* share the basic spatial sense of "removal from a bounded region in space" that is based on the container schema. Establishing a fundamental correspondence between *out* and *deru/dasu* in their basic spatial sense prepares us for an extensive investigation into the respective patterns of semantic extension that will be pursued in the following chapters.

Notes to Chapter 4

¹ Talmy cautions that there are restrictions on the kind of complex events that may be integrated and conceptualized as a macro-event. Furthermore, "languages differ as to the maximum amount of conceptual content of a particular kind and organization that can be packaged colloquially within a single clause and hence readily experienced as a single macro-event" (2000: 217).

² Among lexical V-V compounds, pair compounds are those in which either verb expresses a similar or analogous action. For example, *tae-shinobu*, "endure," comprises two verbs: V1 *taeru* ("bear") and V2 *shinobu* ("hide, endure"). Because English phrasal verbs consist of a verb and a particle, which each belong to different word classes, they are not capable of expressing two analogous actions. Therefore, pair compounds are omitted from the comparison in Table 4.1.

³ It should be noted that as a particle, *out* profiles a complex atemporal relation and therefore does not encode motion per se. When combined with a verb, however, as in a phrasal verb, *out* profiles a trajector's change in location or state as a result of the action denoted by the verb.

Chapter 5 Analysis

5.1 Introduction

Based on the evidence presented in Chapter 4, it was argued that Japanese V-V compounds may be used to effectively convey the meaning of English phrasal verbs, and due to the regular occurrence of both constructions in the spoken and written speech of either language, it was hypothesized that English phrasal verbs are translated as Japanese V-V compounds in a significant number of cases. In order to test this hypothesis, a large number of examples were collected and analyzed. The purpose of this chapter is to present the findings from that analysis and propose several explanations for the observed distribution of correspondence pairs into several predicate types. Section 5.2 introduces the data source and method of collection. Section 5.3 presents the findings of the analysis. The first half of Section 5.3 discusses the distribution of correspondence pairs by predicate type, while the second half focuses on Japanese simplex verbs, which represent the largest predicate type category. The final part of Section 5.3 compares a list of the most frequently occurring simplex verbs with a list of the most frequently occurring V2s in V-V compounds and points out several overarching trends in the types of meaning expressed by simplex verbs and V2s other than *deru/dasu* that are used to encode the meaning of phrasal verbs with out. Section 5.4 concludes the chapter.

5.2 Data

The data used in this study were collected from *Sanseido Comprehensive Dictionary of English Idioms and Phrasal Verbs*, henceforth abbreviated as *Sanseido*. 374 entries consisting of a verb in construction with *out* or *out of* were identified. Some entries consist of a verb-plus-particle along with an alternative particle listed in brackets. When *out* was listed as either the primary particle or as the alternative in brackets and the verb in construction with *out* appeared in at least one of the example sentences, the entry was recorded. Below is an example of an entry where two particle alternatives—*off* and *out*—are listed, with *out* in brackets.

(1)

horn off [out] PhV 他 (米 口) …を 撃退 する;を 追い出す ta[dōshi] bei kō o gekitai suru o oi-dasu trans. [verb] SA COLL ACC repel do ACC chase-put.out "repel, repulse; chase out"

In (1), the Japanese verbs *gekitai suru* "repel, repulse" and *oi-dasu* "chase out" are used to define both *horn off* and *horn out*. Based on these criteria alone, the entry *horn off* [*out*] would not be designated for inclusion in the data set. However, because *horn out* appears in one of the example sentences that follow the definition portion of the entry, the phrasal verb *horn out* was recorded along with the individual Japanese predicates in (1) used to define the various senses of *horn out*, as well as the example sentence in (2) featuring *horn out* along with its Japanese translation.

(2) He tried to horn Ben out of the Cabinet herd. *Kare wa Ben o kakuryō no naka kara oi-das-ō to shita*He TOP Ben ACC cabinet GEN middle from chase-put.out-VOL QUOT do-past

For each entry designated for inclusion in the data set, other types of specific information were also recorded. The categories of specific information—or fields—were designed to extract a range of features pertaining to each item, some of which are used in the present study's analysis and some of which it is hoped will prove useful in future analyses. Information deemed superfluous, such as pronunciation guides and labels marking the item as slang, jocular, old-fashioned, or figurative speech, etc., were omitted.

First, each phrasal verb with *out* was labeled as encoding one or more distinct senses. Items were analyzed in accordance with the word sense disambiguation

protocol employed by the source text. That is, in order to disambiguate the multiple independent but related meanings of each item, this study deferred to the discretion of *Sanseido*'s editors, recording each distinct Japanese predicate that appeared in either the definition portion of the entry or an attendant example sentence along with a number indicating which sense of the phrasal verb in question it corresponds to. Thus, when multiple Japanese predicates corresponded to a single sense of a phrasal verb, each of the Japanese predicates was treated in a separate line, or record, of the data spreadsheet. Subsequently, information about each record was compiled with respect to several different fields, some of which are represented in Table 5.1. Note that Table 5.1 has been transposed so that the column or field headings appear as rows running left to right. The single record featured in Table 5.1 is the Japanese predicate *soto* [*shōmen*] *o muku* "face out [front]," which corresponds to sense 1 of the phrasal verb *face out*.

Field	Field heading	Value			
1	sense	1			
2	entry	face out			
3	Japanese predicate	外 [正面] を 向く soto [shōmen] o muku outside [front] ACC face "face out [front]"			
4	definition, ex	definition/example			
5	preceding elements				
6	predicate type	Japanese simplex verb (other)			
7	out+of				
8	example sentence 1 (English)	The huge gate faced out to sea.			
9	example sentence 1 (Japanese translation)	その 大門 は海 を 向いていた。 Sono daimon wa umi o muite-ita. that large.gate TOP sea ACC face-be-PAST "The huge gate faced out to sea."			

Table 5.1. Japanese predicate corresponding to *face out* (sense 1)

The first field, row 1 of Table 5.1 (labeled "sense"), indicates the particular sense of the phrasal verb with which we are concerned. Therefore, in Field 1 of Table

5.1, the value "1" indicates that we are dealing with sense 1 of *face out*, or what has been designated the primary sense by *Sanseido*. In the second field, the English phrasal verb is listed. The third field specifies the Japanese predicate corresponding to the particular sense of the phrasal verb in question. In the actual data, there are three distinct Japanese predicates used to define sense 1 of *face out*, but in this example, only one of these Japanese predicates, *soto* [*shōmen*] *o muku* "face out [front]," is shown. Records that are identical in all other fields must at least differ in Field 3, "Japanese predicate."

Field 4, labeled "definition/ex," indicates where in the entry the Japanese predicate appears. If the Japanese predicate listed in Field 3 appears only in the definition portion of the dictionary entry, the value "definition" was entered in Field 4. If the Japanese predicate appears in an example sentence but not in the definition portion of the entry, the value "example" was entered. If the Japanese predicate appears in the definition of an entry *and* in the Japanese translation of one of the example sentences, then the value "definition/example" was entered.

Field 5 lists any preceding elements, such as adverbial phrases, auxiliary verbs (e.g., those expressed prior to the main verb via TE-linkage), etc., that appear in construction with the Japanese predicate. Only those elements that appear in coordination with the Japanese predicate as an additional means to convey the full meaning of the phrasal verb are considered to be preceding elements. Here, when the record involved a Japanese predicate that appears only in the definition portion of the entry, there was no reliable way to determine which elements other than the main verb are used to convey the full meaning of the phrasal verb at a determine which elements other than the main verb are used to convey the full meaning of the phrasal verb in translation. Therefore, no preceding elements were recorded. Table 5.2 depicts a data entry for the definition in (3) provided for *bleep out*.

(3) bleep out

(放送 で 不適当な 言葉) を ピーと いう 信号音 で 消す (*hōsō de futekitō-na kotoba*) o pī to iu shingōon de kesu broadcast in inappropriate word ACC pī QUOT say sound.signal with delete "delete with a 'pī' sound (words inappropriate to broadcast)"

Field	Field heading	Value
1	sense	1
2	entry	bleep out
3	Japanese predicate	(放送 で 不適当な 言葉)を ピー (<i>hōsō de futekitō-na kotoba</i>) o <i>pī</i> broadcast in inappropriate word ACC pī と いう 信号音 で 消す <i>to iu shingōon de kesu</i> QUOT say signal.sound with delete "delete with a 'pī' sound (words inappropriate to broadcast)"
5	definition, ex	definition
6	preceding elements	
7	predicate type	Japanese simplex verb (other)
12	out+of	
15	example sentence 1 (English)	
16	example sentence 1 (Japanese translation)	

Table 5.2. Japanese predicate corresponding to *bleep out* (sense 1)

The entire content of (3) was recorded in Field 3 "Japanese predicate." Because there was no accompanying example sentence, it was not possible to determine which linguistic items in the definition function as necessary preceding elements. When an entry featured a Japanese predicate that appeared in both the definition portion of the entry and the Japanese translation of an example sentence, the process of determining which elements qualify as preceding elements relied on comparing the string of linguistic items in the example sentence with its translation in Japanese. In this case, preceding elements were identified as those linguistic items other than the main verb that did not correspond to any element in the English original and were deemed to supplement the meaning of the Japanese verb to encode the full meaning of the English phrasal verb. Those Japanese predicates that appeared solely in the Japanese definition portion of the entry and in no Japanese translations of the accompanying example sentences accounted for 745 of the 1,957 total records.

Finally, I will mention that there are inherent limitations in the data source. The very nature and purpose of a dictionary is to provide an all-inclusive catalogue of entries relative to the target class of lexical items. Thus, a dictionary must be indiscriminate in its inclusion of all lexical items that fall within the target class, regardless of their frequency. Furthermore, the entries in *Sanseido* are organized alphabetically, and although some entries may be supplemented with additional information that indirectly index the likelihood they appear in certain discourse genres, such as the label "Colloquial American [English]," there is no internal hierarchy or labeling¹ that provides precise information on frequency. Therefore, the 374 individual phrasal verbs chosen for this study are given equal status, though in reality some are much less likely than others to be used with regular frequency. Ideally, the data would include only those phrasal verbs that occur with measurable frequency; this may well be achievable by utilizing a parallel corpus of English and Japanese in the future.

5.3 Findings

This section presents the findings from the data analysis. The initial objective of the analysis is to determine what percent of the total correspondence pairs feature an English phrasal verb of the form [verb + out] and a Japanese V-V compound, and furthermore, what portion of those involves specifically a Japanese V-V compound with *deru/dasu* as V2. Based on the criteria examined in Chapter 4, it was hypothesized that Japanese V-V compounds could be used to effectively convey the multiple semantic components encoded by English phrasal verbs. In order to test this hypothesis, the analysis focused on phrasal verbs involving one path particle in

particular (*out*) and the Japanese predicates used to define and translate their meaning. Taking into account the fact that *deru/dasu* encodes a similar path to *out*, or "removal from a bounded region in space," it was predicted that, in more specific terms, Japanese V-V compounds with *deru/dasu* as V2 could be used in a regular way to encode the meaning of phrasal verbs with *out*. Section 4.4 of Chapter 4 offered evidence of a correspondence between *out* and *deru/dasu* regarding their basic senses, but it remains to be seen how this correspondence plays out when more abstract senses are considered.

In fact, *deru/dasu* participates in a variety of grammatical constructions used to translate phrasal verbs with *out* not limited to the V-V compounds. In addition to functioning as V2 of a V-V compound, *deru/dasu* may function as a simplex verb, often accompanied by one or more preceding elements, or as an element in a Sino-Japanese compound. The second objective of the analysis is to establish what percentage of the total these three types of "positive" correspondence pairs account for. As we will see, however, the remaining "negative" correspondence pairs still represent a significant portion of the total. The third task of the analysis focuses on the negative correspondence pairs—that is, those that did not include *deru/dasu* as either V2 of a V-V compound, a simplex verb, or an element in a Sino-Japanese compound. In Chapter 6, it is argued that many of the negative correspondence pairs can be organized around semantic domains to which *out*'s meaning has been extended but *deru/dasu*'s has not, thus requiring an alternate verb.

Before moving on to these objectives, however, it will be necessary to properly characterize Sino-Japanese compounds within the Japanese language and in contrast to native Japanese compounds. Therefore, before presenting the results of the analysis, the following provides a brief explanation of how *deru/dasu* manifests as the character \boxplus *shutsu* in a Sino-Japanese compound.

5.3.1 Sino-Japanese Compounds with 出 shutsu

The Japanese writing system features three separate orthographies: two syllabic and one logographic. The two syllabaries, or phonetic alphabets, are *hiragana* and *katakana*. Generally speaking, hiragana is used to transcribe native Japanese words, and katakana is used to transcribe loan words of non-Chinese origin. The third orthography consists of Chinese characters or *kanji* and is used to write words of Chinese origin as well as some words synthesized in Japan during the Meiji period.

	BLOCK 1			BLOCK 2			BLOCK 3			
Symbol	ひ	S	が	な	力	タ	力	ナ	漢	字
Romanized pronunciation	hi	ra	ga	na	ka	ta	ka	na	kan	ji

TC 1 1		TT	1 . 1		1
Tabla	5 2	Hiragana,	Izotolzo	no ond	1701011
Lane	רו	ппауапа	катака	на анс	канн

Table 5.3 compares the three orthographies used in Japanese writing: hiragana, katakana, and kanji. The first row contains the symbols used in each of these orthographies. Underneath, in row 2, are Roman alphabet characters representing the pronunciation of each Japanese character. BLOCK 1 contains the symbols used to write the word *hiragana*. BLOCK 2 contains the symbols used to write the word *katakana*. BLOCK 3 contains the two kanji characters used to write the word *kanji*.

Nearly all kanji used in the Japanese writing system have at least two possible readings: an *onyomi*, or "sound reading" reflecting how the character is pronounced when it appears in a word of Chinese origin, and a *kunyomi* reflecting how the character is pronounced when it is assigned to a native Japanese word.

The character \boxplus means something roughly equivalent to "exit" and is used to transcribe words of both Chinese and native Japanese origin. As mentioned above, the character \boxplus has two different readings and is pronounced differently depending on the origin of the word. In Sino-Japanese compounds (compounds of Chinese origin), the character \boxplus is pronounced [fut^sul] (henceforth Romanized as *shutsu*). In words of native Japanese origin, \boxplus is usually pronounced [de].

(4) a. 產 出
 san shutsu
 delivery go.out
 "yield, produce"

b. 申し 出 *mōshi de* say (HUM) exit "offer, proposal"

In (4a), \boxplus *shutsu* functions as the second element of the Sino-Japanese compound *sanshutsu* "yield, produce." In (4b), the character \boxplus appears in a compound with the native Japanese *mōshi* "say (humble)," and therefore it is ascribed the kunyomi [de], resulting in the compound *mōshide* "offer, proposal."

One feature of the Japanese writing system is that a Chinese kanji character may optionally replace one or more hiragana symbol used to transcribe a word with similar meaning. When written in hiragana, *deru* and *dasu* both appear as a string of two characters, where each character corresponds to one Japanese mora. Roughly speaking, a Japanese mora functions like an English syllable, and the concept of mora figures in analyses of various phonological phenomena. The character \boxplus , with a similar meaning to that of Japanese *deru* "go out" and *dasu* "put out," is the character used to transcribe these native Japanese verbs when they are written in kanji.

Kanji	出る	出す
Hiragana	でる	だす
Pronunciation (kunyomi)	de ru	da su
Translation	"go out"	"put out"

Table 5.4. Orthographic representation of *deru/dasu*

The advantage to assigning Chinese kanji to native Japanese words may not be as readily apparent in the case of *deru/dasu*, where one symbol, a hiragana character, is simply replaced by another, a kanji character. There are many instances, however, in which the number of hiragana symbols replaced by a single Chinese kanji character exceeds two or three.

Because *deru* and *dasu* are both native Japanese words, when the kanji \boxplus is assigned to them, it is pronounced according to its kunyomi, which surfaces as [de] in the case of *deru* "go out" and [da] in the case of *dasu* "put out." It is unclear, however, whether and to what extent the meaning of *deru/dasu* is present in Sino-Japanese compounds featuring the element \boxplus *shutsu*. The question of to what degree Japanese native speakers are aware of the independent meaning of individual kanji characters in Sino-Japanese compounds is a complex one that lies outside the purview of this study. However, the fact that \boxplus is assigned to the native Japanese verbs *deru* and *dasu* and that these verbs occur frequently in both written and spoken Japanese suggests that, at some level, there is a cognitive association between the meaning of *deru/dasu* and \boxplus when it appears in a Sino-Japanese compound such as *sanshutsu* in (4a).

The following section looks in detail at the type and frequency of Japanese predicates used to define and translate English phrasal verbs with *out*. Among these various types of predicates are Sino-Japanese compounds—both those that contain the character \boxplus *shutsu* and those that do not. When the scope of positive correspondence pairs is expanded to include Sino-Japanese compounds with \boxplus *shutsu*, the motivation for this decision is precisely due to the assumed cognitive association between the character when it is used to transcribe *deru/dasu* and when it is used in a Sino-Japanese compound to convey roughly the meaning "exit."

5.3.2 Distribution of Correspondence Pairs

Correspondence pairs are analyzed into one of several categories based on the type of Japanese predicate used to define or translate the English phrasal verb with *out*. These categories reflect not only structural differences—i.e., whether the predicate is a simplex verb or a compound verb consisting of multiple elements—but also whether or not *deru/dasu* is present as either an independent verb or an element in a compound.

I. Loanword

chill out→rirakkusu suru, blow out→taiya ga panku suru

II. *Deru/dasu* simplex verb²

bud out \rightarrow ha ga deru, float out \rightarrow uite deru

- III. Simplex verb (other)³ flatten out \rightarrow nobasu, give out \rightarrow kubaru
- IV.Sino-Japanese compound with \boxplus shutsuhammer out \rightarrow kushin shite anshutsu suru, head out \rightarrow shuppatsu suru
- V. Sino-Japanese compound (other)

eat out→gaishoku suru, die out→zetsumetsu suru

VI. V-V compound with $deru/dasu^4$

bang out→*tataki-dasu*, comb out→*erabi-dasu*

VII. V-V compound (other)

fish out→*hiki-ageru*, hollow out→*kuri-nuku*

As described in Section 5.2, most of the phrasal verbs with *out* are attributed more than one sense. For each sense, a definition is provided in Japanese, which may consist of one or more distinct Japanese predicates. These sense definitions may also be accompanied by an example sentence in English along with its Japanese translation. When the translation of an example sentence featured a different Japanese predicate than what was used in the definition portion of the entry, two correspondence pairs were recorded, one associating the particular sense of the English phrasal verb in question with the Japanese predicate appearing in the definition portion of the entry, and one associating that same sense of the phrasal verb with the predicate that appears in the Japanese translation of the example sentence. In total, 1,957 correspondence pairs were recorded, which derive from 374 individual phrasal verbs. Figure 5.1 shows the distribution by predicate type for the total number of correspondence pairs.

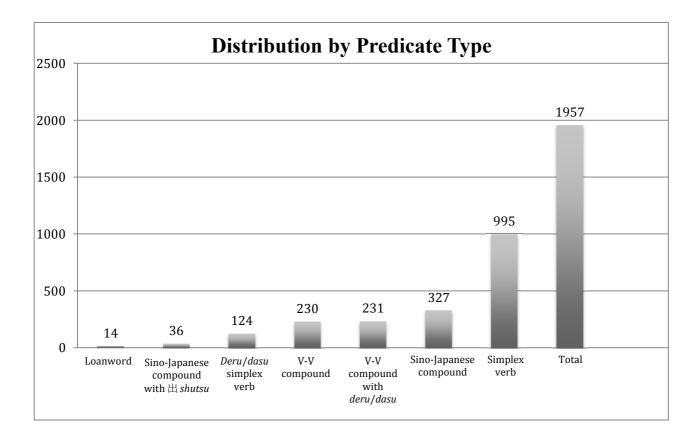


Figure 5.1. Japanese predicates used to translate English phrasal verbs with out

Table 5.5. Predicate types involving *deru/dasu* as percentages of total

Predicate type	Percent
Simplex verb (other)	50.8
Sino-Japanese compound (other)	16.7
V-V compound (other)	11.8
V-V compound with <i>deru/dasu</i>	11.8
Deru/dasu simplex verb	6.3
Sino-Japanese compound with 出 <i>shutsu</i>	1.8
Loanword	0.7
Positive correspondence total	19.9
Negative correspondence total	80.0
Grand total	100

Based on the evidence presented in Chapter 4, it was hypothesized that a significant number of English phrasal verbs with *out* correspond to a Japanese V-V compound, and in particular, a compound with *deru/dasu* as V2. As shown in Table

5.5, correspondences between a phrasal verb with *out* and a V-V compound with *deru/dasu* as V2 account for approximately 12% of the total. The percent of correspondence pairs featuring a V-V compound with some other V2 (not *deru/dasu*) also account for approximately 12%. Although correspondence pairs in the category "V-V compound (other)" do not count as positive correspondence pairs because they do not involve *deru/dasu*, the fact that they consist of an English phrasal verb and a Japanese V-V compound corroborates, and in the very least does not detract from, the majority of the evidence presented in Chapter 4. When the two categories are combined, we find that nearly one quarter of the total correspondence pairs feature an English phrasal verb with *out* and a Japanese V-V compound, including those with *deru/dasu* as V2.

Table 5.6. Predicate types as percentages of total

Predicate type	Percent
Simplex verb	57.1%
V-V compound	23.6%
Sino-Japanese compound	18.5%
Loanword	0.7%
Total	100%

Table 5.6 shows the combined totals of the four main predicate types without distinguishing based on the inclusion of *deru/dasu*. The largest category, representing 57.1%, comprises Japanese simplex verbs other than *deru/dasu*. The second largest category is V-V compounds, representing 23.6%. As explained above, this is precisely the kind of correspondence pair that was predicted based on the criteria presented in Chapter 4 Sections 4.2 and 4.3, which offered evidence legitimizing the feasibility of a contrastive analysis of English phrasal verbs and Japanese V-V compounds. The third largest category at 18.5% is Sino-Japanese compounds. Finally, verbs incorporating non-Chinese loanwords account for 0.7%. The following section examines the two largest predicate types from Table 5.6—Japanese simplex verbs and V-V compounds—in greater detail.

5.3.2.1 Predicate Types: Simplex Verbs

Figure 5.1 and Table 5.5 show that Japanese simplex verbs were the most common predicate type featured among the total correspondence pairs. Based on the analysis of English phrasal verbs as encoding multiple semantic elements not capable of being conflated within a single Japanese verb, this is not the type of correspondence pair that was predicted would occur most frequently. However, upon closer inspection, we find that two factors in particular contribute to this outcome: first, the use of Japanese simplex verbs in specific collocations and idiomatic expressions, and second, the role of preceding elements.

5.3.2.1.1 Collocation and Idiomatic Expressions

Collocation refers to the likelihood of certain words to co-occur regularly within a language. In English, the collocation of *brush* and *teeth*, as in *brush* (*one's*) *teeth*, is typical. In Japanese *ha* "tooth/teeth" collocates with *migaku* "polish." In Spanish, *los dientes* "teeth" collocate with *lavarse* "wash (reflexive)" and so on. Collocations are often arbitrary and therefore unpredictable; that is, there is nothing about the propositional meaning of *brush* that would allow one to accurately predict its collocation with *teeth* over a different verb, such as *wash* or *polish*. Collocational patterning is also language-specific. Thus, when comparing two unrelated languages such as English and Japanese, there will inevitably be mismatches in the patterning of two dictionary equivalents or near equivalents such as *out* and *deru/dasu*.

(5) He copied out the letter.

Kare wa sono tegami no kopī o totta. he TOP that letter GEN copy ACC take-PAST Lit. "He took a copy of the letter."

In (5), *copy out* is translated as *kopī o toru*, literally "take [a] copy." In this case, the typical collocation in Japanese used to express the meaning of *copy out* involves the verb *toru* "take," and thus the correspondence pair is categorized as "Japanese simplex verb (other)." This is just one instance of how collocational patterning can

result in a greater diversity of Japanese verbs used to define and translate phrasal verbs with *out*.

In addition to the mismatches arising from language-specific collocational patterning, many of the Japanese expressions used to define and translate English phrasal verbs with *out* as well as the phrasal verbs themselves have non-compositional meanings. That is, the meaning of the expression as a whole does not derive from the integrated meaning of its individual parts. This meaning can be quite complex, and idiomatic expressions are notoriously difficult to translate. Often the result is an expression with a completely different propositional meaning than the source text original. Therefore, even though *out* and *deru/dasu* have nearly identical propositional or literal meanings, when either is used in an idiomatic expression, it is unlikely that the correspondence between *out* and *deru/dasu* will hold up in translation.

- (6) May had blown me out for a new boyfriend. *Mei wa boku o <u>sode-ni shite</u>, atarashii bōifurendo o eranda.*May TOP 1SG ACC sleeve do new boyfriend ACC choose-PAST
 Lit. "May made me into a sleeve and found a new boyfriend."
- (7) They now branched out into new activities. *Karera wa ima ya te o hirogete atarashii katsudō o hajimeta.*they TOP now and hand ACC spread new activities ACC begin-PAST
 Lit. "They now spread their hands and began new activities."
- (8) Man, is he bummed out!
 Nanto, kare wa <u>hidoi</u> <u>me ni atte</u>-iru koto ka
 what he TOP horrible eye to meet-be thing Q
 Lit. "What a terrible eye he has met!"

In (6), *blow out* corresponds to the Japanese expression *sode ni suru*, which taken literally translates to "make (someone) a sleeve." The idiomatic meaning of this expression is "be cold, ignore." It is unclear how this expression acquired its idiomatic meaning, and there are numerous interesting hypotheses. Several involve the notion of kimono sleeves being peripheral to the body or capable of being detached; therefore, making a person a sleeve means metaphorically removing them from the focus of one's attention. In (7), *branch out* corresponds to *te o hirogeru*, which literally means "spread (one's) hands." *Te o hirogeru* is an idiomatic expression meaning "expand operations," for example, within a business. In (8), *bum out* is translated as *hidoi me ni au*, which literally means "meet a horrible eye." The idiomatic meaning of this expression is "get into trouble, have a bitter experience."

5.3.2.1.2 Preceding Elements

Next, we turn to the second factor thought to contribute to the large representation of Japanese simplex verbs among the total correspondence pairs: preceding elements. It is important to note the role of Japanese adjunctival elements (i.e., adverbial phrases, compound verbs made via TE-linkage) in accurately conveying the meaning of the phrasal verb. In order to get a better idea of exactly how often a Japanese predicate requires an additional element in order to convey the full meaning of the English phrasal verb, Table 5.7 shows the percentage of correspondence pairs for each Japanese predicate type that include one or more preceding element.

Predicate type	Number of entries with preceding elements	Total number of entries	Percent of entries with preceding elements	
Loanword	0	14	0%	
Simplex verb <i>deru/dasu</i>	66	124	53.2%	
Simplex verb (other)	484	995	48.6%	
V-V compound with <i>deru/dasu</i>	52	231	22.5%	
V-V compound (other)	59	230	25.7%	
Sino-Japanese compound with 出 <i>shutsu</i>	6	36	16.7%	
Sino-Japanese compound (other)	58	327	17.7%	

Table 5.7. Percentage of Japanese predicates containing preceding elements by predicate type

The Japanese predicate type that most often includes a preceding element is "simplex verb *deru/dasu.*" The second most common predicate type to contain a preceding element is "simplex verb (other)." This result is consistent with the characterization of English phrasal verbs as capable of encoding three distinct semantic elements (motion, manner, and path) in contrast to Japanese verbs, which, in isolation, are likely to encode only motion and path, leaving manner to be expressed by an element outside the verb or omitted altogether (and thus inferred through context). Compound verbs, on the other hand, include two verbal elements—V1 and V2—whose meanings interact in a variety of ways. Recall from Chapter 3 that one of the five broad categories of semantic relation holding between V1 and V2 is manner, in which V1 expresses the manner of the action expressed by V2. In this arrangement, Japanese lexical compound verbs are equally capable of expressing motion, manner, and path simultaneously, on par with English phrasal verbs that consist of a manner motion verb in conjunction with a path particle. Thus, based on this characterization,

we would expect Japanese compound verbs to require a preceding element less often than Japanese simplex verbs. Indeed, this is what we observe based on the percentages shown in Table 5.7.

Preceding elements were categorized into several classes based on their syntactic form. Some correspondence pairs were accompanied by more than one preceding element. The most common type of preceding element was an adverbial phrase. In (9), the adverbial phrase $ky\bar{u}$ ni "suddenly" combines with *deru* in the translation of the phrasal verb *crop out*.

 (9) Several cases of the disease cropped out in the village.
 Sono byōki no kanja ga sūmei sono mura that disease GEN patient NOM several.people that village ni <u>kyū-ni</u> <u>deta</u>. in suddenly appear-PAST

In (10), an adverbial phrase combines with the simplex verb *hakobu* "carry" to render the meaning of *iron out*.

(10) They met to iron out their roles in the event of war. *Karera wa sensō no okotta toki jibunra no yakuwari o <u>enkatsu-ni</u>
they TOP war GEN occur-PAST time their GEN roles ACC smoothly
<u>hakobu</u> tame kaigō shita.
carry in.order meeting do-PAST*

Japanese has a rich inventory of mimetics, or sound-symbolic words, used in both written and spoken speech. Among adverbial phrases, mimetics in particular are often used in conjunction with a Japanese simplex verb to render the full meaning of the English phrasal verb with *out* (see Chapter 4 Section 4.2.2). In (11), the mimetic word *gutto* "suddenly, with a jerk" is used in combination with *nobasu* "stretch (trans.)" to convey the meaning of *fling out*. In (12), the mimetic word *boso-boso*

"murmuring, muttering" combines with *kotaeru* "reply" to render the meaning of *grumble out*.

- (11) He flung out his arms and caught the child. *Kare wa ryōude o <u>gutto</u> <u>nobashite</u> sono kodomo o tsukamaeta.*he TOP both.arms ACC with.a.jerk stretch that child ACC catch-PAST
- (12) Harley grumbled out some inaudible answer.
 Hārī wa kikitorenai koe de <u>boso-boso</u> to <u>kotaeta</u>.
 Harley TOP hear-POT-NEG voice with muttering QUOT answer-PAST

Another frequently occurring preceding element is a verb in TE form. This includes Japanese simplex verbs, NV compounds, Sino-Japanese compounds, and V-V compounds, each of which is represented in (13)–(16) below.

- (13) Japanese simplex verb in TE form
 He blustered out threats. *Kare wa dona[t]-TE odoshi-monku o narabeta.*he TOP yell-TE threat-word ACC enumerate-PAST
- (14) NV compound

He gave out at the end of the 18th book. *Kare wa dai 18 kan no owari de <u>chikara-tsuki-TE</u> yameta.* He TOP number 18 volume GEN end at power-be.exhausted-TE quit-PAST

(15) Sino-Japanese compound

He hacked out a new plan. *Kare wa atarashii keikaku o <u>kushin shi-TE</u> tateta*. he TOP new plan ACC trouble do-TE set.up-PAST

(16) V-V compound

That boy gouged out a sort of boat.

Sono shōnen wa ki o <u>kuri-nu[i]</u>-TE isshu no bōto o that boy TOP tree ACC hollow-extract-TE one.kind GEN boat ACC *tsukutta*. make-PAST

As these examples illustrate, additional elements outside the main verb play a crucial role in a Japanese predicate's ability to convey the meaning of an English phrasal verb with *out*. By factoring in the role of preceding elements, we are able to explain in part why Japanese simplex verbs were so prevalent among the different predicate types, despite the evidence that V-V compounds (and arguably Sino-Japanese compounds as well), rather than simplex verbs, are more readily equipped to simultaneously encode multiple semantic elements.

5.3.2.1.3 Frequently Occurring Simplex Verbs

Thus far, we have examined collocation and idiomatic expressions as two possible factors contributing to the outcome shown in Figure 5.1, where the Japanese simplex verb is the most common predicate type among the total correspondence pairs. Next, we will look in detail at several specific simplex verbs that occurred regularly throughout the data.

Japanese simplex verb	Count
する suru "do, make"	98
なる naru "become"	72
出る deru "go out"	58
出す dasu "put out"	47
取る toru "take" (kanji), とる toru (hiragana)	27, 3
行く <i>iku</i> "go" (kanji), いく <i>iku</i> (hiragana)	21, 4
言う iu "say"	24
辞める yameru "quit" (kanji), やめる yameru (hiragana)	1, 23
消す kesu "erase," 消える kieru "vanish"	14, 9
作る tsukuru "make"	17
しまう shimau "finish, end"	16
つける <i>tsukeru</i> "attach (trans.)" (kanji),	8,7
$\neg \leq tsuku$ "attach (intrans.)" (hiragana)	0, /
ある aru "be"	14
ふくらむ fukuramu "expand," ふくれる fukureru "expand,"	9, 3, 1
ふくらます fukuramasu "expand (trans.)"), J, I
やる yaru "do"	12
与える ataeru "give (esp. to someone of lower status)"	11
入れる <i>ireru</i> "put into"	11
奪う ubau "steal"	11
来る kuru "come" (kanji), くる kuru (hiragana)	4, 6
広げる hirogeru "spread"	9
しゃべる shaberu "talk"	9
打つ utsu "hit"	9
捨てる <i>suteru</i> "throw away"	9
$ \vec{\beta} \leq hiku$ "pull" (kanji), $\vec{C} \leq hiku$ (hiragana)	7, 2
失う ushinau "lose"	8
現われる arawareru "appear"	6

Table 5.8. Most frequently occurring Japanese simplex verbs⁵

As Table 5.8 shows, only two simplex verbs—*suru* and *naru*—surpass *deru* and *dasu* in frequency. It should be noted that the total count for *suru* includes cases where *suru* exhibits causative morphology, appearing as *saseru*, as well as cases where *suru* appears in its negated form, *shinai*.

Suru "do, make" and *naru* "become" are more versatile than most other simplex verbs because they may function as light verbs. First, we will examine cases in which these light verbs appear in constructions with an adjective or adjectival noun. *Suru* is

used when the state expressed by the adjective or adjectival noun changes due to a volitional action. *Naru*, on the other hand, is used when the change in state is non-volitional.

(17) Her true identity was flushed out by her neighbor. *Kanojo no ari no mama no sujō wa rinjin ni-yotte*She GEN being GEN as.is GEN identity TOP neighbor by *akiraka-ni sareta*.
clear make-PASS-PAST

In the Japanese translation in (17), the nominal adjective *akiraka* "evident, clear" is followed by *ni-yotte* "by" in conjunction with *sareru*, the passivized form of *suru*, which is inflected for tense. *Suru* is used here because the change in state expressed by the phrasal verb *flush out* is brought on volitionally through the action of an agent (*her neighbor*). This example is particularly illustrative because the agent of the volitional act is made explicit in the passive construction through the introduction of a prepositional phrase headed by *by*. On the other hand, *naru* is used when the adjective or adjectival noun refers to a state that changes through a non-volitional process or action.

(18) The days are drawing out.

Hi ga <u>nagaku</u> <u>nari</u>-tsutsuaru. day NOM long become-be.in.the.process.of

The light verbs *suru* and *naru* can also be used with deverbal nouns, as shown in (19)–(20), or with a regular NP like those in (21)–(22).

Deverbal noun

suru

(19) She dug out last night with a teamster.
 *Kanojo wa sakuya torakku untenshu to <u>kake-ochi shita</u>.
 she TOP last.night truck driver with eloping do-PAST
 <i>naru*

(20) The idea fizzled out.
 Sono omoitsuki wa <u>tachi-kie</u> <u>ni natta</u>.
 that idea TOP fizzling.out to become-PAST

NP

suru

(21) He tried to flatten out too quickly. *Kare wa amari-ni hayaku <u>suiheihikō</u> <u>shisei ni shiyō</u> to
He TOP too.much quickly level.flight posture to do-VOL QUOT shi-sugita.
do-exceed-PAST*

naru

(22) It fell out well.

Sore wa yoi <u>kekka ni natta</u>. that TOP good result to become-PAST

As light verbs, the lexicalized meanings of *suru* and *naru* have been bleached. In other words, they contribute little to the semantic content of the predicate as whole. In these cases, the meaning of the phrasal verb with *out* is rendered instead through the adjective, nominal adjective, deverbal noun, or NP that appears in the light verb construction. In this way, *suru* and *naru* may combine with a wide range of linguistic items, hence their high rate of occurrence.

Among the remaining simplex verbs featured in Table 5.8, several will be shown to participate in specific semantic domains in which *out* may be used to express meaning but *deru/dasu* may not. This, it is argued, is due to diverging patterns of semantic extension. This issue will be taken up in detail in Chapter 6. The final section of this chapter examines the most frequently occurring V2s in V-V compounds and identifies several parallels between this list and the most frequently occurring simplex verbs listed in Table 5.8.

5.3.2.2 Predicate Types: V-V Compounds

Va	Count		
V2	kanji	hiragana	Total
~出す -dasu "put out"	205		205
~取る -toru "take"	31		31
~上げる <i>-ageru</i> "raise"	14	15	29
~出る -deru "go out"	18		18
~だす -dasu "begin"	12		12
~去る -saru"leave"	10		10
~消す -kesu "erase"	8		8
~つける -tsukeru "attach (trans.)"	7		7
~抜く -nuku "extract"	5	2	7
~込む -komu "go/put into"	5	1	6
~上がる -agaru "rise"	1	3	4
~切る -kiru "complete"	4		4
~払う -harau "clear away"	4		4
~渡す -watasu "transfer"	4		4
~破る -yaburu "break through"	4		4
~立てる -tateru "set up"	4		4
~除く <i>-nozoku</i> "exclude"	4		4

Table 5.9. Most frequently occurring V2s in V-V compounds

Table 5.9 shows that *dasu* was by far the most frequently occurring V2, with 205 instances, while *deru* was fourth, with 18 instances. When we compare these results with the most frequently occurring simplex verbs presented in Table 5.8, we find several interesting parallels. To start, *toru* "take" was the fifth most frequently occurring simplex verb (with 30 instances) and the second most frequently occurring V2 (with 31 instances). Although *toru* is not traditionally classified as a light verb, it

can express a meaning similar to suru "do," as illustrated by (5) above in the discussion on collocational patterning, where *copy out* is translated as *kopī o toru*, literally "take [a] copy." Aside from this, we find a large number of instances in which simplex toru is used either on its own or in combination with a verb like ubau "steal" or damasu "trick" in TE form to express the meaning of phrasal verbs like bamboozle out, beat out, cajole out, fool out, gull out, etc. These phrasal verbs express a situation in which an object is removed from the sphere of influence or possession of an individual through some means of force or deception. Such phrasal verbs will be collectively referred to henceforth as "bamboozle type" phrasal verbs. Many of the V-V compounds in which toru appears as V2 are used to express the meaning of bamboozle type phrasal verbs. Additionally, 11 instances of ubau "steal" functioning as a simplex verb and many of the instances of ageru "raise" and agaru "rise" functioning as V2s in V-V compounds are involved in correspondence pairs with bamboozle type phrasal verbs. In contrast, there are virtually no instances of deru or dasu functioning as either a simplex verb or V2 in a V-V compound to define or translate bamboozle type phrasal verbs.

Similarly, there are other semantic domains in which phrasal verbs with *out* are used but *deru/dasu* are not, such as "change to inaccessibility." Simplex verbs like *kesu* "erase," *kieru* "disappear," and *ushinau* "lose," all of which appear in Table 5.8, as well as V2s like *saru* "leave" are used to express the meaning "change to inaccessibility," whereas *deru* and *dasu* are not. Finally, the cluster of meanings of *out* that rely on a reflexive trajector (what Lindner (1983) terms OUT 2; see Chapter 4 Section 4.4.2) cannot be expressed with *deru/dasu*. These semantic domains in which *out* participates but *deru/dasu* do not suggest a divergence in their patterns of semantic extension. Chapter 6 argues that a significant portion of the remaining non-correspondence pairs do not occur at random, but rather are organized around specific semantic domains to which the meaning of *out* has been extended but the meaning of *deru/dasu* has not.

5.4 Conclusion

This chapter presented the findings of an analysis of 1,957 pairs of an English phrasal verb with out and a Japanese predicate. The total number of correspondence pairs was analyzed according to the Japanese predicate type used to translate or define a phrasal verb with out. As a result, it was found that the majority of correspondence pairs involved a Japanese simplex verb, including deru/dasu. This was not the correspondence type predicted based on the bulk of the evidence presented in Chapter 4, which sought to align phrasal verbs with V-V compounds and in particular phrasal verbs with out and V-V compounds with deru/dasu as V2. These results can be parsed in a number of ways. When the inclusion or exclusion of *deru/dasu* is disregarded, we find that nearly one-fourth of the correspondence pairs involve a phrasal verb and a V-V compound. Alternatively, predicate types that include *deru/dasu* in any form—as either a simplex verb, an element in a Sino-Japanese compound, or V2 in a V-V compound—can be grouped together as "positive" correspondence pairs because they bear out the fundamental correspondence established between out and deru/dasu by virtue of deriving their basic sense from the container schema. When examined this way, we find that positive correspondence pairs account for approximately one-fifth of the total.

The latter half of Section 5.3, which discussed the findings of the analysis, examined the largest predicate type category, "Japanese simplex verb," in closer detail. Several factors were considered as contributing to the relatively large representation of this predicate type within the data. Finally, the most frequently occurring simplex verbs were compared with the most frequently occurring V2s of V-V compounds, and it was argued that several verbs in particular participate in specific semantic domains, such as "change to inaccessibility." Based on the association of verbs occurring in either list with common semantic domains, the chapter concluded by framing these large contiguous groups of non-correspondence pairs as resulting from divergent patterns in semantic extension.

Notes to Chapter 5

¹ The Oxford English Dictionary, for example, does provide information on the frequency of words by assigning them "frequency bands," which indicate how many times they appear per million words.

² Included in this category are instances such as de-TE-iku, in which deru or dasu is the first verb in a TE-compound that features kuru "come" or iku "go" as V2.

³ Verbs like 達する *tassuru* "reach," 罰する *bassuru* "punish," and 命じる *meijiru* "order, command," which consist of a single kanji character pronounced according to its onyomi but combined with the native Japanese *suru* "do" (or in some cases *jiru* or *zuru*), were classified as simplex verbs.

⁴ Although most V-V compounds in category VI feature *deru/dasu* as the second verb (V2) of the compound, there are instances where *deru/dasu* functions as V1. For example, in the definition portion of the entry for *book out*, sense 1 corresponds to *isoide de-kakeru*, where *isoide* "hurry" (in TE form) precedes the V-V compound *de-kakeru*. *De-kakeru* is a V-V compound consisting of *deru* (V1) and *kakeru* (V2). Another example is *dashi-nuku*, which corresponds to *beat out*, in which *dasu* appears as V1.

⁵ The verbs represented in this table were gleaned from the data by extracting the main verb from the full predicate that corresponded to a phrasal verb with *out*. Many of the entries—both definitions and example sentences—featured a Japanese verb with causative or passive morphology or a negated verb. In each of these cases, the infinitive form of the verb was recorded.

Chapter 6 Discussion

6.1 Introduction

Due to the complex nature of English phrasal verbs in terms of their syntactic structure and semantic non-compositionality, one would not expect a perfectly consistent correspondence between a specific verb-plus-particle combination and a specific Japanese verb. The likelihood of consistent correspondence is diminished further when comparing a range of verbs involving the particle out specifically and a range of Japanese predicates involving deru/dasu. Chapter 5 presented the finding that 19.9% of English phrasal verbs with out correspond to a predicate involving the Japanese verb deru/dasu as either: 1) a simplex verb, 2) an element of a V-V compound verb, or 3) the morpheme /de/ (represented by the kanji \boxplus shutsu) in a Sino-Japanese compound. This chapter aims to demonstrate that the remaining examples, where a phrasal verb involving out does not correspond to a Japanese predicate involving *deru/dasu*, do not exist at random. In the following sections, the set of non-correspondence pairs-that is, the remaining examples that do not involve a pairing of out and deru/dasu-are examined in terms of their coalescence around specific semantic domains. These semantic domains are later discussed with regard to the individual construal operations underlying and motivating them as potential directions of semantic extension.

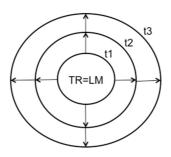
The following discussion of non-correspondence pairs utilizes the framework of cognitive grammar (Langacker 1987, 1991, 2008) to represent how the spatial sense of *out* is extended to denote relationships between entities in non-spatial domains. Recall from Chapter 4 that the spatial sense of both *out* and *deru/dasu* relies on the container schema, in which a bounded container serves as the landmark in which a trajector is located. The particular orientation of the trajector and landmark, often a product of one or more image schema transformations, yields various iterations of the container schema or subschemas that may be encoded by the same particle *out*. In the following, I examine three semantic domains deriving from the

container schema in which *out* may be used to encode meaning but *deru/dasu* cannot. The phrasal verbs participating in each of these domains are categorized into three types: the reflexive trajector type, the change to inaccessibility type, and the bamboozle type.

6.2 Reflexive Trajector

The term "reflexive" denotes a particular relationship between trajector and landmark in which the trajector and landmark are referentially identical. Lindner (1983) employs this term to explain how the spatial sense of *out* and *up* becomes coopted for use in verb-particle combinations like *spread out* and *curl up*. In Chapter 4, the basic spatial sense of *out* was defined as "removal from a bounded region in space." In this sense, the bounded region (or container) serves as the landmark. In most cases, the landmark object remains implicit, as in *She waltzed out (of the room)*, but it may be easily recovered via anaphor or inferred through context. However, the landmark object in a reflexive configuration is neither implicit nor recoverable; it is referentially identical to the trajector. In a reflexive configuration, the trajector's initial boundary is construed as the landmark. As the trajector changes shape through time, it moves with respect to its initial boundary—the landmark—and the displacement of the trajector constitutes a path that can be encoded by a spatial particle like *out*. That is, the trajector and landmark are actually one in the same entity conceived at different points in time.

Figure 6.1. Reflexive out



The syrup spread out.

The three concentric circles in Figure 6.1 represent the boundary of the trajector (TR) at three consecutive points in conceived time:¹ t1, t2, and t3. As the trajector expands in area, the perimeter of its shape moves beyond its initial boundary at t1. In this way, the boundary at t1 serves as the landmark relative to which the position of the trajector at t2 and t3 is *out*. This subschema of *out* profiles "the change in shape of a single object...namely, the change from some initial (LM) form to a final form that occupies a greater area than the initial one" (Lindner 1983: 92). The initial form can occupy space in one, two, or three dimensions.

- Here is a chair to sleep in with the legs stretched out.
 Koko ni ashi o <u>nobashite</u> nerareru isu ga aru. here LOC leg ACC stretch sleep chair NOM is
- (2) They spread out a rug on the grass.
 *Karera wa kusa no ue ni shikimono o <u>hirogeta</u>.
 they TOP grass GEN above LOC rug ACC spread-PAST*
- (3) Her skirt billowed out when the wind caught it.
 *Kanojo no sukāto ga kaze ni fuki-tsukerarete <u>fukuranda</u>.
 she GEN skirt NOM wind by blow-attach-PASS expand-PAST*

(1)–(3) feature three different reflexive trajector type phrasal verbs and their translations in Japanese. In (1), *stretch out* encodes expansion along a one-dimensional line; in (2), *spread out* encodes expansion along a two-dimensional plane; in (3), *billow out* denotes an increase in volume in three dimensions. The Japanese verbs that correspond to the reflexive trajector type phrasal verbs in (1)–(3) are underlined. In each case, a Japanese simplex verb other than *deru/dasu* is used. Furthermore, it is impossible to combine these simplex verbs—*nobasu* "stretch," *hirogeru* "spread," and *fukuramu* "expand"—with *deru/dasu* in a V-V compound.

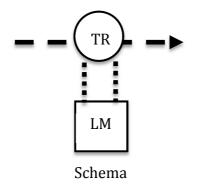
(4) a. *nobi-deru, *nobashi-dasu
b. *hirogari-deru, *hiroge-dasu
c. *fukurami-deru, *fukuramashi-dasu

Reflexive trajector type phrasal verbs with *out* can also be used to encode expansion in non-spatial domains.

- (5) He made an effort to bulk out his paper's contents.
 Kare wa ronbun no nakami o <u>fukuramaseru</u> yō-ni doryoku shita. he TOP paper GEN content ACC expand-CAUS so-that effort do-PAST
- (6) The author dragged the story out.
 *Chosha wa hanashi o dara-dara to <u>hiki-nobashita</u>.
 author TOP story ACC lengthily QUOT drag-stretch-PAST*

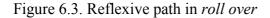
It should be mentioned that *out* is not the only particle attributed a reflexive sense. Lakoff (1987) identifies a reflexive sense for *over*. He characterizes it as a variant of *over*'s central schema, depicted in Figure 6.2.

Figure 6.2. Over's central schema



The bird flew *over* the yard.

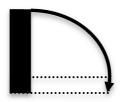
Reflexive *over* is derived from Schema 1 depicted in Figure 6.2 via a "transformational link," which connects related subschemas. Generally speaking, the reflexive sense assumes a relationship between trajector and landmark where both refer to the same entity, but in fact, there are a variety of ways in which this can be realized. Parts of the entity may serve as the trajector and other parts may serve as the landmark. In Figure 6.3, roughly half of the entity functioning as the trajector (*log*) moves *over* with respect to the remaining half.





The log rolled over.

Lakoff labels the path traced by the trajector in Figure 6.3 the "reflexive path." In a variation on this subschema, the entity "as a whole traces the reflexive path" (1987: 433). Figure 6.4. Reflexive path in *fall over*



The fence fell over.

In Figure 6.3, half of the trajector traces the reflexive path. In Figure 6.4, the entire trajector traces the last half of the reflexive path. Importantly, in both cases, the trajector and landmark do not constitute separate entities; rather, they refer to the same entity or parts of the same entity, hence the term "reflexive." Lakoff explains how the reflexive sense, which involves only a single entity, arises from the more prototypical case where a trajector and landmark correspond to two separate entities.

Given a perceived relationship between a TR and a LM which are two separate entities, it is possible to perceive the same relationship between (a) different parts of the same entity or (b) earlier and later locations of the same entity, where one part or location is considered LM and the other TR.

(Lakoff 1987: 443)

Out, in its basic sense, indicates "removal from a bounded region." In *the syrup spread out*, "removal" can only be understood in the context of superimposing two distinct configurations of a trajector corresponding to different nodes in processing time. Under a reflexive construal, the conceptualizer traces a mental path of the boundary of the trajector as it increases in size along a one-, two-, or three-dimensional axis. This requires maintaining an image of the trajector in its initial state through the build-up of configurations toward a full conception of the event profiled by *out*. In the final stage, the boundary of the trajector is considered in contrast to the demarcation of its initial state. The same entity, represented by two temporally

distinct configurations, is conceived of as two distinct entities, which are then assigned the roles of trajector and landmark, respectively.

Reflexive Senses are interesting as they represent complex conceptualizations in which the multiple temporally discontinuous locations of a single entity are integrated into a single scene in which the two temporally distinct locations are conceptualized as participating in a synchronic spatial relation.

(Tyler and Evans 2003: 209)

Among non-correspondence pairs, it was observed that no phrasal verbs with *out* of the reflexive trajector type are translated into a Japanese predicate featuring *deru/dasu*. Neither does this appear to be a coincidental result of the translator's preference. Therefore, we may conclude that the meaning of *out* has been extended to include those senses that involve a reflexive trajector, while the meaning of *deru/dasu* has not. In what follows, I offer a possible explanation for why. I suggest that the mode of conceptualization, or scanning, used to apprehend atemporal complex relations (e.g., those encoded by particles) is amenable to the construal of a reflexive trajector, in contrast to the mode of conceptualization used to apprehend processes (i.e., those encoded by verbs). In other words, the mode of cognitive processing required to express a processual relation via the verb *deru/dasu* inhibits a possible reflexive construal. In V-framed languages like Japanese where path is conflated with motion in the verb stem, the path encoded by *deru/dasu* is therefore prevented from developing a reflexive sense.

6.2.1 Summary and Sequential Scanning

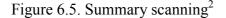
Important to the description of the reflexive trajector are the notions of "summary scanning" and "sequential scanning." In cognitive grammar (Langacker 2000), summary and sequential scanning are offered as two related modes of cognitive processing underlying the distinction between atemporal relations and processes. Atemporal relations are similar to processes in that they contain a series of

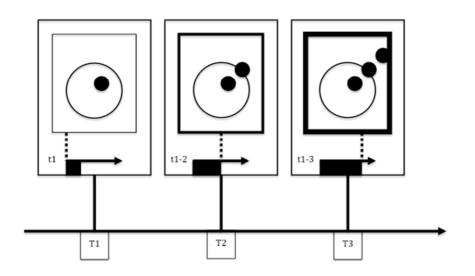
configurations profiling a relationship between trajector and landmark, yet they lack a temporal profile. For example, the contrast between the English dynamic preposition *into* and the verb *enter*, while being semantically very similar, is said to derive from the mode of scanning used in their construal; the former is apprehended via summary scanning and the latter via sequential scanning. Langacker (1990) explains the difference between summary scanning and sequential scanning in the following way:

In summary scanning, the various facets of a situation are examined in cumulative fashion, so that progressively a more and more complex conceptualization is built up; once the entire scene has been scanned, all facets of it are simultaneously available and cohere as a single gestalt...By contrast, sequential scanning involves the successive transformation of one scene into another. The various phases of an evolving situation are examined serially, in noncumulative fashion; hence the conceptualization is dynamic, in the sense that its contents change from one instant to the next.

(Langacker 1990: 78–79)

Complex atemporal relations, such as English *out*, simultaneously access various facets of a complex event via summary scanning, resulting in a single gestalt.





Verbs like Japanese *deru* and *dasu* profile processes, tracking relationships through time via sequential scanning. Only one facet of the complex event is ever accessed at any particular point in processing time.

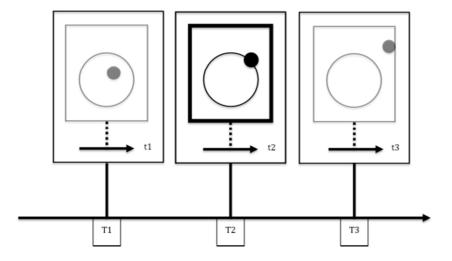


Figure 6.6. Sequential scanning

The reflexive sense of English spatial particles involves a process whereby two configurations of an entity at discontinuous points in conceived time are superimposed and reanalyzed as a static spatial configuration. This crucially relies on the mechanism by which summary scanning operates. Therefore, *out*, an atemporal relation apprehended via summary scanning, is a candidate for undergoing semantic extension to encode subschemas that involve a reflexive trajector. On the other hand, in a V-framed language like Japanese, the *out* path or "removal from a bounded region" is expressed by the verbs *deru* and *dasu*, which are apprehended via sequential scanning. This finding suggests that the typological character of Japanese when expressing motion events precludes the possibility of developing a reflexive sense.

6.3 Change to Inaccessibility

Lindner (1983) defines the basic schema of *out* as representing "the removal or departure of one concrete object from within another object or place" (60–61). She terms the group of senses generated from this basic schema OUT 1. OUT 1 includes instances in which the conceptual structure of the container schema is projected onto abstract semantic domains, such as those involving social relationships, perceptions, or emotions. In this case, *out* encodes a change of state rather than a change in location. Among these abstract senses, Linder posits a "change to accessibility" sense for *out*. In this sense, the region of inaccessibility is construed as the landmark container; the trajector's movement from inside to outside the container constitutes a change in state from being inaccessible to accessible.

Hiratsuka and Imai (2000) also posit a "change to accessibility" sense for simplex *deru*. They define "change to accessibility" as "a change of state in which cognition, perception, or communication becomes possible" (5). This corresponds to Himeno's (1999) "appearance on the surface" or "actualization" sense of *deru/dasu* when functioning as V2 in a V-V compound. Thus, with regard to "change to accessibility," we can state that this particular semantic extension is observed for both English *out* and Japanese *deru/dasu* when *deru/dasu* functions as either a simplex verb or V2 in a lexical compound. Taken together with the fact that *out* when paired with a motion verb and *deru/dasu* both encode "removal from a bounded region" in their basic senses, we can conclude that a similar process is motivating the semantic extension of these two terms in either language.

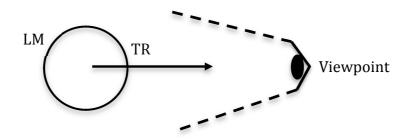
However, as Lindner (1983) points out, *out* is used not only to encode "change to accessibility," but also "change to inaccessibility," which may initially seem counterintuitive.

(7) The stars came out. (change to accessibility)
 Hoshi ga deta.
 star NOM come.out-PAST

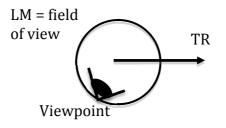
(8) The lights went out. (change to inaccessibility)
 Akari ga kieta.
 light NOM disappear-PAST

Lindner explains this seemingly contradictory state of affairs as reflecting a shift in viewpoint that occurs within the central schema underlying the "change to accessibility" sense. When *out* encodes "change to accessibility," as with Japanese *deru/dasu*, inaccessibility is construed as the container landmark; as a result of moving outside the container into the field of view, the trajector becomes perceivable and accessible. In this schema, the conceptualizer's viewpoint is located outside the landmark, as shown in Figure 6.7.

Figure 6.7. "Change to accessibility"



Alternatively, viewpoint can shift to be located within the container landmark. In other words, the conceptualizer's field of view itself is construed as the container. When a trajector moves from within the boundary of the landmark to an outside region, this movement is encoded by *out*. However, as a result of moving outside the landmark, i.e., the field of view, the trajector becomes unperceivable—and hence, inaccessible. The boundary of the landmark denotes a region in which objects are not only accessible but usable, desirable, and understood by the conceptualizer. Therefore, the path encoded by *out* denotes a change whose resultant state is characterized by inaccessibility, incapability of use, undesirability, or impossibility of understanding. Figure 6.8. "Change to inaccessibility"



When viewpoint is located outside the bounded region serving as the landmark object (Figure 6.7), the bounded region represents a domain in which objects are private, hidden, or unknown. Moving outside the bounded region entails the object becomes public, accessible, visible, and known. When viewpoint is located inside the bounded region (Figure 6.8), the landmark represents a domain that is visible and accessible. This is consistent with being perceptible, functioning, viable, conscious, normal, and desired. On the other hand, the region of inaccessibility outside the bounded region designates objects that are imperceptible, nonfunctional, unconscious, abnormal, or undesired.

It is possible to translate certain English phrasal verbs with *out* expressing "change to accessibility" with a Japanese V-V compound in which *deru/dasu* functions as V2. These examples demonstrate that the semantic extension from "movement to an outside region" to "change to accessibility" has occurred in both the case of English *out* and V2 *deru/dasu*. The pairs in (9)-(12) show that *deru/dasu* may be used to encode *out* in its basic sense, the "change to accessibility sense," as well as a third sense which was not discussed previously but denotes "movement away from origin/source" and is categorized by Lindner (1983) under the group OUT 3. However, only English phrasal verbs with *out* express "change to inaccessibility." This further step in the series of semantic extensions, which critically relies on a shift in viewpoint within the underlying image schema, has not occurred in the case of *deru/dasu*.

(9) chuck out

removal from a bounded region

A man was employed to <u>chuck out</u> any troublemakers. *Monchaku o okosu renchū o <u>tsumami-dasu</u> tame-ni otoko ga hitori* trouble ACC cause gang ACC pluck-put.out in.order man NOM one.person *yatowareta*.

hire-PASS-PAST

change to inaccessibility

The committee considered your suggestions but <u>chucked</u> them <u>out</u> because they would cost too much.

linkai de anata no teian o kentō shita ga, keihi ga committee at 2SG GEN suggestion ACC consider do-PAST but expenses NOM *kasami-sugiru to iu riyū de <u>hiketsu</u> <u>sareta.</u> increase-exceed QUOT say reason by rejection do-PASS-PAST*

(10) grind out

change to accessibility

The writer kept <u>grinding out</u> more stories until the magazine agreed to accept three of the best ones.

Sono sakka wa sara-ni zoku-zoku-to sakuhin o <u>tsukuri-dashi</u>, tsui-ni that writer TOP even.more successively works ACC make-put.out finally sono zasshi wa motto-mo sugureta mono no naka kara san saku that magazine TOP most outstanding thing GEN middle from three works

o keisai suru koto ni dōi shita.

ACC publication do thing to agree do-PAST

change to inaccessibility

<u>Grind out</u> your cigar. *Hamaki o <u>momi-keshite</u> kudasai.* cigar ACC rub-extinguish please

(11) put out

change to accessibility

If you can <u>put out</u> a better system, please do so. *Motto yoi hōshiki o <u>mochi-daseru</u> nara, dō-ka onegai shimasu.* more good system ACC hold-put.out-POT if please request do-POL

change to inaccessibility

<u>Put out</u> all fires before leaving the camping ground. *Kyampujō o saru mae-ni hi o zenbu <u>keshi-nasai</u>.* campground ACC leave before fire ACC all extinguish-IMP-POL

(12) strike out

movement away from origin/source

strike out in another direction Arata-na michi o fumi-dasu new road ACC step-put.out

change to inaccessibility

<u>Strike out</u> the witness's last remark, it has no place in the court record. *Shōnin no saigo no hatsugen o sakujo shi-nasai. Saiban kiroku ni* witness GEN last GEN remark ACC deletion do-IMP-POL court record LOC *noseru ni wa fusawashiku arimasen.*

publish DAT TOP appropriate be-NEG-POL

(Kenkyusha-Longman Dictionary of Phrasal Verbs)

In contrast to English *out*, which features both "change to accessibility" and "change to inaccessibility" senses, Japanese *deru/dasu* can only be used to encode "change to accessibility." That is, the alternate construal which allows *out* to additionally encode change to inaccessibility requires a shift in viewpoint that does not occur within the image schema upon which *deru/dasu*'s "change to accessibility"

sense is based. The reason for this is unclear. Furthermore, Lindner (1983) does not elaborate on how viewpoint as it is used in her analysis relates to viewpoint as it is discussed with regard to other linguistic phenomena, such as active/passive verb morphology as well as deixis and subjectification. However, this contrast suggests that perhaps there is more mobility or flexibility with regard to viewpoint shift in the case of *out* compared to *deru/dasu*, both of which are based on the container schema.

6.4 Bamboozle Type

In this section, I introduce one final group of phrasal verbs that are semantically related and generally do not permit translation by any type of Japanese predicate involving *deru/dasu*. The phrasal verbs with *out* treated in this section involve a change in possession of an object, not by ready, willful intention of the initial possessor, but through some means of persuasion, trickery, or coercion. These verbs, which I term the "bamboozle type," appear in the following construction:

(13) $\langle NP1 V NP2 \text{ out of } NP3 \rangle$

The following examples adhere to the formulation "V *someone* out of *something*" and are instances of what will hereto be referred to as Pattern 1. In this case, we are dealing not with *out* but with the combination *out of*, where the landmark is made explicit as the NP object of the prepositional phrase headed by *of*.

- (14) You intend to bamboozle me out of a beefsteak. *Kimi wa boku o damashite bifuteki o toru tsumori nanoda*.
 you TOP 1SG ACC trick beefsteak ACC take intention it.is.that
- (15) He beat her out of a hundred dollars. *Kanojo o damashite 100 doru o ubatta.*she ACC trick 100 dollars ACC steal-PAST

(16) He coaxed her out of her watch.

Kare wa umaku damashite kanojo kara tokei o tori-ageta. he TOP skillfully trick she from watch ACC take-raise-PAST

Bamboozle type phrasal verbs may alternatively appear in a construction in which NP2 and NP3 are switched, resulting in the formulation "V *something* out of *someone*." This will be referred to as Pattern 2 and is illustrated by the examples in (17)–(18).

- (17) He cajoled a knife out of the boy. *Kare wa kangen de sono shōnen kara naifu o tori-ageta.*he TOP cajolery with that boy from knife ACC take-raise-PAST
- (18) He ground money out of the poor. *Kare wa bimbōnin kara kane o shibori-totta*.
 he TOP poor.people from money ACC squeeze-take-PAST

Instances of Pattern 1 ("V *someone* out of *something*") occurred with greater frequency among the bamboozle type phrasal verbs included in the data. Interestingly, however, it is Pattern 2 that reflects a more typical trajector-landmark orientation in which an "abstract neighborhood of possession" is construed as the landmark and the object or possession serves as the trajector. In this configuration, the trajector's movement outside the boundary of the landmark denotes a change of possession. Pattern 1, on the other hand, reflects the converse: the object changing possession is construed as the landmark, appearing as the object NP of the prepositional phrase headed by *of*. The person is the trajector who moves to the exterior boundary of the landmark.

Figure 6.10. Bamboozle type Pattern 1

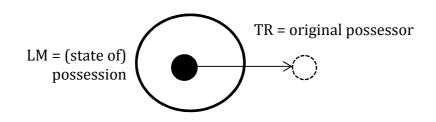
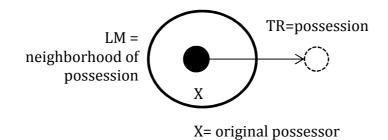


Figure 6.11. Bamboozle type Pattern 2



In other words, in the actual event expressed by the phrasal verb, it is the *something*, not the *someone*, that changes possession (and often, as a consequence thereof, physical location). However, "change in possession" may be construed in one of two ways, resulting in the two patterns of bamboozle type phrasal verbs observed.

Tyler and Evans (2003) regard *out of* as a separate particle distinct from *out*. Particles like *out* and *out of*, along with *in*, *into*, and *through*, have certain specifications regarding the dimensions of the landmark object. More specifically, these specifications—the structural elements of interior, exterior, and a boundary in between—along with the way humans interact with a particular landmark object, contribute to the notion of boundedness. Tyler and Evans emphasize that the way a person interacts with and experiences a landmark gives rise to a number of functional consequences, which in turn become associated with one or more of the various senses attributed to the spatial particle. They offer several examples of functional consequences arising from our interaction with bounded landmarks, which are loosely grouped under the relation of containment.

Bounded LMs may:

- I. Restrict or delimit the TR's movement
- II. Serve as a "salient space" that functions as a goal
- III. Serve as a location from which things emerge or are extracted, which functions as a source
- IV. Serve as a passageway (e.g., *through*)

Tyler and Evans state that the functional property of "source" listed in III associated with some bounded LMs is lexicalized by out of (2003: 180). Therefore, out of profiles a configuration between the trajector and landmark in which the landmark is overtly expressed as the source of the trajector's movement. Among bamboozle type phrasal verbs, the spatial sense of "removal from a bounded region" mediated by out is projected onto the non-spatial domain of possession. Pattern 2 bamboozle type phrasal verbs reflect this mapping in a relatively straightforward manner; the neighborhood or region of possession is construed as a bounded landmark from which a possession serving as the trajector is removed by means of trickery, coercion, or force. Pattern 1 bamboozle type phrasal verbs, however, reflect a different construal-one in which the possessor moves out relative to the bounded region of "possessability" inhabited by the possession. It is not clear whether Pattern 1 derives from Pattern 2 or what image schema transformations must have taken place to generate this alternative construal. It is clear, however, that bamboozle type phrasal verbs very rarely, if ever, correspond to Japanese V-V compounds with deru/dasu as V2. There were no instances in the data of a Pattern 1 bamboozle type phrasal verb corresponding to a predicate featuring *deru/dasu* in any of its forms.

Although V-V compounds with *deru/dasu* are not used to translate Pattern 1 bamboozle type phrasal verbs, there are numerous examples in which a Pattern 1 phrasal verb is translated as a Japanese V-V compound with *toru* "take" as V2.

- (19) I was dished out of the job by Jones.
 Watashi wa sono shoku o Jōnzu ni <u>damashi-torareta</u>.
 1SG TOP that job ACC Jones by trick-take-PASS-PAST
- (20) Jacob fooled Esau out of his birthright.
 Yakobu wa Esau o damashite sono katokuken o <u>ubai-totta</u>.
 Jacob TOP Esau ACC trick that inheritance.right ACC steal-take-PAST

Pattern 1 phrasal verbs may also be translated as a Japanese compound verb with *ageru* "raise" as V2.

- (21) The crooks bilked the old lady out of a fortune.
 Akutō-domo wa rōfujin o damashite taikin o <u>maki-ageta</u>.
 scoundrel-PL TOP old.lady ACC trick large.sum ACC roll-raise-PAST
- (22) People fiddled them out of their money.
 Hito-bito wa karera o damashite sono kane o tori-ageta. people TOP they ACC trick that money ACC take-raise-PAST

Pattern 2 bamboozle type phrasal verbs encode "change in possession" as an object moving *out* relative to a bounded landmark or region of possession. Although this encoding more directly reflects the intuitive sense of a change in possession accompanying a physical change in location, as mentioned previously, Pattern 2 phrasal verbs were less commonly observed in the data. There was only one instance of a Pattern 2 type phrasal verb being translated with a V-V compound featuring *deru/dasu* in position V2.

(23) All the childishness was hammered out of him.
 Kodomo-rashisa wa sukkari kare no naka kara tataki-dasareta.
 childishness TOP completely he GEN middle from hit-put.out-PASS-PAST

We can generalize the asymmetry observed between bamboozle type phrasal verbs with out and Japanese compound verbs with deru/dasu in position V2 as follows: In Pattern 1, the object or possession occupies a "sphere of possessability," which functions as the landmark relative to which an event participant moves out. Alternatively, in Pattern 2, the initial possessor occupies a neighborhood of possession construed as a bounded region or container relative to which the item changing possession moves out. Japanese deru/dasu is not used consistently in the same way as *out* to encode "change of possession" in either permutation. Although there is one example of *deru/dasu* functioning as V2 in the V-V compound *tataki*dasu "hit-put.out" that was used to translate the Pattern 2 bamboozle type phrasal verb *hammer out*, there are no instances of a positive correspondence pair associating a Japanese predicate involving *deru/dasu* with a Pattern 1 bamboozle type phrasal verb. Instead, toru "take" and ageru/agaru "raise/rise" are preferred when encoding the "change in possession" sense mediated by Pattern 1 bamboozle type phrasal verbs. That is, while out, or more specifically out of, has been semantically extended to encode the trajector-landmark orientation typified by Pattern 1, this branch of semantic extension is lacking in the polysemous network of *deru/dasu*. While the reason for this divergence in patterns of semantic extension is not entirely clear, it appears that perhaps English exhibits greater flexibility in the assignment of trajector and landmark roles to event participants, resulting in multiple possible construals of a scene mediated by the same spatial particle.

6.5 Conclusion

This chapter focused specifically on the negative correspondence pairs from the data introduced and analyzed in the previous chapter. A negative correspondence pair is one in which an English phrasal verb with *out* corresponds to a Japanese predicate that does not feature *deru/dasu* as either a simplex verb, an element in a Sino-Japanese compound, or V2 in a V-V compound. What I have intended to demonstrate above is that while a certain degree of inconsistency in the correspondence between

out and *deru/dasu* is to be expected, the entire range of negative correspondence pairs should not be attributed to mere chance or preference on the part of the source text's translators. Rather, there are visible patterns delineating semantic domains in which *deru/dasu* cannot be used to encode the meaning expressed by *out* in a phrasal verb. This chapter has described three of these non-correspondence zones in detail: that which relies on the construal of a reflexive trajector, that which denotes "change to inaccessibility," and that which motivates the bamboozle type phrasal verb (and in particular, those adhering to the formula "V *someone* out of *something*"). In each of these cases, I have suggested that a fundamental change to the container schema underlying the basic sense of both *out* and *deru/dasu* contributes to the alternative possible construal that we observe in phrasal verbs with *out* but not in V-V compounds with *deru/dasu*.

Section 6.2 introduced the distinction between summary scanning and sequential scanning-two different modes of conceptualization of the same objective spatial scene—as one possible explanation for why the reflexive trajector type TR-LM configuration is not available for *deru/dasu*. The reflexive trajector crucially relies on a conceptualization that allows the conceptualizer to access different frames of an event at discontinuous points in time. Within cognitive grammar, this mode of conceptualization is termed "summary scanning." Summary scanning is used to apprehend complex atemporal relations, like out, while verbs like deru/dasu profile processes. Processes are apprehended via sequential scanning, in which an event is conceptualized frame by frame, and only one frame is ever accessible at any point in processing time. In the conclusion to Section 6.2, I argued that the typological character of Japanese with regard to semantic integration of complex motion events precludes *deru/dasu* from developing a reflexive sense. As a V-framed language, Japanese tends to encode path in the main verb. Like *out*, *deru/dasu* encodes the path "removal from a bounded region," but because *deru/dasu* profiles a process and is apprehended via sequential scanning, in contrast to out, it is unlikely to develop a reflexive sense, which operates on the mechanisms of summary scanning.

Section 6.3 investigated the negative correspondence pairs in which *out* expresses "change to inaccessibility." While both *out* and *deru/dasu* are capable of encoding "change to accessibility," only *out* is capable of expressing "change to inaccessibility." Thus, *out* appears in seemingly contradictory pairs of sentences such as *the sun came out* and *the lights went out*. Lindner (1983) explains this superficial contradiction as stemming from a shift in the placement of viewpoint within the configuration of relational entities underlying *out*'s "change to accessibility" indicates that the same shift in viewpoint has not taken place.

Section 6.4 examined bamboozle type phrasal verbs and offered only one example of *deru/dasu* as V2 in a V-V compound being used to translate *hammer out*, illustrative of Pattern 2. No predicate featuring *deru/dasu* in any of its iterations was found to correspond to a Pattern 1 bamboozle type phrasal verb. The relation between Pattern 1 and Pattern 2, which express alternate construals of "change in possession," is unclear. *Out*'s ability to encode "change in possession" as either "V *someone* out of *something*" or "V *something* out of *someone*" indicates a greater range of flexibility with regard to how event participants are assigned the roles of trajector and landmark within this particular permutation of the container schema.

Notes to Chapter 6

¹ Langacker (1990) makes a distinction between "conceived time" and "processing time." Conceived time is built into the object of conceptualization—it spans the length of time over which the event in question evolves. Processing time is the time required to engage in the requisite cognitive operations used to conceptualize an event.

² In Figures 6.5 and 6.7, lowercase *t* stands for conceived time and uppercase *T* stands for processing time.

Chapter 7 Conclusions and Implications

7.1 Summary

This dissertation has sought to explore the consequences of the semantic correspondence between the English particle *out* and the Japanese verbs *deru/dasu* by analyzing a large number of examples featuring senses peripheral to the shared basic sense of "removal from a bounded region." The two lexical items were compared in the context of their participation in two different constructions in either language—the phrasal verb in English and the V-V compound in Japanese. These constructions served as the grammatical lenses, so to speak, through which *out* and *deru/dasu*'s polysemous networks were compared.

Chapter 1 began by explaining this dissertation's objectives and laid out in concise terms its theoretical orientation. The second half of Chapter 1 provided a summary of the chapters to follow.

Chapter 2 offered an overview of the literature pertaining to phrasal verbs in English. The syntactic criteria used to distinguish phrasal verbs (or, alternatively, verb-particle constructions) from superficially similar constructions, such as the verb-prepositional phrase, were examined in addition to semantic criteria used to characterize the relationship between the verb and the particle. At the end of Chapter 2, the term "phrasal verb" was redefined to meet the needs of this dissertation's objective. For the most part, my category of phrasal verb is consistent with the verb-particle construction (VPC) of Lindner (1983) and Lipka (1972) and the phrasal verb of Bolinger (1971). I additionally include, however, verb-particle constructions in which the particle takes a prepositional phrase complement. This allows instances of *out of* like that in (1) to be included in the purview of the analysis.

(1) You intend to bamboozle me out of a beefsteak.

The reason for including "bamboozle type" phrasal verbs becomes clear in Chapter 6, which introduces and discusses three semantic domains exhibiting consistent non-correspondence between *out* and *deru/dasu*.

Chapter 3 reviewed a representative cross-section of the literature pertaining to V-V compounds in Japanese. First, V-V compounds were distinguished from another prominent form of compounding in Japanese—that achieved via TE-linkage. Next, V-V compounds were further categorized into two groups: syntactic V-V compounds and lexical V-V compounds. This dissertation focuses exclusively on lexical V-V compounds, and the remainder of Chapter 3 drew on previous studies to characterize lexical V-V compounds in terms of the combinatory possibilities of V1 and V2 as well as the variety of semantic relationship holding between the two.

Chapter 4 enumerated the reasons for choosing phrasal verbs and V-V compounds as the grammatical constructions to compare in order to determine which senses of out are capable of being encoded by deru/dasu. First, the role of phrasal verbs and V-V compounds in expressing motion events was framed within Talmy's typology of complex event integration. Although English and Japanese belong to different typological groups regarding the locus of expression of an event's core schema, it was argued that both phrasal verbs and V-V compounds provide a means for simultaneously expressing the three semantic elements of motion, manner, and path. Talmy's typology can also be applied to expressions of change of state. In this case, the core schema corresponds to the changed property rather than path, but the means for expressing the core schema-via a satellite in the case of an S-framed language like English and a verb in the case of a V-framed language like Japaneseremains the same. The second half of Chapter 4 provided additional evidence legitimizing a contrastive analysis of phrasal verbs and V-V compounds. Although there are few in-depth studies focusing on these two constructions in particular, their similarities with regard to parallel syntactic phenomena as well as the semantic relationship holding between their component parts have been pointed out by some researchers. In the final part of Chapter 4, the parameter for this dissertation's object of analysis was set at phrasal verbs involving the particle out and V-V compounds in

which the verb *deru* or *dasu* functions as V2. The restriction of this dissertation's focus to two items in particular was intended to facilitate a more in-depth understanding of the complex mechanisms involved in processes of semantic extension. It is hoped that the results of this investigation may serve as a platform upon which future studies can compare different pairs of particles and V2s and perform more broad-sweeping comparisons of phrasal verbs and V-V compounds in general. Working within the framework of cognitive grammar and utilizing the theoretical concepts of image schema, trajector, and landmark, it was argued that both *out* and *deru/dasu* share the basic sense of "removal from a bounded region in space," which is based on the container schema.

Chapter 5 presented the results from an analysis of over 1,950 pairs of a phrasal verb with *out* and a Japanese predicate. Although the correspondence type predicted based on the evidence in Chapter 4 amounted to less than one quarter of the total, several factors influencing the distribution of correspondence pairs were offered.

Chapter 6 focused exclusively on the negative correspondence pairs observed among the data and identified three semantic domains in particular in which *out* can be used to encode meaning but *deru/dasu* cannot. Although this dissertation falls short of providing a full explanation for why these senses have not developed in the case of *deru/dasu*, I contend that these observations may serve as a basis for possible generalizations regarding the construal operations underlying and motivating each of these semantic extensions. In particular, I suggest that the viewpoint plays a significant role in the architecture of cognitive processes that drive new meaning extensions. A contrastive analysis of the type conducted in this dissertation provides a window into the typological character of English and Japanese regarding the respective construal operations driving the semantic extension of lexical items like *out* and *deru/dasu*.

7.2 Implications

7.2.1 Construal Operations

Chapter 4 defined image schemas as schematic patterns of specific embodied experiences arising from imagistic domains (e.g., containers, paths, links, forces, balance) that structure our bodily and non-bodily experiences. A related concept that has been touched on several times in the previous chapters is that of construal operation. The term "construal operation" refers to the process of framing an experience in a way that conveys information about the speaker's conceptualization of that experience. Chapter 6 discussed three semantic domains to which out's meaning has been extended but *deru/dasu*'s has not. This results in three types of phrasal verbs with *out*—the reflexive trajector type, the change to inaccessibility type, and the bamboozle type-that cannot be translated using a V-V compound with *deru/dasu* as V2, despite ample evidence demonstrating that out and deru/dasu do correspond semantically not only at the level of their basic sense, but also within more abstract domains encoding change of state (e.g., the "change to accessibility" sense). Chapter 6 sought to demonstrate that the source of these discrepancies trace back to fundamental differences in the structure of the image schema or subschema sanctioning the use of *out* in each of these senses. The reason why such structural changes have occurred in the case of English out but not in the case of deru/dasu remains to be seen. However, in the remainder of this chapter, I aim to show that each is an instance of a more general phenomenon that can be grouped under one of several categories of construal operation. In doing so, I hope to provide an important building block in the foundation of a potential future framework for analyzing the typological character of construal operations involved in different languages' processes of semantic extension.

Construal operations have been analyzed by multiple researchers, resulting in several distinct but overlapping classification systems. Langacker (1987) uses the term "focal adjustments" to refer to three broad categories of construal operations, which he terms selection, perspective, and abstraction. Viewpoint falls under the category of perspective, which "relates to the position from which a scene is viewed, with consequences for the relative prominence of its participants" (Langacker 1987: 117). Talmy's "schematic systems" (2000) (earlier termed "imaging systems" (1978, 1988a, 1988b)) serve as elaborate frameworks for conceptual structuring and consist of structural schematization, deployment of perspective, distribution of attention, and force dynamics. The most comprehensive classification is provided by Croft and Cruse (2004), who view linguistic construal operations as instances of general cognitive processes. They posit four main categories—attention/salience, judgment/comparison, perspective/situatedness, and constitution/gestalt—under which more specific operations such as summary scanning, sequential scanning, and viewpoint are filed.

A chief aim of this classification is to demonstrate the close relationship between construal operations proposed by linguists and psychological processes proposed by cognitive psychologists and phenomenologists. If linguistic construal operations are truly cognitive, then they should be related to, or identical with, general cognitive processes that are postulated by psychologists...This view follows from the basic hypothesis of cognitive linguistics that language is an instance of general cognitive abilities.

(Croft and Cruse 2004: 45)

Croft and Cruse reiterate Langacker's argument that the meaning of a linguistic expression "is not solely a matter of conceptual content but also evokes how that content is construed (or how that scene is viewed)" (2004: 9). Thus, construal crucially involves the conceptualizer's perspective, or what has been termed the "viewing arrangement." Langacker (1990, 2001, 2008) defines "viewing arrangement" as the relationship between the "viewers" (the conceptualizers who apprehend the meanings of linguistic expressions, i.e., the speaker and hearer) and the situation being "viewed." An important component of the viewing arrangement is the vantage point assumed by the speaker. Different vantage points may be assumed for the same objective scene, and the vantage point is not restricted to the speaker's actual location.

Figure 7.1. Vantage point

SCENE 1

 $VP_A \rightarrow (rock) -----(tree) \leftarrow VP_B$

Vantage Point (VP) A

1. Speaker (at location VP_A): The rock (TR) is in front of the tree (LM). The tree (TR) is behind the rock (LM).

Vantage Point B

2. Speaker (at location VP_B): The tree (TR) is in front of the rock (LM). The rock (TR) is behind the tree (LM).

(Langacker 2008: 76)

In order for utterances (1) and (2) in Figure 7.1 to be semantically equivalent with respect to SCENE 1, the speaker must change physical location. On this condition, both VP_A and VP_B may be assumed for SCENE 1. However, even if the speaker does not change physical location, fictive or non-actual vantage points may be adopted for the purpose of describing a situation from the perspective of the hearer or some other individual.

3. VP₁: If you were standing over there [at VP₂], the tree would be in front of the rock. (Langacker 2008: 76)

Whether or not the vantage point is fixed, as well as which vantage point out of multiple possibilities is assumed for an objective scene, will determine the viewing arrangement, or the relationship between the conceptualizers and the object of conception.

Lindner (1983) uses the notion of viewpoint to explain how *out*'s "change to inaccessibility" sense arises from the "change to accessibility" sense. She explains how a shift in viewpoint causes the conceptualizer's vantage point on the spatial scene

mediated by *out* to be located within the boundary of the landmark container. As a result, objects moving *out* relative to the boundary of the landmark become inaccessible, unperceivable, and by extension undesirable and non-functional. That is why *out* can be used to encode disappearance or inaccessibility, as in *the lights went out*, as well as "change to accessibility," as in *the stars came out*. Lindner does not elaborate on the specific nature of viewpoint as it is used in this context.

Sweetser (2008) defines viewpoint broadly as "anything [that tells you something] about the way that a particular individual's mental space construal is specific to that individual's cognitive and perceptual access." The question remains, however, as to how viewpoint in the sense of Lindner (1983) as a facet of the image schema underlying the multiple, related senses of a spatial particle like *out* relates to viewpoint as discussed regarding other linguistic phenomena such as deixis and subjectification. In Sweetser's terms, verbs may exhibit morphology to mark additional information pertaining to viewpoint, such as the performer of an action (i.e., person and number), middle and reflexive forms (which denote self-directed action versus other-directed action), as well as active and passive forms that characterize the agent's and patient's viewpoints on the same action. How, then, may we classify viewpoint as a mechanism influencing patterns of semantic extension? It stands to reason that these two instances of viewpoint are not unrelated. The precise nature of their relationship, however, is an issue that I hope to address in future studies.

By conducting a cross-linguistic analysis of the patterns of semantic extension observed for two linguistic items like *out* and *deru/dasu*, we can identify several noncorrespondence zones resulting from the application (or non-application) of certain construal operations. It could very well be that each of these non-correspondence zones represents an isolated instance of the particular route traced by a lexical item through its history of gaining, losing, and changing meaning. In many cases, this may be so. But I suspect that beyond the coincidental fallout of history, there are more general trends that link the emergence and co-operation of certain construal operations driving processes of semantic extension, and furthermore, languages may be characterized in terms of their typological predilection toward one or more of these trends. It is my hope that this dissertation provides an impetus to conduct preliminary investigations into what such a typology might look like, what factors should be considered in constructing it, and how it might contribute to a better understanding of the complex interaction between language, cognition, and human psychology.

References

- Bolinger, D. (1971). *The phrasal verb in English*. Cambridge, MA: Harvard University Press.
- Broccias, C. (2007). Unsubcategorized objects in English resultative constructions. In
 N. Delbecque & B. Corneille (Eds.), *On interpreting construction schemas: From action and motion to transitivity and causality* (pp. 103–124). Berlin,
 Germany: Mouton de Gruyter.
- Brugman, C. M. (1988). The story of over: Polysemy, semantics, and the structure of the lexicon. Outstanding dissertations in linguistics. New York, NY: Garland Publishing, Inc.
- Clausner, T., & Croft, W. (1999). Domains and image schemas. *Cognitive Linguistics*, *10*(1), 1–31.
- Croft, W., & Cruse, D. A. (2004). *Cognitive Linguistics*. Cambridge, England: Cambridge University Press.
- Dirven, R. (2001). English phrasal verbs: Theory and didactic application. In M. Pütz,
 S. Niemeier, & R. Dirven (Eds.), *Applied cognitive linguistics II: Language pedagogy* (pp. 3–27). Berlin, Germany: Mouton de Gruyter.
- Erickson, B. (2012). Is studying Japanese worth the effort? In E. M. Rickerson & B.Hilton (Eds.), *The 5-minute linguist* (pp. 274–277). Sheffield, England: Equinox Publishing Ltd.
- Evans, V. (2007). The cognitive linguistics enterprise: An overview. In E. Vyvyan, B.
 K. Bergen, & Z. Jörg (Eds.), *The Cognitive Linguistics Reader* (pp. 2–36).
 London, England: Equinox Publishing Ltd.
- Fauconnier, G., & Turner, M. (1996). Principles of conceptual integration. In J. P.
 Koenig (Ed.), *Discourse and cognition: Bridging the gap* (pp. 269–283).
 Stanford, CA: CSLI Publications.
- Fraser, B. (1974). *The verb-particle combination in English*. Tokyo, Japan: Taishukan Publishing Company.

- Gries, S. T. (1999). Particle movement: A cognitive and functional approach. *Cognitive Linguistics, 10*, 105–145.
- Himeno, M. (1999). Fukugō dōshi no kōzō to imi yōhō [The structure and meaning of compound verbs]. Tokyo, Japan: Hitsuji Shobō.
- Hiratsuka, T., & Imai, S. (2000). Gendai nihongo no dōshi *deru* no imi kakuchō ni tsuite [On the semantic extension of contemporary Japanese *deru*]. Unpublished manuscript.
- Ho, C. M. (2010). Gendai nihongo ni okeru fukugōdōshi no kumiawase: Nihongo kyōiku no kanten kara [A study on the combination of compound verbs in contemporary Japanese from the perspective of Japanese language education]. Tokyo, Japan: Kasamashoin.
- Johnson, M. (1987). *The body in the mind: The bodily basis of meaning, imagination, and reason*. Chicago, IL: The University of Chicago Press.
- Kageyama, T. (1993). *Bunpō to gokeisei* [Grammar and word formation]. Tokyo, Japan: Hitsuji Shobō.
- Kageyama, T. (1999). Keitairon to imi [Morphology and meaning]. Y. Nishimitsu (Series Ed.), Nichiei taishō ni yoru eigogaku enshū shirīzu 2 [Exercises in English learning based on Japanese-English contrastive studies (Vol. 2)]. Tokyo, Japan: Kuroshio Shuppan.
- Lakoff, G. (1987). Women, fire, and dangerous things: What categories reveal about the mind. Chicago, IL: University of Chicago Press.
- Lakoff, G. (1989). Some empirical results about the nature of concepts. *Mind and Language*, *4*(1–2), 103-129.
- Langacker, R. (1987). Foundations of cognitive grammar: Theoretical prerequisites(Vol. 1). Stanford, CA: Stanford University Press.
- Langacker, R. (1990). Subjectification. Cognitive Linguistics 1(1), 5–38.
- Langaker, R. (1991). Foundations of cognitive grammar: Descriptive application (Vol. 2). Stanford, CA: Stanford University Press.

- Langacker, R. (2001). Cognitive linguistics, language pedagogy, and the English present tense. In M. Pütz, S. Niemeier, & R. Dirven (Eds.), *Applied cognitive linguistics I: Theory and Language Acquisition* (pp. 3–39). Berlin, Germany: Mouton de Gruyter.
- Langacker, R. (2008). *Cognitive grammar: A basic introduction*. New York, NY: Oxford University Press.
- Levin, B. (1993). *English verb classes and alternations*. Chicago, IL: The University of Chicago Press.
- Lindner, S. J. (1983). A lexico-semantic analysis of English verb particle constructions with out and up. Bloomington, IN: Indiana University Linguistics Club. [Reprint of University of California, San Diego doctoral thesis, 1981.]
- Lipka, L. (1972). Semantic structure and word-formation: Verb-particle constructions in contemporary English. Munich, Germany: Wilhelm Fink Verlag.
- Matsuda, F. (2004). Nihongo fukugō dōshi no shūtoku kenkyū: Ninchi imiron ni yoru bunseki o tōshite [Acquisition studies of Japanese compound verbs: Through a cognitive semantics-based analysis]. Shirīzu gengogaku to gengokyōiku 1 [Series on linguistics and language education (Vol. 1)]. Tokyo, Japan: Hitsuji Shobō.
- Matsumoto, Y. (1996). Complex predicates in Japanese: A syntactic and semantic study of the notion 'word'. M. Shibatani (Series Ed.), Studies in Japanese linguistics (Vol. 7). Stanford, CA: CSLI Publications.
- Matsumoto, Y. (2011). Japanese compound verbs: types and constraints [PowerPoint slides]. Retrieved from http://www.orinst.ox.ac.uk/sites/jap-ling/files/files/matsumoto.talk_.pdf (Presentation given on Nov. 2, 2011, at the Faculty of Oriental Studies, University of Oxford).
- Mitchell, T. F. (1958). Syntagmatic relations in linguistic analysis. *Transactions of the Philological Society*, 101–118.

- Ohara, K. H. (2002). Linguistic encodings of motion events in Japanese and English:
 A preliminary look. *Keiōgijuku daigaku hiyoshi kiyō, eigo eibei bungaku*[Departmental Bulletin of Keio University, Hiyoshi Campus, English Language and Literature], *41*, 122–153.
- Ohara, K. H. (2004, July). *Manner of motion in Japanese and English*. Paper presented at the Third International Conference on Construction Grammar, Marseille, France.
- Slobin, D. I. (2005). Linguistic representations of motion events: What is signifier and what is signified? In C. Maeder, O. Fischer, & W. Herlofsky (Eds.), *Iconicity inside out: Iconicity in language and literature* (Vol. 4) (pp. 307–322). Amsterdam, the Netherlands: John Benjamins.
- Sugiyama, Y. (2005). Not all verb-framed languages are created equal: The case of Japanese. *Annual Meeting of the Berkeley Linguistics Society*, *31*(1), 299–310.
- Sweetser, E. (2008). Viewpoint and perspective in language and gesture [Video file]. Retreived from https://www.youtube.com/watch?v=-EGxoAIQ0mM
- Tagashira, Y., & Hoff, J. (1986). *Handbook of Japanese compound verbs*. Tokyo, Japan: The Hokuseido Pres.
- Talmy, L. (1978). The relation of grammar to cognition: A synopsis. *TINLAP '78: Proceedings of the 1978 Workshop on Theoretical Issues in Natural Language Processing* (pp. 14–24). Retrieved from http://dl.acm.org/citation.cfm?id=980266
- Talmy, L. (1985). Lexicalization patterns: Semantic structure in lexical forms. In T. Shopen (Ed.), *Language typology and syntactic description* (Vol.3): *Grammatical categories and the lexicon* (pp. 57–149). Cambridge, MA: Cambridge University Press.
- Talmy, L. (1988a). The relation of grammar to cognition. In B. Rudzka-Ostyn (Ed.),
 Topics in cognitive linguistics (pp. 165–205). Amsterdam, the Netherlands:
 John Benjamin
- Talmy, L. (1988b). Force dynamics in language and cognition. *Cognitive Science*, *12*, 49–100.

- Talmy, L. (2000). Toward a cognitive semantics: Typology and process in concept structuring (Vol. 2). Cambridge, MA: MIT Press.
- Tanaka, S., & Matsumoto, Y. (2007). Kūkan idō no gengo hyōgen to sono kakuchō
 [Expressions of spatial motion and their extensions]. M. Nakau (Series Ed.),
 Nichieigo hikaku sensho 6 [Selections of works in contrastive English-Japanese studies (Vol. 6)]. Tokyo, Japan: Kenkyusha.
- Taniwaki, Y., and Tono, T. (2009). Kudōshi [Phrasal verbs]. In T. Kageyama (Ed.), Nichiei taishō: Keiyōshi, fukushi no imi to kōbun [Contrastive English-Japanese studies: Syntax and semantics of adjectives and adverbs] (pp. 293–324). Tokyo, Japan: Taishukan Shoten.
- Teramura H. (1984). *Nihongo no shintakusu to imi II* [Japanse syntax and semantics (Vol. 2)]. Tokyo, Japan: Kuroshio Shuppan.
- trainwreckpolitics. (2008, April 17). *Obama gets that dirt off his shoulder* [Video file]. Retrieved from https://www.youtube.com/watch?v=kzXcNgCr0nk
- Tyler, A., & Evans, V. (2003). The semantics of English prepositions: Spatial scenes, embodied meaning and cognition. New York, NY: Cambridge University Press.

Dictionaries

- Ando, S. (Ed.) Sanseido eigo idiomu, kudōshi daijiten [Sanseido Comprehensive Dictionary of English Idioms and Phrasal Verbs]. (2011). Tokyo, Japan: Sanseido.
- Higashi, N., & Suwabe, H. (Eds., Trans.). (1994). Kenkyūsha ronguman kudōshi eiwa jiten [The Kenkyusha-Longman dictionary of phrasal verbs]. Tokyo, Japan: Kenkyusha.

MOEHLE Ashlyn Michelle

A Contrastive Study of Japanese Compound Verbs and English Phrasal Verbs: Building Toward a Typology of Linguistic Construal Operations Involved in Processes of Semantic Extension

正誤表

vi ページ1 段落、13 行目 (正) involved in the process \rightarrow (正) involved in processesviii ページ3 段落、6 行目 (田) forces of the processes \rightarrow (E) forces of processes15 ページ例文 (22'b)(課) b. The hippies \rightarrow (E) b. *The hippies25 ページ4 段落、5 行目 (E) b. *The hippies(E) can optionally by \rightarrow (E) can optionally be36 ページ例文 (6b)(課) b. *[[<i>nomi-hajmeru</i>]_SYNTACTIC \rightarrow (E) ''' @/// (Se) (E) '''' (E) b. *[[<i>nomi-hajmeru</i>]_SYNTACTIC \rightarrow (E) '''' (E) '''' (E) '''' (E) '''' (E) '''' (E) '''' (E) ''''' (E) ''''' (E) '''''' (E) ''''''''''''''''''''''''''''''''''''			
viii ページ3 段落、6 行目(i) forces of the processes \rightarrow (正) forces of processes15 ページ例文 (22'b)(i) b. The hippies \rightarrow (正) b. *The hippies25 ページ4 段落、5 行目(i) can optionally by \rightarrow (E) can optionally be36 ページ例文 (6b)(i) b. *[[<i>nomi-hajmeru</i>]_SYNTACTIC \rightarrow (E) b. *[[<i>nomi-hajmeru</i>]_SYNTACTIC \rightarrow (E) b. *[[<i>nomi-hajme</i>]_SYNTACTIC \rightarrow (E) b. *[<i>nomi-hajme</i>]_SYNTACTIC \rightarrow (E) a similar type pattern \rightarrow (E) similar type pattern \rightarrow (E) the locus for the mapping of path \rightarrow (E) in this study was collected \rightarrow (E) in this study was collected \rightarrow (E) 5.1, the value "1" \rightarrow (E) 5.1, the value "1"	vi ページ	1段落、13行目	(誤) involved in the process →
(正)(正)forces of processes15 ページ例文 (22'b)(課)b. The hippies \rightarrow (正)25 ページ4 段落、5 行目(課)can optionally by \rightarrow (正)36 ページ例文 (6b)(課)b. *[[nomi-hajmeru]_{SYNTACTIC} \rightarrow (正)38 ページ例文 (9b)(課)*on the verge of being killed" \rightarrow (正)38 ページ月文 (9b)(課)*on the verge of being killed"53 ページ1 段落、1 行目 (第) (第)(課) a similar type pattern \rightarrow (正)57 ページ例文 (3e)(課)Fulfillment of confirmation \rightarrow (正)58 ページ1 段落、13 行目(課)the loci for the mapping of path \rightarrow (正)66 ページ例文 (15b)(課) run in the ointment82 ページ2 段落、1 行目(課)in this study was collected85 ページ1 段落、1 行目(課)1, the value "1" \rightarrow (正)57 ページ1 段落、1 行目(課)1, the value "1"			(正) involved in processes
15 ページ例文 (22'b)(誤) b. The hippies \rightarrow (正) b. *The hippies25 ページ4 段落、5 行目(誤) can optionally by \rightarrow (正) can optionally be36 ページ例文 (6b)(誤) b. *[[nomi-hajmeru]_SYNTACTIC \rightarrow (正) b. *[[nomi-hajme]_SYNTACTIC38 ページ例文 (9b)(誤) *on the verge of being killed" \rightarrow (正) *be on the verge of being killed"53 ページ1 段落、1 行目 (第 3 章注 3)(誤) a similar type pattern \rightarrow (正) a similar pattern57 ページ例文 (3e)(誤) Fulfillment of confirmation58 ページ1 段落、13 行目 (王) the locus for the mapping of path \rightarrow (正) rub <i>in</i> the ointment66 ページ例文 (15b)(誤) run <i>in</i> the ointment \rightarrow (正) rub <i>in</i> the study were collected82 ページ2 段落、1 行目 85 ページ1 段落、1 行目(誤) 1, the value "1" \rightarrow (正) 5.1, the value "1"	viii ページ	3段落、6行目	(誤) forces of the processes →
(正)(正)(正) $hippies$ 25 ページ4 段落、5 行目(誤) can optionally by \rightarrow 36 ページ例文 (6b)(誤) b. *[[nomi-hajmeru]_SYNTACTIC \rightarrow 38 ページ例文 (9b)(誤) "on the verge of being killed" \rightarrow 53 ページ1 段落、1 行目 (第)(誤) a similar type pattern \rightarrow 57 ページ例文 (3e)(誤) Fulfillment of confirmation \rightarrow 57 ページ1 段落、13 行目(誤) the loci for the mapping of path \rightarrow 66 ページ例文 (15b)(誤) run in the ointment82 ページ2 段落、1 行目(誤) in this study was collected85 ページ1 段落、1 行目(誤) 1, the value "1" \rightarrow (正) in this study were collected(E) 1, the value "1"			(正) forces of processes
25 ページ4 段落、5 行目(誤) can optionally by \rightarrow (正) can optionally be36 ページ例文 (6b)(誤) b. *[[nomi-hajmeru]_SYNTACTIC \rightarrow (正) b. *[[nomi-hajme]_SYNTACTIC38 ページ例文 (9b)(誤) "on the verge of being killed" \rightarrow (正) "be on the verge of being killed"53 ページ1 段落、1 行目 (第 3 章注 3)(誤) a similar type pattern \rightarrow (正) a similar pattern57 ページ例文 (3e)(誤) Fulfillment of confirmation \rightarrow (正) Fulfillment or confirmation58 ページ1 段落、13 行目(誤) the loci for the mapping of path \rightarrow (正) the locus for the mapping of path66 ページ例文 (15b)(誤) run in the ointment82 ページ2 段落、1 行目(誤) in this study was collected \rightarrow (正) in this study were collected(限) 1, the value "1" \rightarrow (E) 5.1, the value "1"	15 ページ	例文 (22'b)	(誤) b. The hippies →
(正)(正)can optionally be $36 \sim - \vec{\vee}$ 例文 (6b)(誤) b. *[[nomi-hajmeru]_SYNTACTIC \rightarrow (正) b. *[[nomi-hajme]_SYNTACTIC $38 \sim - \vec{\vee}$ 例文 (9b)(誤) "on the verge of being killed" \rightarrow (E) "be on the verge of being killed" $53 \sim - \vec{\vee}$ 1 段落、1 行目 (第 3 章注 3)(II) a similar type pattern \rightarrow (II) a similar pattern $57 \sim - \vec{\vee}$ 例文 (3e)(II) Fulfillment of confirmation \rightarrow (II) Fulfillment or confirmation $58 \sim - \vec{\vee}$ 1 段落、13 行目(II) the loci for the mapping of path \rightarrow (II) the locus for the mapping of path $66 \sim - \vec{\vee}$ 例文 (15b)(II) run <i>in</i> the ointment $82 \sim - \vec{\vee}$ 2 段落、1 行目(III) in this study was collected $\vec{N} \sim - \vec{\vee}$ 1 段落、1 行目(III) in this study were collected $85 \sim - \vec{\vee}$ 1 段落、1 行目(III) in the value "1" \rightarrow (III) 5.1, the value "1"			(正) b. *The hippies
$36 \sim - \vec{\vee}$ 例文 (6b)(誤) b. *[[nomi-hajmeru]_SYNTACTIC \rightarrow (正) b. *[[nomi-hajme]_SYNTACTIC $38 \sim - \vec{\vee}$ 例文 (9b)(誤) "on the verge of being killed" \rightarrow (正) "be on the verge of being killed" $53 \sim - \vec{\vee}$ 1 段落、1 行目 (第 3 章注 3)(誤) a similar type pattern \rightarrow (正) a similar pattern $57 \sim - \vec{\vee}$ 例文 (3e)(誤) Fulfillment of confirmation \rightarrow (正) Fulfillment or confirmation $58 \sim - \vec{\vee}$ 1 段落、13 行目 (民) the locus for the mapping of path \rightarrow (正) the locus for the mapping of path $66 \sim - \vec{\vee}$ 例文 (15b)(誤) run in the ointment $82 \sim - \vec{\vee}$ 2 段落、1 行目 (民) in this study was collected $85 \sim - \vec{\vee}$ 1 段落、1 行目 $85 \sim - \vec{\vee}$ 1 段落、1 行目 <td>25 ページ</td> <td>4 段落、5 行目</td> <td>(誤) can optionally by \rightarrow</td>	25 ページ	4 段落、5 行目	(誤) can optionally by \rightarrow
100 (E)100 (E)(E)(E)(E)(E)(E)(E)(E)(E)38 ページ例文 (9b)(誤) "on the verge of being killed" \rightarrow (E) "be on the verge of being killed"53 ページ1 段落、1 行目 (第 3 章注 3)(E) a similar type pattern \rightarrow (E) a similar pattern57 ページ例文 (3e)(誤) Fulfillment of confirmation58 ページ1 段落、13 行目(誤) the loci for the mapping of path \rightarrow (E) the locus for the mapping of path66 ページ例文 (15b)(誤) run <i>in</i> the ointment82 ページ2 段落、1 行目(誤) in this study was collected85 ページ1 段落、1 行目(誤) 1, the value "1" \rightarrow (E) 5.1, the value "1"			(正) can optionally be
$38 \sim - \vec{\vee}$ 例文 (9b)(誤) "on the verge of being killed" (正) "be on the verge of being killed" $53 \sim - \vec{\vee}$ 1 段落、1 行目(第 3 章注 3)(誤) a similar type pattern \rightarrow (正) a similar pattern $57 \sim - \vec{\vee}$ 例文 (3e)(誤) Fulfillment of confirmation \rightarrow (正) Fulfillment or confirmation $58 \sim - \vec{\vee}$ 1 段落、13 行目(誤) the loci for the mapping of path \rightarrow (正) the locus for the mapping of path $66 \sim - \vec{\vee}$ 例文 (15b)(誤) run <i>in</i> the ointment \rightarrow (正) rub <i>in</i> the ointment $82 \sim - \vec{\vee}$ 2 段落、1 行目(誤) in this study was collected $85 \sim - \vec{\vee}$ 1 段落、1 行目(誤) 1, the value "1" \rightarrow (正) 5.1, the value "1"	36 ページ	例文 (6b)	(誤) b. *[[<i>nomi-hajmeru</i>] _{SYNTACTIC} →
(正)(正)(正)(正) $53 \sim - \vec{\vee}$ 1 段落、1 行目(第 3 章注 3)(正) a similar type pattern \rightarrow (正) a similar pattern $57 \sim - \vec{\vee}$ 例文 (3e)(三) Fulfillment of confirmation \rightarrow (正) Fulfillment or confirmation $58 \sim - \vec{\vee}$ 1 段落、13 行目(誤) the loci for the mapping of path \rightarrow (正) the locus for the mapping of path $66 \sim - \vec{\vee}$ 例文 (15b)(誤) run <i>in</i> the ointment \rightarrow (正) rub <i>in</i> the ointment $82 \sim - \vec{\vee}$ 2 段落、1 行目(誤) in this study was collected $85 \sim - \vec{\vee}$ 1 段落、1 行目(誤) 1, the value "1" \rightarrow (正) 5.1, the value "1"			(正) b. *[[<i>nomi-hajme</i>] _{SYNTACTIC}
53 ページ1 段落、1 行目(第 3 章注 3)(誤) a similar type pattern \rightarrow (正) a similar pattern57 ページ例文 (3e)(誤) Fulfillment of confirmation \rightarrow (正) Fulfillment or confirmation58 ページ1 段落、13 行目(誤) the loci for the mapping of path \rightarrow (正) the locus for the mapping of path66 ページ例文 (15b)(誤) run <i>in</i> the ointment82 ページ2 段落、1 行目(誤) in this study was collected \rightarrow (正) in this study were collected \rightarrow (正) 5.1, the value "1" \rightarrow (正) 5.1, the value "1"	38 ページ	例文 (9b)	(誤) "on the verge of being killed" \rightarrow
3 章注 3)(正) a similar pattern57 ページ例文 (3e)(誤) Fulfillment of confirmation \rightarrow (正) Fulfillment or confirmation58 ページ1 段落、13 行目(誤) the loci for the mapping of path \rightarrow (正) the locus for the mapping of path66 ページ例文 (15b)(誤) run <i>in</i> the ointment \rightarrow (正) rub <i>in</i> the ointment82 ページ2 段落、1 行目(誤) in this study was collected85 ページ1 段落、1 行目(誤) in the value "1" \rightarrow (正) 5.1, the value "1"			(\mathbb{E}) "be on the verge of being killed"
$57 \sim - ジ$ 例文 (3e)(誤) Fulfillment of confirmation \rightarrow (正) Fulfillment or confirmation $58 \sim - ジ$ 1 段落、13 行目(誤) the loci for the mapping of path \rightarrow (正) the locus for the mapping of path $66 \sim - ジ$ 例文 (15b)(誤) run <i>in</i> the ointment \rightarrow (正) rub <i>in</i> the ointment $82 \sim - ジ$ 2 段落、1 行目(誤) in this study was collected $85 \sim - ジ$ 1 段落、1 行目(誤) 1, the value "1" \rightarrow (正) 5.1, the value "1"	53 ページ	1段落、1行目(第	(誤) a similar type pattern $ ightarrow$
1段落、13行目(訳) Fulfillment or confirmation58 ページ1段落、13(誤) the loci for the mapping of path \rightarrow (正) the locus for the mapping of path66 ページ例文 (15b)(誤) run <i>in</i> the ointment \rightarrow (正) rub <i>in</i> the ointment82 ページ2段落、1(誤) in this study was collected82 ページ1段落、1(誤) in this study were collected85 ページ1段落、1(誤) 1, the value "1" \rightarrow (正) 5.1, the value "1"		3 章注 3)	(正) a similar pattern
$58 \sim - ジ$ 1 段落、13 行目(誤) the loci for the mapping of path \rightarrow (正) the locus for the mapping of path $66 \sim - ジ$ 例文 (15b)(誤) run <i>in</i> the ointment \rightarrow (正) rub <i>in</i> the ointment $82 \sim - ジ$ 2 段落、1 行目(誤) in this study was collected $85 \sim - ジ$ 1 段落、1 行目(誤) 1, the value "1" \rightarrow (正) 5.1, the value "1"	57 ページ	例文 (3e)	(誤) Fulfillment of confirmation \rightarrow
Image: Second state(正)(正)(正)(正)(正)(正) $66 \sim - \vartheta$ 例文 (15b)(誤)(誤)run in the ointment \rightarrow (正)(正)rub in the ointment $82 \sim - \vartheta$ 2 段落、1 行目(誤)in this study was collected $85 \sim - \vartheta$ 1 段落、1 行目(誤)1, the value "1" \rightarrow (正)(正)			(正) Fulfillment or confirmation
$66 \sim - ジ$ 例文 (15b)(誤) run <i>in</i> the ointment \rightarrow (正) rub <i>in</i> the ointment $82 \sim - ジ$ 2 段落、1 行目(誤) in this study was collected \rightarrow (正) in this study were collected \rightarrow (正) in this study were collected $85 \sim - ジ$ 1 段落、1 行目(誤) 1, the value "1" \rightarrow (正) 5.1, the value "1"	58 ページ	1段落、13行目	(誤) the loci for the mapping of path \rightarrow
1111182 ページ2 段落、1 行目(誤) in this study was collected \rightarrow (正) in this study were collected85 ページ1 段落、1 行目(誤) 1, the value "1" →(正) 5.1, the value "1"			(\mathbb{E}) the locus for the mapping of path
 82 ページ 2 段落、1 行目 (誤) in this study was collected → (正) in this study were collected 85 ページ 1 段落、1 行目 (誤) 1, the value "1" → (正) 5.1, the value "1" 	66 ページ	例文 (15b)	(誤) run <i>in</i> the ointment \rightarrow
OutputOutputOutput \rightarrow (正) in this study were collected85 ページ1 段落、1 行目(正) 5.1, the value "1"			(正) rub <i>in</i> the ointment
85 ページ 1 段落、1 行目 (誤) 1, the value "1" → (正) 5.1, the value "1"	82 ページ	2 段落、1 行目	(誤) in this study was collected
85 ページ 1 段落、1 行目 (誤) 1, the value "1" → (正) 5.1, the value "1"			\rightarrow
(正) 5.1, the value "1"			(\mathbb{E}) in this study were collected
	85 ページ	1段落、1行目	(誤) 1, the value "1" →
91 ページ 例 I Loanword (調) rirakusu→			(正) 5.1, the value "1"
	91 ページ	例 I. Loanword	(誤) rirakusu→
(正) rirakkusu			(正) rirakkusu
102 ページ 表 5.8 Count の順番に誤がありました。上か	102 ページ	表 5.8	Countの順番に誤がありました。上か
ら下 count の合計の数字が順番に並ぶ			ら下 count の合計の数字が順番に並ぶ
ように調整しました。			ように調整しました。
105 ページ 表 5.9 Count の Total (合計)の順番に誤があ	105 ページ	表 5.9	Count の Total (合計)の順番に誤があ
りました。合計の数字が順番に並ぶよ			りました。合計の数字が順番に並ぶよ
うに「~上げる」と「~上がる」とい			うに「~上げる」と「~上がる」とい
う二つの項目の順番を直しました。			う二つの項目の順番を直しました。

105 ページ	2 段落、2 行目	(誤) while <i>deru</i> was third \rightarrow
		(正) while <i>deru</i> was fourth
120 ページ	2段落、6行目	(誤) encode <i>out</i> in it's basic →
		(\mathbb{E}) encode <i>out</i> in its basic
123 ページ	例文 (14)	(誤) <i>bīfusutēki →</i>
		(正) bifuteki
134 ページ	2段落、1~2行目	(誤) pairs of a phrasal verbs→
		(正) pairs of a phrasal verb