A CROSS-LINGUISTIC EXPLORATION INTO THE SEMANTICS OF ENGLISH, JAPANESE AND MANDARIN RESULTATIVES

(英語、日本語および中国語における
結果構文の意味論に関する言語横断的研究)

Takeo Suzuki
鈴木武生

The Department of Language and Information Sciences
The Graduate School of Arts and Sciences
The University of Tokyo

June 2010

A CROSS-LINGUISTIC EXPLORATION INTO THE SEMANTICS OF ENGLISH, JAPANESE AND MANDARIN RESULTATIVES

A DISSERTATION SUBMITTED TO THE GRADUATE SCHOOL OF ARTS AND SCIENCES, THE UNIVERSITY OF TOKYO IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

IN

LINGUISTICS

JUNE 2010

BY

Takeo Suzuki

Dissertation Committee:

Eijiro Tsuboi, Chairperson
Yang Kairong
Shigeru Sakahara
Atsuko Kondoh
Kaoru Koda

Acknowledgements

The journey of my research into lexical semantics of resultative constructions in English, Japanese and Mandarin began ten years ago. I have spent better than half of these past ten years on the collection and processing of linguistic data of English resultatives, Japanese V-V compounds and Mandarin V-V compounds for further analysis. Defining a common theoretical platform to capture the differences in semantic features of resultatives across these three different languages was a much more difficult process than I first expected. However, I have been lucky to have opportunities to get kind and valuable advice as well as unconditional assistance from many people during the course of my research. I wish to thank all the individuals that provided me such support, without which the completion of this dissertation would never have been possible.

First and foremost, I must thank my primary supervisor Associate Prof. Eijiro Tsuboi for his critical comments and insightful suggestions. He gave his time generously to guide me through the process of defining and improving the grammatical framework for the description of the target linguistic phenomena.

I also would like to extend my appreciation to the dissertation committee members Prof. Yang Kairong, Prof. Shigeru Sakahara, Prof. Atsuko Kondo and Prof. Kaoru Koda for providing their very useful and valuable comments from their respective specialized perspectives. In particular, Prof. Yang gave much of his time to advise me on how to treat the related grammatical issues of Mandarin from the viewpoint of cognitive grammar. Prof. Hideki Kimura and Prof. Christine Lamarre also deserve thanks for helping me solve a few, but nevertheless important, questions regarding other related constructions in Mandarin.

My gratitude extends to Prof. Taro Kageyama, Prof. Yo Matsumoto, Prof. Misato Tokunaga and Prof. Yoko Yumoto, who all kindly gave me inspiring advice and comments when, at various linguistics conferences, I presented preliminary research connected to this paper.

I am deeply grateful to the many others who have made substantial contributions, including George Berninger, Mike Lloret and Anton MacDonald, for the arduous task of proofreading and double checking the linguistic data; my friend Kerman Jouni, who helped me to process a massive amount of complicated text data for our corpus and databases by developing special software programs; my native informants and fellow researchers, including Makoto Akiyama, Chen Shun-yi, Gao Yang, Ho Hsueh Fen, Lei Guilin, Li Kuanhsien, Lin Limei, Tamae Lindo, Lu Jian, Karen Mack, Miyuki Matsuoka, Teo Chuu Yong, Wang Yinghui, Xu Yongxin, Yang Ming, Yuen Wing Shan, Zhang Chao and Zhang Penglei for providing me with insightful advice and suggestions.

I also wish to thank my friends Antoon Burgers, Eiichi Kusano and Shinji Suzuki for their warm encouragement that lifted my spirits whenever I felt disheartened along the way.

Last but not least, I would like to thank my family and, in particular, my wife Tomoko, for their patience and constant support and understanding which helped me complete this study in time. This dissertation is also dedicated to the memory of my sister Eimi, who, more than anyone, was looking forward to its completion.

Abstract

This paper explores the semantic features of resultatives in English, Japanese and Mandarin. English encodes resultative events syntactically, whereas Japanese does so in the form of morphological compounds. Mandarin also realizes resultative constructions by means of compounds. However, despite the nature of their morphological structures, Mandarin V-V compounds also show a change of syntactic valence such as causative alternations.

In terms of agentivity or causativity, English AP resultatives denote the agent/patient opposition encoded in the first causing segment of the causal chain. Therefore, to link the causing segment to the result segment, the theme argument of the result predicate must be linked to the patient argument of the verb, not the agent argument. In contrast, Mandarin and Japanese V-V compounds can ignore this linking condition. In these languages, the theme of change of state event can be linked to the agent of the verb. This suggests that in these two languages, resultatives do not necessarily have a causative event structure. Therefore, an agentive event can start at the second node of the causal chain by linking the agent to the theme of change of state.

In the semantics of the temporal relation between the causing event and the result events, it is shown that English AP resultatives have stronger constraints on the mediation of a temporal gap between the two subevents than Japanese or Mandarin do. In particular, Mandarin resultatives allow such a temporal gap considerably freely. This seems to be correlated with our claim that Mandarin resultatives do not necessarily encode a causative relation in the underlying event structure.

As for aspectual structures, the event structure of Mandarin resultatives does not rely on the causal chain, but on the temporal transition chain between the V1 event and the V2 event. This type of event structure enables the appearance of a situational causer in the subject position. This temporal transition chain is structured by the compounding of the two subevents. In this sense, if one claims that the compound head specifies aspectual information of the compound, the existing definition of the compound head should be reconsidered.

Japanese V-V compounds, because of their nature as being genuine lexical compounds, show different behaviors that cannot be found in English or Mandarin. In this discussion, it is proposed that Japanese V-V compounds are subject to the Causal Hierarchy Condition when V1 selects its partner V2. Since the notion of cause cannot syntactically be encoded, it has to be encoded in either V1 or V2. If the notions of

manner/means and cause are to be encoded in a single compound, the notion of manner/means must be encoded in V1 and the notion of cause in V2, because verbs of manner/means are higher than lexical causative verbs in the verb hierarchy.

This paper also makes an attempt to explore the boundary between two opposite approaches to resultatives: the lexical approach and the construction grammar approach. In particular, one of the most important themes is to explicate the semantics of how each lexical component is construed in relation to the whole construct, as well as of how the whole construct governs the components. Based on close examination of the grammatical features of resultatives in the three typologically different languages, we suggest that the semantic relation of an expression is determined in the way that the semantic elements are merged into a larger, seamless whole, which in turn governs the semantic distribution of the components. In other words, a sentential meaning is determined through a dynamic semantic relativism among the components, and also among the whole construct and its components.

Table of Contents

Abbreviations

General Abbreviations

Acc ..... Accusative marker
Asp ..... Aspect marker
Caus ..... Causative marker
Cl ..... Classifier
Comp ..... Complementizer (*no*, の)
Cpl ..... Copula
Deic ..... Deictic motion verb
Gen ..... Genitive marker
Grd ..... Gerund
Loc ..... Locative marker
Neg ..... Negation morpheme
Nom ..... Nominative marker
Oblq ..... Oblique marker
Pas ..... Passive marker
Prf ..... Perfect marker
Prg ..... Progressive marker
Prt ..... Particle
Pst ..... Past morpheme
Pth ..... Path
Intrg ..... Interrogative particle

Special Abbreviations for Mandarin

BA ..... Accusative marker (把)
BEI ..... Passive marker (被)
DEp ..... Potential maker (得)
DE ..... Degree/Manner complement marker (得)
DI ..... Adverbial ending (地)
DUR ..... Durative/Progressive marker (在)
JIU ..... Emphatic adverb (就)

Chapter 1

Introduction

1.1 General Overview of Previous Studies on Resultatives

Theoretical linguistic studies on resultatives began when Simpson (1983) proposed her "Simpson's Law," also known as the Direct Object Restriction (DOR), which states that the resultative phrase must be predicated of the object argument in English resultatives. Over the past two decades after her distinguished analysis on English resultatives, various studies have vigorously been undertaken to explore the syntax-semantics interface of resultatives.

The early stage of the studies on resultatives mainly focused on the syntactic analyses of the construction, including Hoekstra (1988, 1992) and Carrier & Randall (1992). The former proposed the Small Clause Analysis assuming a binary branching structure; the latter discussed the relation between the argument structure and the syntactic structure, based on a ternary branching structure analysis.

In the early 1980's, Jackendoff (1983) provided the basis for the lexical semantics by introducing the notion of conceptual structure. This view underlines the supremacy of semantics over syntax, and provides a theoretical basis for semantic accounts of grammatical relations in various syntactic constructs.

The trend for a greater emphasis on semantic accounts was spurred by a series of vigorous studies starting in the late 1980's on the relation between verb meanings and argument realization. Such literature includes: Pinker (1989), Jackendoff (1987, 1990, 1991), Pustejovsky (1991a), Levin & Rappaport Hovav (1991) (hereafter L&RH), and Levin (1993) among others. These studies share the view that the Lexical Semantic Structure (LCS) is the syntax-semantics interface that maps verb meanings and syntactic representations via the argument structure.

Resultatives raised very important questions about syntax-semantics mismatches, and therefore they have been of the greatest interest to many researchers, including L&RH (1991, 1995, 1999), Kageyama (1996), Rappaport Hovav & Levin (1998, 1999a, 1999b, 2001) (hereafter RH&L), Wechsler (1997b, 2000), Alsina (1996), and Verspoor (1997), among others. In particular, L&RH and RH&L propose that the DOR is tenable as a grammatical principle of resultatives, and that the argument realization of resultatives is principled by the event structure.

One of the early typological studies on resultatives includes Nedjalkov (1988), who proposes six subclasses of resultatives based on the observation of a cross-linguistic

variety of resultatives. Washio's (1997, 2003) typological approach on resultatives provided a new dimension to the studies on resultatives. In his study, he proposed a set of semantic parameters: strong resultative and weak resultative[1] to classify resultatives of English, Japanese and French. His approach was adopted by Tsuzuki (2007), who examined the distribution of strong and weak resultatives using PP and AP, in English, German, Dutch, French and Italian respectively.

Other important theoretical frameworks for the studies on resultatives include: the generative lexicon grammar by Pustejovsky (1991b, 1995); the aspectual account by Tenny (1992, 1994, 1995); the construction grammar approach by Goldberg (1995), Boas (2003), Goldberg and Jackendoff (2004); and the functional grammar account by Takami & Kuno (2002).

Above all, Goldberg's construction grammar approach should be noted in that the theory considers the construction as a gestalt representation of components of the sentence. The theory assumes a monostratal structure between meaning and syntax, discarding the notion of syntactical derivation. The construction account regards a resultative as a gestalt whole of the syntactical components. In this theory, the syntax-semantics mismatches are explained not in terms of grammatical constraints attributed to lexical properties, but in terms of a polysemous network of constructions that encodes a grammatical relation of event participants in conventionalized scenarios.

1.2 The Purpose of This Dissertation

The purpose of this dissertation is to examine whether or not these previous discussions and proposals of grammatical constraints on resultatives are applicable to other languages with different typological features, i.e., Japanese and Mandarin. Japanese and Mandarin can represent resultative events in the form of V-V compounds. Thus, for these two languages, V-V compounds will be examined in this study as grammatical constructs to denote resultative events. This study also aims to explore cross-linguistic and language-specific grammatical principles that underlie the argument realization of resultative constructions of English, Japanese and Mandarin.

In this dissertation, I will examine resultative examples from various data resources including an existing corpus, dictionaries, and a newly created corpus of texts from novel texts. Throughout the chapters, our discussions will mainly focus on the following questions:

[1] A "weak" resultative is a sentence where the verb implies the result state of its object, as an expression in *wiping the table clean*; a "strong" resultative is a sentence where the verb does not imply the result state of the object, as in *pounding the metal flat*.

(1) Agentivity of the subject argument as well as the validity of the Animate Instigator Restraint.[2]
(2) Causativity: syntax-semantics mismatches and causative alternation
(3) Constraints on the object argument and the tenability of the DOR
(4) Temporal relations between the causing event and the caused event.
(5) Aspectual properties of predicate components and compounds
(6) Compounding principles of V1 and V2 in Japanese and Mandarin V-V compounds
(7) Two types of causative relations encoded: causal chain and temporal transition

1.3 The Organization of This Dissertation

Chapter 2 argues for the two types of grammatical principles that license English resultatives. The chapter begins with a review on the semantic constraints on the subject argument of adjective resultatives (AP resultatives) and prepositional resultatives (PP resultatives) by examining the data from the British National Corpus (BNC). Also, semantic constraints on the object argument are discussed.

Next we will discuss the validity of Goldberg's endpoint account based on the BNC data, and examine what types of verbs can co-occur with particular types of adjectives.

In conclusion, we argue that two parameters are involved in the semantics of English resultatives: verbal causativity and boundary of the result predicate. These two properties are relevant to the semantics and grammatical constraints of various subtypes of resultatives. These properties also play an important role in causativization of agentive verbs of manner of motion[3].

Chapter 3 focuses on the grammatical principles that license the compounding of the component verbs of V-V compounds. We will begin with the general overview of the previous major studies on Japanese V-V compounds, as well as the general semantic characteristics of V-V compounds.

In Section 3.3, we will discuss the agentivity/causativity of V-V compounds to explore the grammatical conditions that license inanimate causers in V-V compounds. In the discussion, it is proposed that V-V compounds allow an inanimate causer subject when they denote a non-physical or metaphorical causative event.

In Section 3.4, we delve into the temporal relations between the causing event and the caused event, and then we will scrutinize the telicity of events denoted by V-V compounds. It is generally considered that V2 determines the aspect and telicity of the

[2] The subject argument of a causative resultative has to be an animate agent.
[3] They include verbs like *jump*, *march*, *run*, etc.

compound. However, we will discuss how V1 also plays an important role in determining the aspect of the compound.

In Section 3.5 we closely examine the compounding principles of component verbs based on the analyses of the general distribution of actual compounding patterns. Then we claim that the compounding of component verbs of Japanese V-V compounds generally follows the verbal hierarchy based on the causal chain.

Chapter 4 argues that Mandarin resultative verb constructions (RVC) employ a different cognitive schema from the causal chain in order to represent a causative relation. We begin by the general overview of RVCs and Directional Verb Constructions (DVC), which are represented in the form of V-V compound respectively. Then we will take a brief look at the previous studies and accounts for syntax-semantics mismatches of RVCs.

In Section 4.3, we first discuss the agentivity/causativity of RVCs. It has been known that RVCs license the object argument as the causer, and this has long been the center of debate. To answer this question, we will analyze the semantic constraints on the selection of the causer subject, and will also compare them with the data from other Chinese dialects.

In Section 4.4, we consider aspectual characteristics of V-V compounds including the issue of possible temporal relations between the component verbs.

In Section 4.5, compounding patterns of component verbs are closely examined by analyzing the results of our statistical data. The conclusion of the analyses suggests that to encode causative events, Mandarin RVCs employ a fundamentally different cognitive schema—the notion of temporal transition—from the causal chain .

Finally in Section 4.6, we will refer to the issues of the headedness of V-V compounds as well as the general conditions for “non-canonical” arguments to be realized in syntax. As a conclusion of the discussion here, we claim that in Mandarin RVCs, the aspectual properties of events are not determined by a sole single lexical component such as V2. This poses a question about the validity of the traditional assumption that the component that determines the aspect of the compound can be considered as the head.

Chapter 2

Reviewing Questions on Semantic Constraints on Resultative Constructions

This chapter deals with current issues related to semantic constraints on the event conflation of English resultative constructions, and discusses related questions based on the result of my analyses of the additional data, including those gained from the BNC. These issues include semantic constraints on: 1) subject NPs; 2) object NPs; 3) selected types of verbs and adjectives; and 4) other distinctive properties of the event aspect of resultatives. In the final section of this chapter, following the discussions on the above issues, I will claim that the event structure of English resultatives is conflated according to the agent-patient causative hierarchy principle, which determines the grammaticality and the rigid organization of the argument structure of English resultatives.

2.1 Semantic Constraints on Subject NPs

2.1.1 Animate Subject vs. Inanimate Subject in Causative Event

There long have been discussions over the legitimate properties of subject NPs that appear in resultative constructions, particularly over the licensing of an inanimate noun in the subject position. This question not only has been discussed in the framework of the resultative construction, but has also been a major topic in the study of the semantics of causative expressions. Lakoff (1977) lists 14 prototypical features of the agent in causative events as in (1).

(1) Lakoff's 14 Prototypical Properties of Agent in Causative Event

1. There is an agent, who does something.
2. There is a patient, who undergoes a change to a new state.
3. The change in the patient results from the action by the agent.
4. The agent's action is volitional.
5. The agent is in control of what he does.
6. The agent is primarily responsible for what happens.
7. The agent is the energy source in the action; the patient is the energy goal.
8. There is a single event. (There is spatiotemporal overlap between the agent's action and the patient's change.)

9. There is a single, definite agent.
10. There is a single, definite patient.
11. The agent uses his hands, body, or some instrument.
12. The change in the patient is perceptible.
13. The agent perceives the change.
14. The agent is looking at the patient. (Lakoff 1977: 244)

Lakoff includes not only a volitional animate agent—classical property for agentivity, but also an event-causing energy source, and body part or instrument. According to Langacker's (1987, 1991) action chain model, the agent is conceptualized as the source of energy flow in contrast to the patient as the goal of the energy flow, and the instrument is located immediately downstream of the action chain as the extensional domain of the agent. In fact, Langacker (2000) points out that an inanimate agent can also appear in a causative event as shown in (2).

(2) a. This key opened the door. (Instrument)
b. An explosion woke me up. (Natural force) Langacker (2000: 32, (4b), 5(b))

2.1.2 Status of Inanimate Agent in Resultatives

L&RH (1995) admit that a natural force can appear in a causative event in principle, but they point out that its legitimacy as the agent is subject to the semantics of each verb that appears in the sentence.

(3) a. *The explosion assassinated/murdered the senator.
b. *The lightning cut the clothesline.
c. ??The wind removed the clouds from the sky. (L&RH: 1995; (45b), (49b), (50a))

Levin (1993) observes that the acceptability of an instrumental subject in a causative event is determined by the distinction between an intermediary instrument and a facilitating (or enabling) instrument. Intermediary instruments turn up a subject, but facilitating instruments do not.

(4) a. The crane loaded the truck. (Intermediary instrument)
b. *The pitchfork loaded the truck. (Facilitating instrument)
(Levin 1993: 80, (277a, b))

For the resultative construction, Goldberg (1995) proposes the (Animate) Instigator Restraint, which stipulates that only animate instigator arguments are acceptable in two-argument resultative constructions. Thus, Goldberg judges unacceptable the following examples in (5), which were cited by Randall (1983).

(5) a. (*) The jackhammer pounded us deaf.
b. (*) The alarm clock ticked the baby awake. (Randall 1983)

Based on the data exhibited in the above discussions, it is a fact that causative events require the subject noun to have a certain degree of agentivity. However, the agentivity of a subject seems to be influenced by our pragmatic knowledge as shown in (4a, b), and also by the meaning of the matrix verb of the subject noun as seen in the difference between (2b) and (3a).

2.1.3 Closer Look at Data from BNC

I used the search condition template [NP + Verb + (Article)[1]+ (NP) + AP] for AP resultative examples in the BNC for analyses of various linguistic properties of the construction and its components. However, self-reflexive nouns, such as *yourself* and *itself*, are excluded from the search target of the second "NP" in the template. The self-reflexive resultatives (such as *laugh oneself sick*) are different from other "normal" resultatives in that they are usually used as hyperbolic expressions. As a result of the search, I found a total of 1289 hits.

These examples comes in three types: 1) "normal" AP resultatives (816 instances), 2) AP resultatives headed by *drive, run, send* or *turn* (186 instances), and 3) render-headed resultatives (287 instances).

First of all, I studied the distinctive properties of subject NPs in 816 "normal" AP resultative instances found in the above search. The data do not include AP resultatives headed by *drive, run, send, turn or render*, and those headed by periphrastic causative verbs (*get, have, let* and *make*). Such AP resultatives should be handled separately from normal AP resultatives because they obligatorily require the result predicate as the complement in resultative use. Those headed by *drive, run, send, turn or render* will be discussed separately in following sections.

Table (6) shows the distribution of subject NPs of 816 normal AP resultatives by the semantic type. (For the complete data, see Appendix A1.)

[1] The parenthesized "article" is an optional element in the template. The parenthesized "NP" to the right means that it is not included in the query template for intransitive resultatives.

(6) Distinctive Properties of Subject NPs in “Normal” AP Resultatives

Entity Type	Instances	Percentage	Example
Animate agent	735	90.1%	...heard a tearing sound as a blade impaled his sleeve, and he wrenched it free. ...
Natural force	19	2.3%	A great wind of rage seemed to blow her along the passage, flung the door open and then ...
Instrument	5	0.6%	...she found it was no easy task to move the balance beam which swung the gates open.
Body part	13	1.6%	This time the hiss was louder and strong fingers gripped his shoulder and shook it, jerking him awake.
Inanimate causer	35	4.3%	America's economic sanctions failed to dislodge General Manuel Noriega but squeezed the economy dry.
Unable to be classified	4	1.1%	Less generous names suggested were Wiping the Slate Clean, and We're Only Making Holds for Nigel.

These results generally coincide with the claim commonly made in the literature: resultatives show a strong tendency to select an animate agent in the subject position. A natural force or instrument can be considered as an extension of the animate agent. However, a strong constraint, such as Goldberg’s Instigator Constraint, does not seem to completely hold because some resultatives found in the BNC allow inanimate subjects, as shown in (7a, b). Such inanimate subjects include the subclasses of physical objects (such as items, products, devices/machines, etc.), events, activities, beliefs/thoughts, psychological states, news, chemicals, etc. In the following examples, a device and faith, respectively, are licensed as the causer subject.

(7) a. Device

...Well, like I said, I was sound asleep when Danny's receiver started crackling and jerked me awake. ‘Hello! Hello! Calling Butcher's Boy! Come in Butcher's Boy!’...

(BNC)

b. Faith

...The word of the Lord may have to do with faith in God that cuts people free from besetting depression, it may have to do with simple lifestyle or it may have ... (BNC)

Furthermore, causative change verbs, such as *drive*, *turn* and *render*, show far greater acceptability of inanimate causers. For example, non-animate causers are more likely to appear in a resultative with the verb *drive* (144 instances in total), than animate agents are. The following table shows the statistical data of AP resultatives with the verb *drive* from the BNC. (For complete data, see Appendix A2.)

(8) Subject NPs Appearing in AP Resultatives with Verb *Drive* (Total of 144 Instances)

Entity Type	Instances	Percentage	Examples
Agent	51	35.4%	...his mother and father drove him frantic with their endless harping on irrelevancies...
Natural force	3	2.1%	...The wind will drive you onshore. Get into the trees and make for high ground. ...
Instrument	0	0%	No example
Body part	0	0%	No example
Inanimate causer	82	56.9%	On Sundays, it's flipping football, and it drives me!
Unable to classify	8	5.6%	...The Abyss, Young Einstein, Lola, Asterix and the Big Fight and Driving Me Crazy By SHEILA JOHNSTON WE ARE unlikely to learn many secrets of the soul when the Enterprise sallies forth next week in Star Trek V;...

What causes this striking difference in the acceptability of inanimate causers in the resultative construction? One way to account for this is to say that the semantics of individual verbs is responsible for such a difference because the examples in (6) and (7) all denote resultative events by means of an identical syntactical configuration. Furthermore, the verb *turn* (33 instances in total) shows an even greater preference for inanimate causers as the subject. (For complete data, see Appendix A3.)

(9) Subject NPs Appearing in AP Resultatives with Verb *Turn* (Total of 33 Instances)

Entity Type	Instances	Percentage	Example
Agent	10	30.3%	...He was too wise and experienced a horseman to attempt to force them to go forward: instead he turned them short and proceeded to plough another stetch....
Natural force	3	9.1%	...Frost ain't good for plants, it turns them black and kills them off if you ain't careful,...
Instrument	0	0%	No example
Body part	0	0%	No example
Inanimate causer	19	57.6%	...Polluted water often smells, and a serious and persistent pollution may turn a stream anaerobic, causing it to give off hydrogen sulphide,...
Unable to classify	1	3%	... composite index rose 0.18 to 246.42. #2.2m Venables star bid turned partnership sour By Eric Brown Daily Post Correspondent TERRY Venables and Alan Sugar were all smiles when ...

As shown in the figures in (9), inanimate causers account for about 60% of all resultative instances with the verb *turn*. At this stage of the discussion, I consider it tenable to claim that resultatives typically license animate agents, but they also allow inanimate causers as the legitimate subject as long as (a) particular linguistic condition(s) is/are met, because not all inanimate causers are unconditionally banned in the construction.

To get a clearer picture of the status of agents in resultatives, I will examine the data of PP resultatives gained from the BNC.

2.1.4 Comparison with Data from PP Resultatives

Now let us take a look at the distribution of agents in PP resultatives. I will take up resultative examples with the preposition *into* for this comparison. The examples were obtained from the BNC by means of the search template [NP + Verb + Article[2] + NP +

[2] To find PP resultative sentences data for this study, I used a template that only searches for

into + NP]. A total of 3,820 instances were found by the query template. They include PP resultatives headed by 1) normal verbs (2,705 instances); those by *drive* (50 instances) and *turn* (287 instances); those by verbs of transportation, such as *bring* (189 instances), *carry* (24 instances), *send* (24 instances), *take* (195 instances); those by verbs of putting, such as *put* (353 instances) and *set* (2 instances); those by periphrastic causative verbs, such as *get* (93 instances), *let* (11 instances), *make* (30 instances). However, render-headed PP resultatives are not included in this paper in order to keep the data size under a controllable level.

Furthermore, I will not handle those resultatives with either a bare noun object, a pronoun object or a reflexive object for the convenience of reducing the total hit number. (For the complete data, see Appendix A4.)

(10) Subject NPs Appearing in PP Resultatives with *into* (Total 3,820)

Entity Type	Instances	Percentage	Example
Agent	2,214	58%	...Acceptance, as used here, means that people begin to absorb the experience into their everyday life so that it can be coped with instead of dominating their every...
Natural force	0	0%	No example
Instrument	35	0.9%	...The lens in both the eye and the camera brings the world into focus...
Body part	6	0.2%	...She was drinking her tea, making a comfortable watery chirrup as her long upper lip drew the tea into her mouth...
Inanimate causer[3]	291	7.6%	...But video installation calls the viewer into spatial relationship with the object,...
Unable to judge	51	1.3%	... require different methods, the preliminary step is the same in both cases. This consists of analysing the coins into groups or categories of similar coins, since it is always easier to situate a large ...

sentences including direct object NPs with an article, but not those sentences with bare object NPs or object pronouns because of the limitation on my time available for the data analyses.

[3] The percentage of inanimate causers found in all subject types differs from verbs to verbs: *set* (50%), *send* (41.7%), *let* (27.3%), *bring* (24.9%), *drive* (24%), *make* (13.3%), "normal" verbs (7.3%), *turn* (5.4%), *get* (4.3%), *put* (1.4%), *take* (2.6%) and *carry* (0%).

The percentage of inanimate causers is 7.5%, which is close to the percentage observed in the statistics for AP resultatives (6). This fact shows that the English resultative construction consistently allows a certain percentage of inanimate causer NPs as the subject despite the difference in the resultative component AP or PP. Like the case of AP resultatives, the acceptability of inanimate causers largely relies on the meaning of the verb used in the construction. For example, the predicate *pour into* together with the agent subject was found in 52 sentences in the BNC, but no examples with the inanimate causer subject. In contrast, the predicate *divide into* allows both an agent and inanimate causer as the subject. The following is part of the distribution data of agent vs. inanimate causer in the BNC. The first figure in the parentheses shows the number of examples with an agent subject, while the latter shows those with an inanimate causer subject.

(11) Difference in Acceptability of Inanimate Causer by Verbal Meaning in BNC Data
Verbs that do not accept inanimate causers:
pour (52:0), *slip* (33:0), *drop* (36:0), *break* (23:0), *dip* (19:0)
Verbs that accept inanimate causers:
divide (113:34), *lead* (41:15), *force* (18:13), *draw* (20:12), *plunge* (16:9)

We will discuss this topic again from the viewpoint of verbal semantics in Section 2.5.3.

2.2 Grammatical Restraints on Object NPs of Resultatives

2.2.1 Grammatical Status of Direct Object Restraints

The Direct Object Restraint (DOR), also known as Simpson's law (1983), has been one of the main issues of lexical semantics in various discussions over the validity of the unaccusative hypothesis. This constraint expresses the grammatical principle that in the resultative construction, the result phrase is predicated of the internal argument, which is mapped to the object position in syntax. This principle was once challenged by the counterevidence presented by Wechsler (1997) and Verspoor (1997).

(12) a. The wise men followed the star out of Bethlehem. (Wechsler 1997: 313, (15))
b. John danced mazurkas across the room. (Verspoor 1997: 151, (4.102))

To explain the grammatical property that differentiates "genuine" resultatives from the non-canonical examples in (12), RH&L (2001) propose a force recipient analysis based on Croft's (1991, 1998) causal chain model, which assumes the basic properties of

prototypical causative sentences.

(13) a. A simple event is a (not necessarily atomic) segment of the causal network;
b. simple events are nonbranching causal chains;
c. a simple event involves transmission of force;
d. transmission of force is asymmetric, with distinct participants as initiator and endpoint (Croft 1991: 173)

RH&L discuss two possible interpretations of a sentence like *Tracy wipes the table clean*. The first interpretation is interpreted with *clean* predicated of the object and the second of the subject. They argue that English resultatives do provide evidence for the assumption that unaccusativity is syntactically encoded. Consider the examples in (14).

(14) a. Tracy wipes the table clean.

b. Tracy $\xrightarrow[\text{ACT ON}]{}$ table $\xrightarrow[\text{CHANGE}]{}$ table (RH&L 2001: 788 (53))

c. Tracy $\begin{cases} \xrightarrow{\text{CHANGE}} \text{Tracy} \\ \xrightarrow{\text{ACT ON}} \text{table} \end{cases}$ (ibid: 789 (54))

RH&L explain that the transmission of force from the subject to the object as the force recipient contributes to the connection of the two segments ACT ON and CHANGE in the causal chain, as diagramed in (14b). The branching diagram in (14c) violates (13b), and thus (14c) does not hold in a causative relation. Likewise, the examples (12a) and (12b) cannot be interpreted as resultatives either.

2.2.2 Closer Look at Force Recipient Account

RH&L (2001) support Jackendoff's (1990) view as to what specifies the force recipient in the causal chain. Jackendoff states:

> ...the Patients are probably not "grammatical Patients" — that is the Patient is not licensed by the verb itself. Rather, these NPs are Patients by virtue of discourse or pragmatics: a story is generated in which the Actor somehow adversely affects the Patient. (Jackendoff 1990: 230)

What is important in his insight above is that the verb is not the sole licenser in the resultative construction. The following examples are considered to be cases in which the XP licenses the postverbal NP as the force recipient or patient.

(15) a. ??The general marched the soldiers/The general marched the soldiers to the tents.
b. ?The rider jumped the horse/The rider jumped the horse over the fence.
c. *We ran the mouse/We ran the mouse through the maze.
(L&RH 1995: (69b, c), (70b, c), (80b, c))

In the above examples, it is considered that the PPs enable the original event type denoted by the intransitive motion verbs to be reinterpreted as events of the causative change of location. Thus, the examples sound less felicitous without the PP phrases. PPs are capable of helping licensing unsubcategorized postverbal NPs as the force recipient. However, they also help change the semantic status of the postverbal NPs. Consider the examples below:

(16) a. The servant lit candles around the corridor.
b. The kid buzzed the doorbells along the street.
c. The man collected garbage cans down the road.

The PPs in (16a, b, c) are all predicated of the subject, not the object. The above events do not represent a causative change of state but rather intransitive events of agentive motion, since the postverbal NPs are construed as the objects aligned throughout the path of intransitive motion of the subject. Interestingly, (17a, b) are illegitimate in the "what X did to Y is" test, but (17c) is felicitous in the test.

(17) a. *What the servant did to the candles was to light them around the corridor.
b. *What the kid did to the doorbells was to buzz them along the street.
c. What the man did to garbage cans was to collect them down the road.[4]

According to RH&L's account, for the higher activity subevent to be connected to the lower change of state/location event, the object in the activity subevent must be a force

[4] I think this sentence falls between OOR and SOR. Nevertheless I think it is SOR because the sentence does not describe the result of the cans but the activity done by the agent along the path. What distinguishes it from the OOR sentence (*The rider jumped the horse over the fence*) is, I think, the plurality of the objects, *garbage cans*.

recipient. The verbs *light*, *buzz* and *collect* are all transitive although there is some degree of difference in transitivity. The objects in (17), though not typical, can be considered force recipients in RH&L's term, because they are affected by the external causer. Now a question arises. What makes (17c) legitimate? It is the implication that the "garbage cans" are being carried down the road together with the garbage collector. On the other hand, the objects in (17a, b) have no implication of motion down the path.

2.2.3 Objects Aligned throughout Motion Path

Let us take a look at the argument linking of the subject-oriented resultative in (17c). The sentence is repeated in (18). Note that the LCS in (18) is used for convenience of explanation:

(18) The man collected garbage cans down the road.

[[x ACT ON y1] CAUSE [y2 MOVE [TO z]]]

Agent Patient Theme Goal

Force recipient (change of state)

Theme (change of location)

In (18), the PP *down the road* licenses the entire event as the motion event despite the type of event denoted by the main verb *collect*. In the case of intransitive PP resultatives, the agent argument *x* can be reinterpreted as the agentive theme in the motion event, which is licensed by the PP. Furthermore, as mentioned in 2.2.2, the postverbal object can be interpreted as a group of objects located throughout the path of the motion.[5] Thus the theme argument *y2* (*the man*) can look for an argument in the higher subevent for linking, and it can be linked to the agent argument *x* (*the man*), ignoring the patient argument *y1* (*garbage cans*).

In the above sentence, for the DOR to hold, the argument *y2* has to be linked to the argument *y1*. However, this principle can be cancelled when the argument *y1* is interpreted as a group of objects that are aligned through the motion path of the argument *x*, even if the argument *y1* is a force recipient in the activity event. This exceptional argument linking is only possible in intransitive PP resultatives, and it is not

[5] For this reason, a sentence like *He read a book out of the room* is ruled out because the object "book" is not a group of objects located throughout the path of the motion.

[6] The PP *to death* is applicable to the verb phrase. However, although it emphasizes the degree of change of state, it does not represent a physical or metaphorical change of location event.

allowed in intransitive events of change of state denoted by AP resultatives. This is the definitive difference between PPs and APs in English. The agent argument can be given an interpretation as the motion entity, but not an entity that undergoes a change of state. (This will be discussed in 2.2.5.1 again.)

2.2.4 Non-Prototypical Patient

Lakoff & Johnson (1980) study various features shared by causative events and propose that the prototypical causation is characterized by the notion of direct manipulation of the object by the volitional agent. They list several features that are shared by causative events as in (19).

(19) Prototypical Features of Causation by Lakoff & Johnson (1980: 70)

a. The agent has as a goal some change of state in the patient.
b. The change of state is physical.
c. The agent has a "plan" for carrying out this goal.
d. The plan requires the agent's use of a motor program.
e. The agent is in control of the motor program.
f. The agent is primarily responsible for carrying out the plan.
g. The agent is the energy source, and the patient is the energy goal.
h. The agent touches the patient either with his body or an instrument.
i. The agent successfully carries out the plan.
j. The change in the patient is perceptible.
k. The agent monitors the change in the patient through sensory perception.
l. There is a single specific agent and a single specific patient.

To summarize the above features regarding the prototypical patient of causation, the patient, as the goal of energy, undergoes a perceptible and physical change of state.

However some resultatives allow a patient with different features from such prototypical conditions. Consider the examples in (20), all of which are taken from the BNC.

(20) a. Mr Antoniades required each of them, Mr Villiers and Miss Bridger, to agree to pay one half of each aggregate periodical payment, but this circumstance cannot convert a tenancy into a license.

b. That is one of the things that writing does: it entices the reader into an 'unreal'

world, a world ‘really’ only composed of funny marks on a page, and through those marks makes the reader consider something which may form no part of normal life.

c. Simon Knapp, BZWMR Lamont gets full marks for presentation but overall it won't change a lot of projections for recovery. It will certainly stabilise affairs but will not galvanise the nation into action.

d. In his reply, Mr Major ducked answering Mr Lamont's central attack against his style of government, and his limp and lacklustre speech plunged the Tories into gloom.

The relevant verbs in (20) are *convert*, *entice*, *galvanise* and *plunge*. Interestingly, none of these verbs represent a physical causative change event in the provided context, and all of their patient arguments are meant to undergo a more indirect, metaphorical change of state, not a physical, perceivable change as expected in the prototypical causation. Let’s look at the following list of the components in the resultatives in (20). They are listed in (21).

(21) List of Components of Resultatives in (21)

Subject (Agent)	Verb	Object (Patient)	PP
a. circumstance	convert	tenancy	into a license
b. it (what writing does)	entice	readers	into an unreal world
c. it (presentation)	change	nation	into action
d. his limp and lacklustre speech	plunge	the Tories	into gloom

Since the subject nouns above are inanimate, non-volitional and abstract/intangible causers in indirect causative events, they can be considered as greatly deviating from the prototypical agenthood. The opposition of this non-prototypical agent and non-prototypical patient shows a strong contrast to the opposition of the prototypical agent and the prototypical patient in the causation characterized by direct manipulation. In order to distinguish these non-prototypical agents and patients from their prototypical counterparts, I propose using the term Affector and Affectee respectively, since they are involved in temporarily or physically more indirect, abstract causative change events. With respect to my data collected from the BNC, Affector-Affectee pairs are frequently found in PP resultatives, but are very rare in AP resultatives. I will further discuss why

this is the case based on the statistical result of the corpus data in Section 2.5.2.

2.2.5 Semantic Properties that Determine Theme Argument in Motion Events

2.2.5.1 Meaning Shift from Unergative to Unaccusative

L&RH (1995) scrutinized syntactic behaviors of agentive verbs of manner of motion and verbs of sound emission in resultative constructions. Based on such observation, they concluded that each of these two classes possess two subclasses respectively: one is internally caused verbs and the other externally caused events, as in (22).

(22) a. Internally caused agentive verbs of manner of motion: *dance, jump, swim*, etc.
b. Non-agentive verbs of manner of motion: *bounce, roll, slide*, etc.
c. Internally caused verbs of sound emission: *roar, screech, yell*, etc.
d. Externally caused verbs of sound emission: *clatter, jingle, rattle*, etc.

Verbs (22b) and (22d) are inherently dyadic, and they denote externally caused motion events. In contrast, the internally caused verbs (22a) and (22c) are monadic, and they are inherently unergative. However, some of the verbs of the latter class can appear in motion events. Consider (23).

(23) a. She danced/swam free of her captors. (L&RH 1995: 186 (15a))
b. They slowly swam apart. (ibid (15a))
c. The train roared into the station.
d. The car rumbled down the street.

Internally caused agentive verbs of manner of motion can regularly appear in motion events. In such a case, some verbs require a path expression, and others do not. In contrast, internally caused verbs of sound of emission are subject to a stricter semantic constraint on their directed motion uses. When they appear in directed motion events, the presence of a path expression is a requisite, but even with it, some verbs do not allow a directed motion use when they are unergative, as shown in (24).

(24) *He yelled/shouted down the street. (L&RH 1995: 190 (25a, b))

Based on the above evidence, L&RH (1995) conclude that both internally caused agentive verbs of manner of motion, and internally caused verbs of sound emission, despite their inherent classification as unergative, have dual classification as unergative

and unaccusative, although such manner of motion verbs and sound emission verbs do not necessarily show perfect parallels in grammatical behavior. This dual classification of unergative verbs can be paraphrased as a phenomenon whereby the external argument of internally caused verbs of manner of motion can be licensed as the internal argument of the verb through the verbal semantic shift from unergative to unaccusative. However L&RH (1995) do not provide any further account for the grammatical condition for this type of meaning shift.

2.2.5.2 Three Types of Motion Events

One of the largest questions related to motion verbs discussed by L&RH (1995) is why agentive motion verbs have dual verbal classification as unergative and unaccusative. To account for this question, I propose that the semantic properties encoded in the manner component of motion verbs determine the construal of the moving entity in a motion event, resulting in dual behaviors of the moving entity as the external argument in unergative events, and as the internal argument in unaccusative events. Such distinct behaviors are best observed in causation alternation.

To examine the semantic properties that determine the behaviors of the moving entity in a motion event, I chose 107 agentive verbs of manner of motion (*run* verbs) from the verb list in L&RH (1995), and I conducted causative alternation tests on them.

(25) List of Agentive Verbs of Manner of Motion Used in Causative Alternation Tests
amble, bolt, bound, canter, carom, cavort, charge, clamber, clump, coast, crawl, creep, dart, dodder, file, flit, fly, frolic, gallop, gambol, goosestep, hasten, hobble, hop, hurry, hurtle, inch, jog, journey, jump, leap, limp, lollop, lope, lumber, lurch, march, meander, mince, mosey, nip, pad, parade, perambulate, plod, prance, prowl, race, ramble, romp, run, sashay, saunter, scamper, scoot, scram, scramble, scud, scurry, scutter, scuttle, shamble, shuffle, sidle, skedaddle, skip, skitter, skulk, sleepwalk, slink, slither, slog, slouch, sneak, somersault, speed, stagger, stomp, stray, streak, stride, stroll, strut, stumble, stump, swagger, sweep, swim, tack, tear, tiptoe, toddle, totter, traipse, tramp, travel, troop, trot, trudge, trundle, vault, waddle, walk, whiz, zigzag, zoom

I excluded some verbs from the test list although they are classified as agentive verbs of manner of motion in L&RH (1995), because they have pure transitive use. These verbs include *bowl*, *dash*, *promenade* and *rush*. Also, verbs such as *climb*, *backpack*, *roam*, *rove*, *trek*, *wade* and *wander* are excluded because they take a path object in transitive use.

The tests were based on the average score of the judgment by three native-speakers. They gave a different score to each verb according to its acceptability when it is causativized: 1.0 for a felicitous example; 0.7 for one which is grammatical but sounds a little strange; 0.3 for one which sounds very strange; 0 for an unacceptable sentence.

The results are as follows:

(26) Results of Causative Alternation Tests

a) Group A: Verbs Regularly Appearing in Causative Use: Full Score of 1.0 point (22 verbs, 20.56%)

canter, *charge*, *coast*, *fly*, *gallop*, *hasten*, *hurry*, *inch*, *leap*, *march*, *parade*, *prance*, *race*, *run*, *sneak*, *somersault*, *speed*, *sweep*, *tack*, *walk*, *whiz*, *zigzag*

b) Group B: Verbs with a Score of 0.9 to 0.6 (19 verbs, 17.76%)

creep (0.9), *dart* (0.9), *goosestep* (0.9), *jump* (0.9), *streak* (0.9), *tiptoe* (0.9), *vault* (0.8), *trot* (0.8), *zoom* (0.8), *file* (0.77), *scoot* (0.77), *trundle* (0.77), *saunter* (0.7), *swim* (0.7), *nip* (0.67), *ramble* (0.67), *slog* (0.67), *strut* (0.67), *traipse* (0.67)

c) Group C: Verbs with a Score Lower Than 0.6 (65 verbs, 61.32%)

amble (0.57), *gambol* (0.57), *hobble* (0.57), *lurch* (0.57), *mosey* (0.57), *plod* (0.57), *shuffle* (0.57), *sidle* (0.57), *stride* (0.57), *jog* (0.53), *lumber* (0.47), *meander* (0.47), *scurry* (0.47), *stomp* (0.47), *stroll* (0.47), *troop* (0.43), *trudge* (0.43), *perambulate* (0.43), *scutter* (0.35), *hurtle* (0.33), *skip* (0.33), *crawl* (0.23), *stump* (0.23), *tramp* (0.23), *waddle* (0.23), *stray* (0.2), *swagger* (0.2), *tear* (0.1), *bolt* (0), *bound* (0), *carom* (0), *cavort* (0), *clamber* (0), *clump* (0), *dodder* (0), *flit* (0), *frolic* (0), *hop* (0), *journey* (0), *limp* (0), *lollop* (0), *lope* (0), *mince* (0), *pad* (0), *prowl* (0), *romp* (0), *sashay* (0), *scamper* (0), *scram* (0), *scramble* (0), *scud* (0), *scuttle* (0), *shamble* (0), *skedaddle* (0), *skitter* (0), *skulk* (0), *sleepwalk* (0), *slink* (0), *slither* (0), *slouch* (0), *stagger* (0), *stumble* (0), *toddle* (0), *totter* (0), *travel* (0)

The examples in (27) are from the above three Groups A, B and C.

(27) a. The rider cantered the horse across the ground. (Group A)
b. She snuck him into her room. (Group A)
c. ?He sauntered the horse through the park. (Group B)
d. ?/??They gamboled the pony around the pasture. (Group C)
e. ?She strolled her son through the park. (Group C)

f. *The doctor doddered the patient along the corridor. (Group C)

Verbs in Group A and those in Group C show a striking distinctness in causative alternation. Group A verbs pass causative alternation, but Group C verbs do not. Group B verbs vary in judgment depending on informants. What characterized Group A verbs is the semantic property of their selected patient.

(28) a. He leaped {his horse/*his cat} over the fence.
b. He coasted {the car/*the ball} down the hill.
c. He somersaulted {his monkey/??his stick} high into the air.
e. He walked {the 50-gallon drum/*the 50-pound box} into the warehouse.

Group A verbs select as the patient, a noun which is construed as inherently having self-driving force or momentum. In this reading, the patient is construed as moving on its own self-driving force under the constant direction of the controller. The patient typically includes a vehicle or horse[7]. Therefore, this type of causative can be considered as indirect causation. In fact, Group A verbs hardly select as the patient, a noun with no self-driving force as in (28). For the convenience of classification, I will call such verbs *march* verbs. Verbs such as *inch*, *parade*, *sneak* and *sweep* have transitive use, but when they take a typical inanimate patient in the transitive use, the sentences do not represent an event of agentive motion. Compare (29).

(29) a. He swept his cavalry around the enemy's flank.
b. He swept the dust away.
c. The murderer inched her over the cliff.
d. The murderer inched his rifle forward toward the corner.

On the other hand, most Group C verbs do not participate in causation alternation, or if they do, their sentences are barely acceptable. Interestingly, verbs of this group encode a manner of motion attributed to the agent's internal conditions, such as physical or psychological factors. (30) lists some of the Group C verbs together with the agent's internal condition which causes that manner of motion encoded in the manner constant component.

[7] L&RH(1995) uses the term "self-control body."

(30)

Verb	Related Physical/Psychological Condition
bolt	frightened
bound	happy/excited/frightened
dodder	aged
sleepwalk	sleeping
stroll	relaxed
stump	angry
swagger	proud/confident
totter	sick/drunk
waddle	fat body with short legs

The manners of motion denoted by these verbs are exclusively determined by the agent's internal conditions, not by any other external causer. Therefore, these verbs do not participate in causative alternation. For the convenience of classification, I will call these verbs *bolt* verbs.

Summing up the above discussions, there are three types of motion entities: 1) motion entities in *roll* verbs, 2) motion entities in *march* verbs, and 3) motion entities in *bolt* verbs. These three types of motion entities assume different semantic roles depending on the type of motion event. The moving entity (*y*) of a *roll* verb event is an internal argument and it is assigned a theme. In a transitive use, the moving entity is coindexed to the patient in the activity subevent as in (31). The LCS representations hereafter are used for the convenience of explaining the argument linking.

(31) John rolled the barrel down the hill.

[[x ACT-ON y_i <MANNER>] CAUSE [y_j MOVE [DOWN z]]]

Agent Patient Theme Path

In this event, the patient represents an inanimate entity that undergoes a change of location solely due to the force exerted by the external causer because it is unaccusative (L&RH 1995:147).

Secondly, the moving entity in a *march* verb event is linked to the theme in the intransitive, and it is coindexed to the patient in the transitive use. This type of moving entity must have a construal of having a self-driving force, which causes the transitive use to have a reading of indirect causation. In order to distinguish direct causation and indirect causation, I use CONTROL in LCS as the predicate for this type of indirect causation. The predicate CONTROL can be defined as representing associative

causation (Shibatani & Pardeshi 2002: 96), which is characterized by the situation where the causer's action and the causee's action show a spatiotemporal overlap. This implies that such assistive causation cannot be used for causative AP resultatives, because the causer's action cannot spatiotemporally overlap the causee's action in a change of state event. The causer may be able to experience a motion event with the causee, but not an event of a change of state.

(32) shows the linking of the arguments of transitive and intransitive uses of the verb *jump*.

(32) a. The horse jumped over the fence.

[[y_i MOVE [OVER x]] IN-MANNER-OF [x_j ACT <MANNER>]]

Theme Path Agent

b. The rider jumped the horse over the fence.

[[x ACT ON y_i <MANNER>] CONTROL [y_j MOVE [OVER x]]]

Agent Patient Theme Path

In (32a), the activity subevent is degraded to the manner subevent, and it is subordinated to the change of location event.

Finally, the moving entity in a *bolt* verb event is linked to the theme, and it does not appear in causative alternation because its internal property encoded in the manner component semantically prevents the introduction of an external causer.

(33) The cat bolted through the window.

[[y_i MOVE [THROUGH x]] IN-MANNER-OF [x_j ACT <MANNER>]]

Theme Path Agent

The MANNER constant may be linked to the verb's internal properties or external properties, and these two types of properties are incompatible with each other. However it seems quite difficult to represent this distinction in the framework of LCS.

In conclusion, a moving entity is basically assigned a theme role, but it is also linked to another role in a different type of motion event. *Roll* verbs regularly assign a theme role and a patient role, but their manner constant specifies the nature of the patienthood of the moving entity: an entity that undergoes change of location solely due to the force exerted by the external causer. The manner constant of *march* verbs requires the moving entity to be construed as having a self-driving force. The manner constant of *bolt* verbs

specifies the nature of the agenthood of the moving entity: The manner pertaining to the type of motion denoted by these verbs is determined by the agent's internal properties, which rejects causative alternation. The following list shows three classes of motion verbs together with their associated grammatical properties.

(34) Motion Verb Classes and Associated Grammatical Properties

Verb classes / Properties	*Roll* verbs	*March* verbs	*Bolt* verbs
Verb type:	Unaccusative	Unaccusative/Unergative	Unergative
Type of event:	Direct Causation	Indirect Causation	Non-Causation
Assigned role:	Theme (&Patient)	Agent (& Patient) &Theme	Agent & Theme

When *roll* verbs and *march* verbs are causativized, the motion entity is also interpreted as a patient. So the role label *Patient* is shown in the parentheses for these two types of verbs.

2.3 Constraint on Adjectives Reviewed

2.3.1 Endpoint Account

Goldberg (1995) claims that a resultative AP must be predicated of the direct object of a transitive verb.

(35) a. *He watched the TV broken.
b. *He believed the idea powerful. (Goldberg 1995:181, (7) and (8))

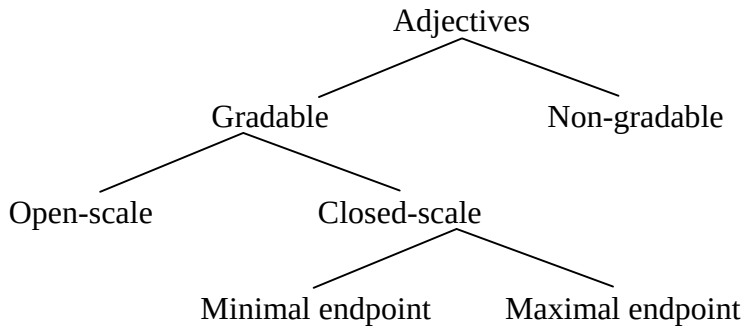
Furthermore, she proposes the End-of-Scale Constraint on the aspectual nature of result adjectives, and claims that most of the adjectives that can occur as a resultative predicate are non-gradable adjectives with a clear delimited endpoint, such as *sober*, *flat*/*smooth*, *alive*/*dead*, *asleep*/*awake*, *full*/*empty*, *free*, etc. All these adjectives reject quantifying phrases such as *a little*.

(36) a. ?a little sober
b. ?a little flat/smooth
c. ?a little alive/dead (Goldberg 1995: 195, (75) through (77))

Wechsler (2000) accounts for the constraints on the selection of resultative APs in terms of the event telicity. Before we discuss Wechsler's accounts, we should take a brief look

at types of adjectives in terms of telicity.

(37) Classifications of adjectives by telicity



Adjectives first come in two types: gradable and non-gradable. Gradable adjectives allow the gradable interpretations of the properties like *long* and *clean* whereas non-gradable adjectives do not allow gradable interpretations like *dead*. Gradable adjectives have open-scale adjectives and closed-scale adjectives. The former includes long and large, which have no end point in the scale. Closed-scale adjectives have those with a minimal endpoint like *dirty* and *wet*, and those with a maximal endpoint like *clean* and *smooth*. For example when something is *dirty*, it is true even when only a part of it is dirty. In contrast, *clean* cannot be used to describe something which is partially clean.

Wechsler claims that both gradable and non-gradable adjectives can occur in resultative sentences, but of two different aspectual types: durative and punctual.

(38) Two Types of Adjectives Occurring in Resultatives (Wechsler 2000: 19)

Type I. The verb is durative (expresses an event that is extended in time); the resultative predicate is a gradable, maximal endpoint closed-scale adjective.

Type II. The verb is punctual; the resultative predicate is a non-gradable adjective.

Type III. The resultative predicate is a path PP (to or into) whose object NP specifies the bound. (The verb is normally durative, unless the path is very short.)

Thus, adjectives of Type I apply to a sentence like *He hammered the metal flat*, and those of Type II to a sentence like *He shot the man dead*.

2.3.2 Paradox Associated with Endpoint Account

In the BNC were found 1,002 AP resultative examples[8] in the BNC, including 816 "normal" AP resultatives and 186 resultatives headed by *drive*, *run*, *send* and *turn*, together with 111 result adjectives (in type count)[9]. For each of these adjectives, I conducted co-occurrence tests by using three proportional modifiers, *a little*, *half* and *completely*, and a comparative adverb, *more/-er*.

Firstly, the tests showed that 88 unique type adjectives (79.28%) can co-occur with *completely* when they are put in the resultative construction. These adjectives are listed in (39).

(39) Adjectives that Can Accept *Completely*[10]

alert; *anaerobic*; *askew*; *awake*; *bare*; *barmy*; *batty*; *black*; *black and blue*; *blank*; *blind (emphasis or visual inability)*; *blue*, *bloodless*; *brainless*; *brown*; *clean*; *clean and smooth*; *clean of*; *clear*; *clear of*; *cloudy*; *cold*; *cold and heavy*; *crazy*; *crooked*; *daft*; *dead*; *deaf*; *demented*; *dizzy*; *dotty*; *dry*; *empty*; *firm*; *foolish and mad*; *frantic*; *free*; *free of*; *full*; *good and tight*; *green*; *helpless*; *insane*; *insensible*; *level*; *loose*; *mad*; *milky*; *mushy*; *mute*; *naked*; *numb*; *odd*; *off-balance*; *onshore*; *open*; *pale green*; *pink*; *political*; *ragged*; *rancid*; *raw*; *ready*; *red*; *red and green*; *red or green*; *rigid*; *rotten*; *saline*; *senseless*; *shitless*; *sick*; *silly*; *smooth*; *sour*; *spare*; *spitless*; *stone-dead*; *stupid*; *taut*; *thick and green*; *unconscious*; *violet*; *white*; *wide*; *witless*; *yellow*

Adverbs *completely*, *half* and *almost* can modify closed-scale adjectives (For more discussions, see Kennedy & McNally 1999 and McNally & Kennedy 2008). In particular, *completely* specifies the state of the maximal endpoint of scales. In contrast, these modifiers cannot co-occur with open-scale adjectives such as *interesting* and *tall*.

---

[8] These data do not include those examples with periphrastic causative verbs (*make*, *let* and *get*), verbs of putting (*put* and *set*) and the causative verb *render*, because they share different semantic properties from other "normal" verbs that occur in resultatives. The verb *render* is examined separately. (For details, see Appendixes 1, 2, 3 and 5.)

[9] Instances like *yellow* and *yellow, pink, orange and scarlet* are counted as separate unique types respectively.

[10] Some of the following adjectives show different behaviors to modification by *completely* depending on the context. They include *spoon* (*the ball*) *completely wide* and **push* (*the door*) *completely wide*.

[11] Some adjective pairs such as *clear* and *clear of*, and *free* and *free of* are counted as separate entries respectively because the counterparts of each pair these adjectives have a different meaning from each other.

(40) a. completely {empty/full/??expensive/??large}
b. half {empty/full/*expensive/*large}
c. almost {empty/full/??expensive/??large}

In this respect, the fact that the majority of the adjectives used in AP resultatives can accept the modification by *completely* supports Goldberg's End-of-Scale Constraint. Her claim is that adjective predicates in AP resultatives denote a non-gradable state, expressing a clear boundary on the scale beyond which the denoted activity can no longer be continued. In fact, however, there is contradictory evidence to her account. Modifiers *a little*, *more*, and *very* can usually co-occur with open-scale adjectives, but not with maximal endpoint adjectives.

(41) a. a little {*empty/*full/expensive/large}
b. very {*empty/*full/expensive/large}
c. more {*empty/*full/expensive/large}

However, the modifier tests I did with the BNC data have shown different results from the distribution predicted from (41). In the case of unique verb adjective pairs (247 unique pairs) headed by "normal" verbs, 22% (54 pairs) of the pairs can co-occur with *a little*; 72% (178 pairs) with *half*; 46% (114 pairs) with *more* or *-er*; 26% (64 pairs) with very; 97% (240 pairs) with *completely*. Table (42) shows the distribution of the modifications by *a little*, *half*, *more*/*-er*, *very* and *completely*. (For details, see Appendix A8.)

(42) Modifiers Co-Occurring with 247 Unique V-A Pairs

Modifiers	Unique Pairs	Percentage
a little	54	22%
half	178	72%
more/-er	114	46%
very	64	26%
completely	240	97%

The co-occurrence distribution in all V-A pairs (1002 AP resultatives headed by normal verb or drive/run/send/turn) shows a far greater deviation from the distribution

[12] Note that these figures do not represent unique tokens because some of these adjectives can co-occur with multiple different modifiers.

predicated from the End-of-Scale Constraint. The co-occurrence rate is respectively: (41%; 412 pairs) with *a little*, (80%; 798 pairs) with *half*; (58%; 586 pairs) with *more*/*-er*; (34%; 340 pairs) with *very*; (91%; 910 pairs) with *completely*. (For details, see Appendix A7.)

These figures also provide counterevidence to the specifications in Wechsler's (2000) Type I and Type II because the specifications only license non-gradable adjectives or those with a maximal endpoint.

To answer this paradox, I will further explore the semantic principles underlying the selection of adjectives and verbs in resultatives in the next section.

2.3.3 Distribution of Verb Classes and Types of Co-Occurring Adjectives

Wechsler's specifications require that verbs which denote a punctual event co-occur with a non-gradable adjective, and those that denote a durative event co-occur with a gradable maximal endpoint adjective.

However, the data gained from my research in the BNC do not necessarily support these specifications as shown in (41). Now let us look at Table (43) below. Note that the table is not exhaustive. For the complete data, see Appendix A9.

(43) 321 Unique Verb-Adjective Pairs by Major Verb Class

Verb Classes	N-Grd	(N-)Grd	Max	Max/Op	Op	Min	Emp	Etc
a. Verbs of putting (Token count: 44; Type count: 23)								
	9	2	7	0	3	2	0	0
b. Verb of removing (Token count: 105; Type count: 39)								
	14	1	12	9	1	2	0	0
c. Verbs of exerting force (Token count: 232; Type count: 41)								
	11	0	0	0	10	18	0	2
d. Verbs of throwing (Toke count: 24; Type count: 7)								
	2	0	1	0	0	5	0	0
f. Verbs of contact by impact (Token count: 64; Type count: 32)								
	10	0	9	0	4	8	1	0
g. Verbs of contact (Token count: 7; Type count: 6)								
	0	0	1	1	1	3	0	0
h. Verbs of cutting (Token count: 37; Type count: 14)								
	5	0	1	1	3	4	0	0
i. Verbs of separating & disassembling (Token count: 6; Type count: 3)								
	1	0	0	0	0	2	0	0

j. Verbs of coloring (Token count: 22; Type count: 16)								
	0	16	0	0	0	0	0	0
k. Psych-verbs (Token count: 29; Type count: 15)								
	0	0	0	0	6	5	4[13]	0
l. Verbs of killing (Token count 23; Type count: 2)								
	1	0	1	0	0	0	0	0
m. Verbs of emission (Token count 16; Type count: 9)								
	3	1	1	0	1	3	0	0
n. Destroy verbs (Token count: 12; Type count: 2)								
	1	0	1	0	0	0	0	0
o. Verbs of COS (Token count: 46; Type count: 14)								
	3	1	2	1	1	8	0	0
p. Manner of motion verbs (Token count: 20; Type count: 10)								
	4	0	0	0	0	6	0	0
q. AP complement verbs (Token count: 180; Type count: 44)								
	7	10	3	2	17	5	0	0

Symbols:

N-Grd: Non-gradable, (N-)Grd: Non-gradable/Gradable, Max: Maximal endpoint, Max/Op: Maximal endpoint/Open-scale, Op: Open-scale, Min: Minimal endpoint, Emp: Emphasis, Etc: others

The first figure in the parentheses under the column label *Verb Class* represents the total tokens of the verbs found in the BNC; the second figure represents the number of the unique types of the verbs. This table is not exhaustive; it only covers major verb classes. Each figure in the other columns represents the number of unique type verbs co-occurring with the type of adjective labeled at the top of each column. Some adjectives are classified into two different types. In such cases, different type names are separated by a slash.

Let's look at Table (43a). The figure "44" in the parentheses means that a total of 44 tokens of verbs of putting are found in my BNC data. Among them, there are 23 unique types of verbs, including *fill, lift, pack, pile, pump, spray, winch*, etc.

On the lower line is the figure "9" under N-Grad. It means that there are 9 unique types of verb-adjective pairs (hereafter referred to as V-A pair) comprised of a verb of

[13] This usage can be found in examples like *knock silly*, *scare stupid*, and *rob blind*. The verbs *knock* and *rob* are not psych-verbs in their lexical uses, but they are tentatively put here because they are used as a verb of causing a change of the psychological state of the patient, and their original sense of physical contact or deprivation is not reflected on the semantics of the resultatives.

putting and a non-gradable adjective. Likewise, the figure “7” under the column of Max for the same verb class, means that unique types of V-A pairs were found with a gradable maximal endpoint adjective. Furthermore, there are three unique V-A pairs that can take an open-scale adjective.

The symbol *(N-)Gradable* (meaning gradable or non-gradable) can be applicable to an adjective in expressions like *fraying bare* and *stripping bare*. The adjective is a non-gradable adjective in resultatives, but it can mean an adjective with a maximal endpoint in a sentence like: *The cupboard was becoming bare*.

The column label *Max/Op* means a particular adjective can be interpreted as a maximal or open-scale adjective. Such adjectives include *clean*. Since the adjective allows modifiers *very* and *more* in a sentence like *wiping the table very clean/cleaner*, it is classified under this type.

Table (43) shows that verbs of putting (a), verbs of removing (b), verbs of exerting force (c) and verbs of contact by impact (f), are highly compatible with non-gradable adjectives, but many classes can allow gradable adjectives, too. In particular, Wechsler’s Type II specification predicts that verbs of removing, which mainly include durative verbs such as *wipe* verbs, *clean* verbs and *remove* verbs, take maximal endpoint adjectives. However, verbs of this class (43b) seem open to not only non-gradable but also maximal endpoint or open-scale adjectives as well.

Maximal endpoint adjectives, minimal endpoint adjectives and open-scale adjectives all seem compatible with most verb classes. Given this distribution, it may be considered that the selection of verbs and adjectives is not solely determined by the aspectual properties of verbs or adjectives, and that there should be an alternative account for the constraints on the predicate components of resultatives. Interestingly, some verbs classes prefer gradable, open or minimal endpoint adjectives to those specified by Wechsler’s Type I or II.

2.4 Further Constraints on Verbs and Adjectives

2.4.1 Distribution of V-A Pairs by Scale Type of Adjectives

Examining the data provided in (43), the AP resultative construction does not necessarily seem to follow the patterns specified by Wechsler: gradable maximal endpoint adjectives (specified in Wechsler’s Type I) and non-gradable adjectives (specified in Wechsler’s Type II). Now let’s take a look at Table (43). The table lists various types of adjectives found in AP resultatives from the BNC data. The middle column shows the number of unique combinations of a verb and an adjective.

(44) Distribution of Unique V-A Pairs by Scale Type of Adjective

Scale Type	Unique V-A Pairs	Examples
a. Non-gradable	82	*blank, clear of, dead, free, level*
b. Non-gradable/Gradable	31	*black, brown, pink, predictable*
c. Maximal	45	*bare, dry, empty, full, unconscious*
d. Maximal/Open-scale	15	*alert, clean, clean and smooth, crazy*
e. Open-scale	41	*cold, high, loose, short, taut, wide*
f. Minimal	82	*ajar, askew, awake, off-balance, open*
g. Emphasis	6	*(sting-)bloodless, (scare- witless*
h. Others	2	*(pull-)good and tight, (push-)open wide*

Interestingly, not only the (44a) non-gradable adjective (82 V-A pairs), but also the (44f) minimal endpoint adjective (82 V-A pairs) show the highest frequency. Also the open-scale adjective (44e) presents considerably high frequency (41 V-A pairs). Furthermore, adjectives with no punctual endpoint, such as (44b) and (44d), can also participate in AP resultatives (a total of 46 unique V-A pairs). This suggests that a certain account has to be given to explain the distribution of open-scale adjectives and minimal endpoint adjectives in AP resultatives, since Wechsler's semantic constraints on adjectives preclude these adjectives and Goldberg (1995) poses the End-of-Scale Constraint on AP resultatives.

In the next section, we will conduct an "a little" test to examine the boundedness of adjectives.

2.4.2 "A Little" Test on Boundedness of Adjectives

I conducted tests by means of the adverb *a little*, to examine the boundedness of adjectives used in each unique V-A pair found in the BNC AP resultative data. Consider (45). The adverb *a little*, as well as *very*, is generally considered to modify unbounded open-scale or gradable adjectives. The middle column represents the original scale type of adjective used in the preceding example.

(45) A *Little* Test on Adjectives

Example	Adjective Type	
a. He knocked the ash {*a little} clear.	Non-grad	{*a little/*very} clear
b. He yanked the nail {*a little} free.	Non-grad	{*a little/*very} free
c. He painted the wall {*a little} white.	Non-grad/Grad	{a little/very} white

d. He sprayed the board {a little} pink[14].	Non-grad/Grad	{a little/very} pink
e. He blotted the paper {*a little} dry.	Maximal	{*a little/*very[15]} dry
f. He opened his pocket {*a little} empty.	Maximal	{a little/*very} empty
g. He washed the dish {*a little} clean.	Maximal/open	{*a little/very} clean
h. He tugged the clips {*a little} loose.	Open-scale	{a little/very} loose
i. He chafed his skin {a little} raw.	Open-scale	{a little/very} raw
j. He knocked the table {a little} askew.	Minimal	{a little/*very} ajar
k. He kicked the door {*a little} open.	Minimal	{*a little/*very} open

Two things can be observed in the above test result: 1) AP resultatives show a general preference for the bounded interpretation of the event. Thus some adjectives that can potentially allow unbounded interpretation, as seen in (45c, f, h), are interpreted as bounded adjectives; 2) Some unbounded adjectives, such as (45d, i, j), can maintain their unbounded readings in AP resultatives.

Many scholars have observed that AP resultatives denote a bounded event that ends with a particular result state, and that their result predicates are subject to scalability constraints, such as Wecshler's scalability constraints and Goldberg's End-of-Scale Constraint. Now a question arises: what licenses an open-scale adjective or an adjective with potential gradable reading in AP resultatives as in (45d, i, j), in contradiction to the general semantic constraints imposed by the AP resultative construction? The most likely account for this is that AP resultatives are a collection of achievement/accomplishment events with a different aspectual contour of the endpoint of the event, and the interpretation of how the result is brought about heavily depends on the type of activity denoted by the main verb.

2.4.3 Semantics of "Exceptional" Adjectives

Table (46) is another version of the data shown in (43). The verb classes are rearranged in descending order according to the total tokens of verbs of each class (Verb Token). Other column labels of *N-Grd*, *Max*, *(N-)Grd*, *Max/Op*, *Op* and *Min* respectively correspond to non-gradable adjective, maximal endpoint adjective, (non-)gradable adjective, maximal endpoint/open-scale adjective, open-scale adjective and minimal endpoint adjective. Figures in these columns for six types of adjectives represent the number of unique pairs of a verb and an adjective from the labeled class. For

[14] Goldberg (1995:197, (91a)) explains that lexically causative verbs such as *make* and *red* are exceptional to the End-of-Scale Constraint.

[15] Acceptable in the case of climate reading.

example, the figure "11" under *N-Grd* on the line of *Verbs of exerting force* means there are 11 unique verb-adjective pairs made of a verb of exerting force and a non-gradable adjective. The figures in the highlighted block shows the number of V(erb)-A(djective) pairs that incorporate an "aspectually exceptional" adjective: 1) adjectives with gradable reading, 2) adjectives with open-scale reading or 3) minimal endpoint adjectives. All these three types of adjectives cannot be captured by Wechsler's constraints. The data of AP complement verbs are separately shown at the bottom of the table since they do not seem to share the same semantic constraints with other aspectually licensed AP resultatives.

(46) Major 15 Verb Classes of AP Resultatives Found in BNC

Rank	Verb Class	Verb Token[16]	N-Grd	Max	(N-)Grd	Max/Op	Op	Min
1.	Verbs of exerting force	232	11	0	0	0	10	18
2.	Verbs of removing	105	14	12	1	9	1	2
3.	Verbs of contact by impact	64	10	9	0	0	4	8
4.	Verbs of COS	46	3	2	1	1	1	8
5.	Verbs of putting	44	9	7	2	0	3	2
6.	Verbs of cutting	37	5	1	0	1	3	4
7.	Psych-verbs	29	0	0	0	0	6	5
8.	Verbs of throwing	24	2	1	0	0	0	5
9.	Verbs of killing	23	1	1	0	0	0	0
10.	Verbs of coloring	22	0	0	16	0	0	0
11.	Manner of motion verbs	20	4	0	0	0	0	6
12.	Verbs of emission	16	3	1	1	0	1	3
13.	Destroy verbs	12	1	1	0	0	0	0
14.	Verbs of contact	7	0	1	0	1	1	3
15.	Verbs of separating & disassembling	6	1	0	0	0	0	2
16	AP Complement Verbs (*drive*, *run*, *send* and *turn*)	180	7	3	10	2	17	5

The above table shows that AP resultatives allow a considerable number of V-A pairs incorporating an aspectually exceptional adjective (those in the columns of *(N-)Grd*, *Max/Op*, *Op* and *Min*). In the following sections, I will show that AP resultatives allow adjectives other than maximal endpoint adjectives and non-gradable adjectives by

[16] Some verbs have multiple classification of two or more classes.

examining the data from the BNC, and will examine what factors license the appearance of such aspectually exceptional adjectives in AP resultatives.

2.4.3.1 Verbs of Coloring plus (Non-)Gradable Adjectives

Table (47) shows the possibility or impossibility of modification of V-A pairs by proportional modifiers *a little*, *half*, *more*, *very* and *completely*.

(47) Verbs of coloring+(N-)Grd: 16 unique V-A pairs: 16 V-A pairs

Verb	Adjective	a little	half	more	very	completely
colour	black	N[17]	Y	Y	N	Y
dye	black	N	Y	Y	N	Y
paint	black	N	Y	Y	N	Y
stain	black	N	Y	N	N	Y
colour	brown	Y	Y	Y	Y	Y
paint	brown	Y	Y	Y	Y	Y
stain	brown	Y	Y	N	Y	Y
paint	green	Y	Y	Y	Y	Y
paint	pale green	N	N	N	N	Y
colour	pale pink and green	N	N	N	N	N
paint	red and green	N	N	N	N	Y
stain	red or green	N	N	N	N	Y
paint	white	N	N	Y	Y	Y
dye	yellow	N	N	Y	Y	Y
paint	yellow	N	N	Y	Y	Y
dye	yellow, pink, orange and scarlet	N	N	N	N	N

According to the data shown above, there seem to be three types of adjectives: Type 1) typical non-gradable adjectives such as *black*, Type 2) non-gradable reading adjectives that potentially have a certain degree of gradable reading such as *white* and *yellow*, Type 3) non-gradable/open adjectives such as *brown* and *green*. Type 1 rejects modification by *a little* or *very*. It only allows the modification by *half* or *completely*. This is a typical characteristic of non-gradable adjectives. Type 2 allows the modification by *very*, but it rejects *a little*. This suggests Type 2 adjectives are lexically non-gradable, but they can

[17] The symbols *N* and *Y* mean "No" and "Yes" respectively. This also applies to other tables: (48) through (66).

potentially represent a gradable range of color tones in a situation where the speaker is comparing different tone changes of a single color. Type 3 is a non-gradable/open-scale type because it also allows the modification by *a little* and *very*. Such semantic distinctiveness of color adjectives seems to be solely due to their lexical properties because human perception of colors is based on the hue of chromatic colors and closed achromatic scale (white-gray-black). Thus chromatic colors tend to be perceived as gradable colors whereas the achromatic colors tend to be perceived as non-gradable colors. This can explain why some colors are constantly non-gradable while others behave like a non-gradable or open-scale type as can be seen in the data (47).

Finally, one of my informants pointed out that when a color adjective is modified by *a little*, it may imply not only a degree reading but also a partiality reading. For example, "spaying something a little pink" may mean either that all area is painted a little pink, or that part of the area is painted pink.

2.4.3.2 Verbs of Removing plus Maximal/Open-Scale Adjectives

AP resultatives with a maximal/open-scale adjectives tend to show the same distribution of Type 2 adjectives discussed in 2.4.3.1. One can see that they are basically non-gradable adjectives because they reject the modification by *a little*, but allow *half* and *completely*. On the other hand, they potentially allow a "partial" gradability because they allow the modification by *very*.

(48) Verbs of Removing plus Maximal/Open-Scale Adjectives: 10 V-A pairs

Verb	Adjective	a little	half	more	very	completely
lick	clean	N	Y	Y	Y	Y
polish	clean	N	N	Y	Y	Y
rub	clean	N	Y	Y	Y	Y
scour	clean	N	Y	N	Y	Y
scrub	clean	N	Y	N	Y	Y
suck	clean	N	Y	N	Y	Y
swab	clean	N	Y	N	Y	Y
sweep	clean	N	Y	Y	Y	Y
wash	clean	N	Y	Y	Y	Y
wipe	clean	N	Y	Y	Y	Y

Based on the above observations, the notion of *clean* is placed on one end of the closed dirty-clean scale as a non-gradable adjective. At the same time, however, the availability

of *very* suggests that the adjective can also represent an internal gradability of cleanliness. This means something can be cleaner even after a certain degree of cleanliness is achieved by an activity. In fact, verbs *lick*, *rub*, *sweep*, *wash* and *wipe* all allow *very*. In an event denoted by such verbs, it may not be difficult to imagine a stage where one can further improve the cleanliness after a certain degree of cleanliness is achieved. But the verbs *scour* and *swab*, which do not allow *very*, imply the exertion of strong force, and thus this meaning collides with the "fine tuning" of cleanliness after it is achieved. The adjective *clean* in the phrase *suck clean* means the complete consumption of something, not in the sense of hygiene. It is understandable why *more* is not allowed for this, considering that the consumption of something by sucking it is usually achieved instantaneously.

2.4.3.3 V-A Pairs with Open-Scale Adjectives

In this section, we will see various classes of verbs that appear with an open-scale adjective. To state the conclusion first, when a verb is interpreted as a verb of causative change of shape/location/tension/dimension, it allows the formation of a V-A pair with an open-scale adjective.

Now let's look at verbs of exerting force in (49).

(49) Verbs of Exerting Force plus Open-Scale Adjectives: 10 V-A pairs

Verb	Adjective	a little	half	more	very	completely
draw	close	Y	N	Y	Y	N
press	close	Y	N	Y	Y	N
pull	close	Y	N	Y	Y	N
shake	cold	N	N	N	N	Y
shake	loose	Y	Y	Y	Y	Y
tug	loose	Y	Y	Y	N	Y
shake	rigid	N	N	N	N	N
draw	taut	Y	Y	Y	Y	Y
pull	taut	Y	Y	Y	Y	Y
push	wide	N	N	Y	Y	N

In the above table, the V-A pairs *draw-close*, *press-close*, *shake-loose*, *tug-loose*, *draw-taut*, and *pull-taut* allow the modification of an open-scale adjective by *a little*. These V-A pairs represent a causative change of location or tension as mentioned above. Consider the data in (50).

(50) Verbs of Putting plus Open-Scale Adjectives: 3 V-A pairs

Verb	Adjective	a little	half	more	very	completely
lift	high	Y	N	Y	Y	N
pile	high	Y	N	Y	Y	N
wrap	snug and warm	N	N	N	Y	N

The V-A pairs *lift-high* and *pile-high* represent a causative change of dimension. Thus it allows the modification of the open-scale adjective *high* by *a little*. The same can hold true of V-A adjectives in (51).

(51) Verbs of Cutting plus Open-Scale Adjectives: 3 V-A pairs

Verb	Adjective	a little	half	more	very	completely
cut	fine	Y	N	N	Y	N
cut	short	Y	N	N	Y	N
cut	thin	N	N	Y	Y	N

The V-A adjectives *cut-fine* and *cut short* can be understood to represent an event of causative change of shape or dimension. Interestingly, the adjective *thin* cannot be modified by *a little*. This is because the notions of *thin* and *thick*, in contrast to *fine* or *short*, refer to a range of scale close to either endpoint.

Verbs of contact by impact and psych-verbs are also combined with an open-scale adjective for different reasons from the cases seen above. Consider the test results in Tables (52) and (53).

(52) Verbs of contact by impact plus Open-Scale Adjectives: 4 V-A pairs

Verb	Adjective	a little	half	more	very	completely
knock	cold	N	Y	N	N	Y
whip	raw	N	Y	Y	Y	Y
knock	silly	N	Y	N	N	Y
spoon	wide	Y	N	N	Y	Y

(53) Psych Verbs plus Open-Scale Adjectives: 6 V-A pairs

Verb	Adjective	a little	half	more	very	completely
bore	rigid	N	Y	N	N	Y
scare	rigid	N	Y	N	N	Y

stun	rigid	N	Y	N	N	Y
scare	silly	N	Y	N	N	Y
bore	stupid	N	Y	N	N	Y
scare	stupid	N	Y	N	N	Y

Except for *wide* in the pair *spoon-wide*, all the other adjectives are used in an extended meaning. For example the pair *knock-cold* is synonymous to *knock-down*, and *raw* of the pair *whip-raw* is used to mean "red and painful." The other adjectives *rigid*, *silly* and *stupid* are used as the emphasis of the activity denoted by the verbs. The V-A pair *spoon-wide* in (52) means to hit a golf ball with a spoon golf club wide from a particular place. Thus this event comes under causative change of location.

2.4.3.4 V-A Pairs with Minimal Endpoint Adjectives

This section exemplifies various classes of verbs that appear with a minimal endpoint adjective. Adjectives listed here are all lexically classified as minimal endpoint adjectives. Despite their lexical properties, some of them seem to behave as open-scale (or gradable) adjectives because they allow the modification by *a little*. Consider the data in (54).

(54) Verbs of Exerting Force plus Minimal Endpoint Adjectives: 18 V-A pairs

Verb	Adjective	a little	half	more	very	completely
push	ajar	N	N	N	N	N
jerk	awake	N	Y	N	N	Y
shake	awake	N	Y	Y	N	Y
push	off-balance	Y	Y	Y	N	Y
elbow	open	Y	Y	Y	N	Y
force	open	Y	Y	Y	Y	Y
jerk	open	N	Y	Y	N	Y
lever	open	Y	Y	Y	N	Y
press	open	N	N	N	N	Y
prize	open	N	Y	Y	N	Y
pull	open	Y	Y	Y	N	Y
push	open	Y	Y	Y	N	Y
shake	open	N	Y	N	N	Y
shoulder	open	N	Y	Y	N	Y
shove	open	N	Y	N	N	Y

snatch	open	N	N	N	N	Y
thrust	open	N	Y	N	N	Y
yank	open	Y	Y	Y	N	Y

The adjective *open* can be modified by *a little* in V-A pairs with verbs such as *elbow*, *force*, *lever*, *pull*, *push* and *yank*. These verbs allow the interpretation of gradual achievement, which is compatible with the modification by *a little*. In fact, other verbs, such as *jerk*, *push*, *shove*, *snatch* and *thrust*, do not normally allow *a little* because they encode the exertion of a quick, violent force to bring about a result.

This holds true of *ease* and *steam* in (55). It takes a certain length of time to bring about the result implied by these two verbs. Their paired adjectives can be modified by *a little*.

(55) Verbs of COS plus Minimal Endpoint Adjectives: 8 V-A pairs

Verb	Adjective	a little	half	more	very	completely
break	open	N	Y	Y	N	Y
burst	open	N	Y	N	N	Y
crack	open	N	Y	N	N	Y
crash	open	N	N	Y	N	Y
ease	open	Y	Y	Y	N	Y
flatten	open	N	Y	N	N	Y
fold	open	N	Y	N	N	Y
steam	open	Y	Y	Y	N	Y

These minimal endpoint adjectives can have a different aspectual reading due to the semantics of the verbs they are paired with. This tends to be the case when the event denoted by the partner verb has a reading of gradual achievement. The reading of gradual achievement of the event comes from the implication of physical difficulties in exerting a force (e.g. *ease open* and *yank open*), or a certain length of time required in bringing about a result (e.g. *steam open*).

Also, the reading of gradual achievement is interpreted as a minimum amount of force being used to bring about the result. For example, the V-A pair *elbow open* in (54) allows the modification by *a little*, because it can depict a situation where the agent make something slightly open by pushing it with an elbow gently. Other examples of this type can be found in (56).

(56) Verbs of Contact plus Minimal Endpoint Adjectives: 3 V-A pairs

Verb	Adjective	a little	half	more	very	completely
nudge	ajar	N	N	N	N	N
nudge	awake	Y	Y	Y	N	N
nudge	open	Y	Y	Y	N	Y

The verb *nudge* implies a gentle push. The adjective *awake* implies a scale of degrees reading from being slightly awake to be fully awake. Therefore, if someone nudges someone else a little awake, it can mean that he can make the person slightly awake by exerting a physical force. But the adjective *ajar* refers to a state of being slightly open. Thus *nudge-ajar* cannot be modified by *a little*.

(57) Verbs of Cutting plus Minimal Endpoint Adjectives: 4 V-A pairs

Verb	Adjective	a little	half	more	very	completely
carve	open	N	Y	N	N	Y
cut	open	N	Y	Y	N	Y
slash	open	N	Y	N	N	Y
slit	open	Y	Y	Y	N	Y

The V-A pair *slit open* in (57) denotes an event of gradual causative change of shape. The verb *slit* means to make a long narrow cut in something, and the created cut inherently has a gradable reading. Therefore it allows the reading of a gradual achievement of an event. But the adjective open is not modified by *a little* when they are paired with other verbs in (57). The verb *carve* means to cut something out, and the verb *slash* means to create a long but deep cut in something. These verbs semantically assume a particular minimum degree of accomplishment, and these semantic properties seem to collide with the meaning of *a little*. The V-A pair *cut open* should also be understood as implying such a minimum degree of accomplishment.

The V-A pairs in (58) are the examples that show that verbs of contact by impact can have a different construal due to the semantics of the partner adjective.

(58) Verbs of Contact by Impact plus Minimal Endpoint Adjectives: 8 V-A pairs

Verb	Adjective	a little	half	more	very	completely
knock	askew	Y	Y	Y	N	Y
drum	awake	N	N	N	N	Y
kick	awake	N	Y	N	N	Y

knock	crooked	Y	N	Y	Y	Y
knock	off-balance	Y	Y	Y	N	Y
kick	open	Y	Y	Y	N	Y
slam	open	N	N	N	N	Y
smash	open	N	Y	N	N	Y

The adjectives of orientation *askew*, *crooked* and *off-balance* are minimal endpoint adjectives, and especially so when they refer to a situation where the ideal physical orientation of an object is lost. Therefore, the on-balance/off-balance state of something must be understood as representing a binary value.

Contrary to this predication, these adjectives allow the modification by *a little*. This has something to do with our way of perceiving objects in our environment. In human perception, the objecthood of things is characterized by their stationary property. They are understood as not being able to move or change by themselves without receiving an external force. Some objects may show a great obstinacy in their physical orientation because of their heavy weight or physical stability. When this reading is available with the object in question, the above adjectives can be modified by *a little*. The modifier *a little* implies the inherent obstinacy of the object in its physical orientation.

In (59), we will look at some V-A pairs of a psych-verb and a minimal endpoint adjective.

(59) Psych-Verbs plus Minimal Endpoint Adjectives: 4 V-A pairs

Verb	Adjective	a little	half	more	very	completely
frighten	awake	N	Y	N	N	Y
shock	awake	N	Y	N	N	Y
startle	awake	N	Y	N	Y	Y
wear	numb	Y	Y	N	N	Y

Some of the pairs allow the modification by *very* or *a little*, and this suggests that *awake* and *numb* have a gradable reading depending on the type of the partner verb.

In particular, the adjective *numb* in (59) behaves differently from another adjective of sensation *awake*. The sensation of being numb starts at one end of a scale, and the sensation is gradually intensified along the scale. The adjective *numb* may be able to be sensed by “finer scales” than *awake*. The adjective *awake* does not allow *a little*, but interestingly only it can be modified by *very* in the V-A pair *startle awake*. The verb *frighten* implies that one gets extremely surprised and anxious, and thus the reading of

being maximally surprised collides with the semantics of *very*. On the other hand, the verb *startle* implies a "moderate" intensity of surprise, and thus the V-A pair *startle awake* can be modified by *very*.

The pairs in (60) are verbs of throwing and minimal endpoint adjectives. The adjectives in (60) show typical behaviors of minimal endpoint adjectives.

(60) Verbs of Throwing plus Minimal Endpoint Adjectives: 5 V-A pairs

Verb	Adjective	a little	half	more	very	completely
chuck	open	N	Y	N	N	Y
flick	open	N	Y	N	N	Y
fling	open	N	Y	N	N	Y
flip	open	N	Y	N	N	Y
throw	open	N	Y	N	N	Y

The adjectives *open* in (60) all reject the modification by a *little*, *more* and *very*, unlike other V-A pairs *ease open*, *nudge open*, *slit open*, *kick open*, etc. This confirms our observation in (54) that the meaning of *a little* can collide with verbs that imply the exertion of a quick, violent force to bring about a result. Verbs of throwing come under this case because the thrower needs to make a quick strong motion to launch an object into a ballistic motion.

Contrary to the adjectives *open* in (60), the adjectives *open* in Table (61) behave more like an open-scale adjective: many of the adjectives in (61) allow *a little* and *very*.

(61) Manner of Motion plus Minimal Endpoint Adjectives: 6 V-A pairs

Verb	Adjective	a little	half	more	very	completely
twist	askew	Y	N	Y	N	Y
edge	open	Y	Y	Y	N	Y
slide	open	Y	Y	Y	N	Y
sling	open	N	Y	N	N	Y
swing	open	Y	Y	Y	N	Y
worm	open	Y	Y	Y	N	N

The verb *twist* on top implies a gradual achievement of an event, and it is paired with the adjective *askew*, which refers to a state of physical orientation. In this case, as seen in (58), the use of *a little* and *more* are justified because the obstinacy reading of *askew* is compatible with the reading of gradual achievement of *twist*.

The verbs *slide* and *swing* involve causative change of location, and they allow the modification by *a little* and *very*. If the object of these verbs is a door, the verbs can depict the situation where the door becomes slightly open by sliding or swinging it.

In contrast, the verb *sling* implies the exertion of strong physical force in a careless manner. The verb actually does not allow *a little*, *more* and *very*, as can be predicted from the generalization of (61). The verb *worm* implies physical difficulties in exerting a force upon the patient. This verb denotes an event where a change of state cannot be achieved quickly. This reading changes the interpretation of *open*, and consequently the modification by *very* and *completely* is rejected.

V-A pairs in our data include emission verbs. The adjective *open* behaves as a typical minimal endpoint adjective when it is paired with such verbs. Consider (62).

(62) Verbs of Emission plus Minimal Endpoint Adjectives: 3 V-A pairs

Verb	Adjective	a little	half	more	very	completely
blast	open	N	N	N	N	Y
click	open	N	Y	N	N	Y
snap	open	N	Y	N	N	Y

The verbs of sound emission in (62) all depict instantaneous events, and thus *open* is interpreted as a maximal endpoint adjective. In fact, these three V-A pairs all reject the modification by *a little* or *very*. The verb *blast* does not justify the use of *half*. This can be explained as that the force of blasting is so strong that the state of being a little, or half open cannot be considered to be the typical result of blasting. This also confirms that the intensity of the force implied by verb is related to the gradable reading of the paired adjective.

2.4.3.5 AP Complement Verbs: *Drive, Turn* and *Send*[18]

AP complement verbs *drive*, *turn* and *send* can take open-scale adjectives and minimal endpoint adjectives considerably freely. The examples are listed in (63) and (64).

(63) AP Complement Verbs plus Open-Scale Adjectives

Verb	Adjective	a little	half	more	very	completely
drive	batty	Y	Y	N	N	Y
turn	bearish	N	N	Y	N	N
turn	cloudy	Y	Y	Y	Y	Y

[18] The verb *send* in this case is used as a verb of causative change of state, not as a ditransitive verb.

turn	cold and heavy	Y	N	Y	Y	Y
turn	different	N	N	N	N	N
drive	dizzy	Y	N	Y	Y	Y
drive	frantic	Y	Y	Y	Y	Y
drive	mad	Y	Y	Y	Y	Y
send	mad	Y	Y	Y	Y	Y
turn	milky	Y	Y	Y	Y	Y
turn	odd	Y	N	Y	Y	Y
turn	pale and soft	Y	N	N	Y	N
turn	political	Y	N	Y	Y	Y
run	ragged	N	Y	Y	Y	Y
turn	short	N	N	N	N	N
drive	spare	Y	Y	N	N	Y
turn	thick and green	N	N	N	Y	Y

(64) AP Complement Verbs plus Minimal Endpoint Adjectives

Verb	Adjective	a little	half	more	very	completely
drive	barmy	Y	Y	N	N	Y
drive	daft	Y	Y	Y	N	Y
drive	dotty	Y	Y	N	N	Y
drive	insane	Y	Y	Y	Y	Y
turn	sour	Y	N	N	Y	Y

AP complement verbs are often combined with adjectives of mental state such as *crazy*, *dotty*, *insane*, etc. Interestingly, AP complement verbs can co-occur with various types of adjectives. For this reason, it can be assumed that verbs encoding the result state tend to impose fewer constraints on the licensed types of adjectives, as pointed out by Goldberg (1995: 196). I will continue this discussion by examining the distribution of *render*-headed adjectives in the next section.

2.4.3.6 Render-Headed Adjectives

Like AP complement verbs, the verb *render*[19] seems freer from semantic constraints on

[19] The verb render can be classified as an AP-complement verb because it also requires a result predicative when it denotes a causative change of state. However the verb is treated separately from other AP-complement verbs in this paper since it has far less constraints on the selection of the object and the result predicate than other AP-complement verbs.

the property of the adjective the verb takes, although it is usually used in a situation where one cancels or ensures the effect, value or capability of something[20]. Consider (65).

(65) *Render*-Headed Adjectives with Proportional Modifiers

a. He suggested, "This comparison and the great similarity in the appearances of the comets seem to *render it very probable* that the comets are the same."

b. To harden a router is to *render it more heavily defended and more difficult* to attack.

c. At the same time, however, it feels over-produced, completely devoid of any rough edges and is also just the right length to *render it a little inconsequential*.

d. Nitric acid is said to increase the amount of ammonia in the urine, and thus to *render it slightly alkaline*.

e. This proved to be difficult without compromising the story, so rather than drop some scenes, I decided to *render it slightly smaller*.

f. Closer inspection should *render it somewhat legible*. (WEB)

As shown in the above examples, *render* can take an inanimate causer, and the events denoted by *render* do not imply a causative event by means of exertion of physical force. At the same time, the verb can co-occur with various adjectives as long as they represent a status of effect, value, ability and possibility. Thus it can be considered that the verb lexically specifies a result state of its object. (For details, see Appendix A10.)

This can hold with AP complement verbs. The verbs *drive*, *turn* and *send* have a causative meaning only when they take a result predicate. Thus they also can be considered to lexically specify a result state of the object. Furthermore AP complement verbs do not necessarily imply the exertion of physical force by the agent.

Based on these observations, one can make a general assumption that: for verbs that appear in AP resultatives, if the verb implies the direct exertion of physical force on the patient, it tends to impose stricter constraints on the adjective than those verbs which do not imply the direct exertion of physical force. Contrariwise, verbs that do not imply the direct exertion of physical force can license an inanimate causer. In this sense, it can be said that resultatives employing *render* or AP complement verbs are distant from the prototypical resultative, and that semantic constraints on the prototypical resultatives are largely due to the semantic properties of the verb.

[20] According to our data from the BNC, the top ten adjectives most frequently used with *render* include liable (23), impossible (10), useless (10), incapable (8), harmless (6), important (6), ineffective (6), suitable (6), unable (6) and unusable (6). The figures in the parentheses represent the counts of the instances found.

2.5 Two Semantic Scales of Causative Resultatives

2.5.1 Verbal Causativity

Based on the discussion in 2.4, I propose that the prototypical causative resultative involves the following four semantic features in (66):

(66) Semantic Features of Prototypical Causative Resultative
a. Agentivity
b. Direct exertion of physical force
c. Immediacy of result effect
d. Boundary reading of the result state denoted by the result predicate

The features (66a), (66b) and (66c) are associated with the semantics of verbs that appear in resultatives, while the feature (66d) is associated with result predicate APs (or PPs). The feature (66a) *agentivity*, refers to the nature of the subject NP, and the feature of animate volitional agent is an important property for the verb to appear in a prototypical resultative event. The feature (66b) *direct exertion of physical force*, is related to the nature of the causative process. In a prototypical causative event, the agent conveys a physical force to the patient in a perceivable manner. The feature (66c) *immediacy of result effect*, is related to the patienthood of the object NP. In a prototypical causative event, the effect must be brought about upon the patient without mediating a temporal gap after the activity is completed.

The feature (66c) *boundary reading of the result state denoted by the result predicate* is primarily associated with the properties of the result predicate. This feature specifies on the scale a clear endpoint of a change of state over which the activity cannot be continued. For the convenience of representation, I will use the term *boundary of the result*, to refer to this feature.

These four features are closely related with one another to integrate the activity event and the result event into a single causal chain. If any of these is lacking, the causativity of the event is reduced. For a typical causative resultative event, these four properties must be fully satisfied. Otherwise, the event is interpreted as being of lower causativity.

2.5.2 Two Dimensional Scales by Verbal Causativity and Boundary of Result

As discussed above, the features (66a), (66b) and (66c) are associated with verbs, while the feature (66d) is related to the properties of result predicates. Thus we can categorize the former three features under the term *verbal causativity*. Now I propose that by combining the two semantic scales: *verbal causativity* and *boundary of the result*, we

can effectively capture the semantics of English causative resultatives, and explain the aforementioned constraints on the combination of verbs and result predicates.

Furthermore, these two scales are of great use in explaining semantic differences between AP resultatives and PP resultatives. For example, PPs can allow a reading of a durative process during which the change of state event is gradually achieved. In other words, their endpoints are less distinct and more gradable than those specified by AP resultatives, which denote punctual endpoints. Thus, PPs can appear in resultatives with lower verbal causativity, such as events of a metaphoric causative change of state or events of non-physical causative change of state.

In contrast, in order for a resultative to represent an event of a physical causative change of state, the sentence must fully satisfy the two semantic features: verbal causativity and boundary of the result. This requires the resultative to employ a verb that implies the exertion of a physical force by an animate (or volitional) causer, as well as an AP result predicate denoting a clear boundary of change of state.

2.5.3 What Verbs Can Co-occur with AP or PP?

The claim made in 2.5.2 can be confirmed in the data shown in (67). It lists major verbs appearing in PP resultatives which I found in the BNC. The figures in parentheses represent the number of tokens. Verbs annotated with an asterisk are those not found in AP resultatives in the BNC.

(67) Frequently Used 52 Verbs in PP Resultatives in the BNC
*divide** (159), *push* (103), *lead** (89), *throw* (80), *convert** (72), *cut* (67), *transform** (59), *pour** (56), *force* (53), *plunge** (48), *slip* (44), *split** (44), *drop** (42), *draw* (36), *translate** (35), *insert** (31), *introduce** (28), *thrust* (28), *break* (25), *incorporate** (23), *integrate* (23), *press* (22), *stick** (22), *tip** (22), *pull* (21), *dip** (20), *move** (20), *toss** (19), *enter** (18), *slide* (18), *feed* (16), *fit** (15), *spoon* (15), *stir** (15), *change** (14), *load** (14), *stuff* (14), *drag* (13), *fold* (13), *provoke** (13), *shove* (13), *pack* (12), *roll**[21] (12), *separate** (12), *release** (11), *tuck** (11), *dig** (10), *ease* (10), *kick* (10), *slam* (10), *sort** (10), *steer** (10)

The above list (67) shows that 30 out of 52 verbs are not found in our AP resultatives corpus. Many of these verbs, such as: *divide*, *lead*, *convert* and *transform*, do not

[21] In fact, the verb *roll* can appear in AP resultatives, but it was not found in the corpus of my research. Pronoun objects such as *it*, *her*, *them*, etc. were excluded in the search keys for AP resultatives in the BNC. Otherwise some examples of *roll* might have been found.

necessarily imply the exertion of a physical force. In this respect, these verbs are lower in verbal causativity than those verbs typically used in AP resultatives.

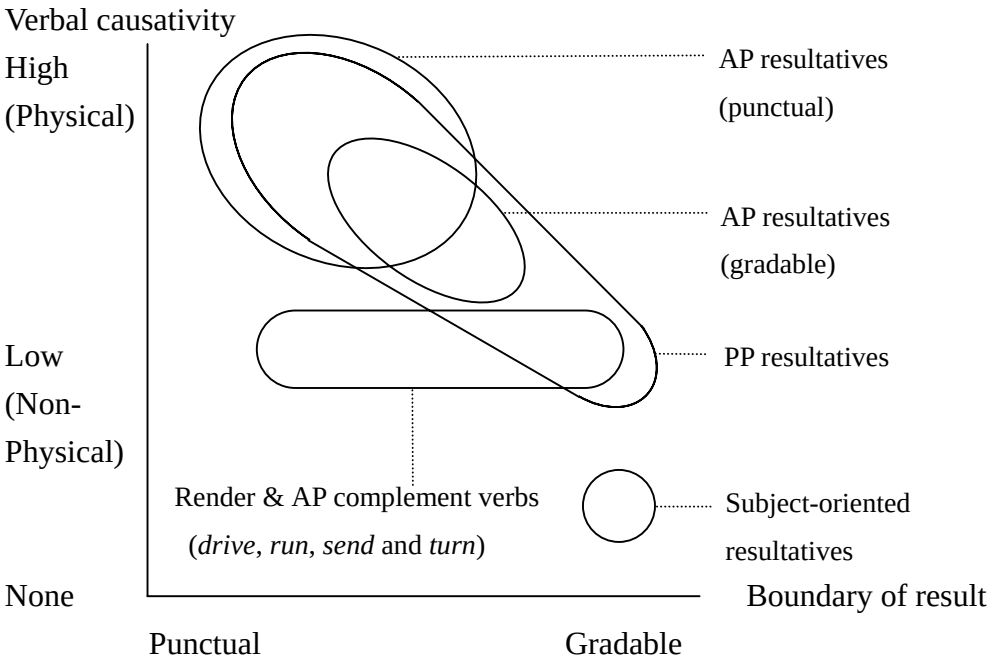
The subject-oriented resultatives exemplified in (16) can be explained in terms of the two scales of verbal causativity and boundary of the result. The examples in (16) are repeated as (68) below.

(68) a. The servant lit candles around the corridor.
b. The kid buzzed the doorbells along the street.
c. The man collected garbage cans down the road.

The PPs of the above examples are all unbounded, and the verbal causativity of the verbs is low because the verbs in (68a) and (68b) do not imply causative change of state or change of location, although the subjects are volitional agents. The verb in (68) denotes a causative change of location, but it does not specify the manner of exerting a physical force. Also note that the objects in (68) are all plural. The plurality of the objects causes the objects to be interpreted as a set of things serially aligned throughout the path, and this reading justifies the PPs modifying the subjects. Therefore it is safe to say that these sentences, though using lexical components necessary for resultatives, are the most remote from the domain of prototypical causative resultatives of all related expressions.

The schemata in (69) represent the semantic relation between AP resultatives, PP (*into*) resultatives and subject-orient resultatives in the two dimensional scales of verbal causativity and boundary of the result.

(69) Semantic Relation between Resultatives and Other Related Expressions



The shapes above represent the semantic domains of the subtypes of resultatives or the related expressions. These semantic domains are aligned by the two semantic scales: verbal causativity and boundary of the result. AP resultatives typically use verbs implying the exertion of a physical force. Thus, they usually show high causativity, but their APs may vary in boundary reading depending on the semantics of the verb they are paired with. Such APs may represent a gradable reading in the state of result.

PP (into) resultatives cover multiple semantic domains. They can license both an animate and inanimate causer, and can denote a physical and non-physical causative event. If the PP refers to a physical endpoint of a causative motion event, its endpoint has a bounded reading. But when the PP refers to a metaphoric or non-physical path and a endpoint, the boundary reading allows a gradable reading.

Render-headed resultatives and AP complement resultatives stay low in verbal causativity, but they can both present a resultative with a rather punctual endpoint or a more gradable boundary.

Subject-oriented resultatives essentially do not encode a causative event, but an intransitive motion event with a non-punctual endpoint. Therefore, they stay at the right bottom corner.

2.6 Summary

In this chapter, I reviewed and discussed various proposed claims and other related questions about semantic constraints on English resultative constructions. In summary of this chapter, I propose that the semantics of English resultatives can be captured by two semantic scales: verbal causativity and boundary of the result. The former scale comprises three sub-features: 1) agentivity, 2) degree of causative force exerted, and 3) immediacy of effect. Differences in these two semantic scales characterize the distinctive semantics of AP resultatives, PP resultatives and their variants respectively.

Chapter 3

Japanese V-V Compounds

In Chapter 2, I discussed the two different semantic scales that determine the semantics and behavior of English AP resultatives. In this chapter, I will examine the semantic properties of Japanese V-V compounds as the semantically corresponding construction to the English resultative construction. In the discussions to follow, I will examine various types of V-V compounds in terms of the causativity, aspectual structure and combination patterns of V1 and V2. I will conclude by proposing: 1) that the verb hierarchy plays an extremely important role in determining the combination patterns of V-V compounds; and 2) that there is a significant co-relation between the headedness of compounds and the argument linking condition between V1 and V2.

3.1 Review of Past Studies

3.1.1 Teramura (1969, 1984) and Yamamoto (1984)

The V-V compound has long been a central issue in studies on the Japanese grammar. The oldest literature on this issue includes Matsushita (1928), Yamada (1936), Takebe (1953) and Sakakura (1957). In particular, Teramura (1969, 1984) can be considered to be the most important works that established a foundation of studies on V-V compounds. Teramura (1969, 1984) proposes classifying V-V compounds into the following four types based on the degree of semantic independence of component verbs.

(1) Teramura's Classification of V-V Compounds

a. Independent V1 + Independent V2
   yobi-ireru (call-put.in, "call in"), *nigiri-tsubusu* (grasp-flatten, "crush in one's hand")

b. Independent V1 + Dependent V2
   furi-hajimeru (fall-begin, "begin to fall"), *yobi-kakeru* (call-hang, "call to")

c. Dependent V1 + Independent V2
   sashi-dasu (thrust-put.forth, "hold out"), *furi-muku* (shake-turn.ones's.face, "turn around")

d. Dependent V1 + Dependent V2
   harai-sageru (pay-lower, "sell off"), *kiri-ageru* (cut-raise, "put an end to")

Teramura's approach is motivated by the purpose of distinguishing compound

component V2s from what he calls Type 3 aspect markers[1], such as *-dasu* ("begin to"), *-hajimeru* ("begin to"), *-kakeru* ("be on the verge of" or "have almost done") and *-ageru* ("have finished doing"). Since some V2s have dual classifications as a Type 3 aspect marker and a thematic component V2 of a compound, no morphological clue is available to define the criteria. The verb *-ageru* is a good example: it means either "have finished doing" or "raise." He admits, however, that it is very difficult to define objective criteria to clearly distinguish these two categories.

Yamamoto (1984) reviews Teramura's classification from a viewpoint of case government, as shown in (2).

(2) Yamamoto's Classification

a. Type 1: V1 and V2 govern the case of NPs:

Otoko ga tabako wo nage-suteru.
man Nom cigarette Acc throw-dispose.of
"A man throws away a cigarette."

b. Type 2: V1 governs the case of NPs:

Otoko ga sora wo mi-ageru.
man Nom sky Acc look-raise
"A man looks up at the sky."

c. Type 3: V2 governs the case of NPs:

Saigai ga uchi[2]*-kasanaru.*
disaster Nom strike-lie.on
"Disasters occur repeatedly."

d. Type 4: Neither V1 nor V2 governs the case of NPs:

Otoko ga shippai wo kuri-kaesu.
man Nom failure Acc reel-turn.over
"A man repeats failures." (Yamamoto 1984: 32-49)

Yamamoto's test sees which component verb governs the cases. In the instance of the compound *uchi-kasanaru* in (2c), the V1 is prefixized (only meaning repetition) and the

[1] Teramura classifies aspect makers into three groups. Type 1 markers include conjugational endings *-ru* (imperfect) and *-ta* (perfect). Type 2 aspect markers include auxiliary aspectual predicates which are added to the gerund form (*-te*) of the main verb, such as (*-te*) *iru*, (*-te*) *aru*, (*-te*) *oku*, (*-te*) *miru*, (*-te*) *yaru*, (*-te*) *ageru*, etc. Type 3 markers include auxiliary aspectual predicates which are added to the *renyoukei* stem of the preceding verb. For details, see Teramura (1984: 119-163).

[2] The V1 *uchi-* is an inflection form of *utsu* ("(of martial art, clock, impression) strike"). It has a few synonyms including *naguru* ("(of a fistfight) strike"), *butsu* ("(of children's fight) strike or slap") and *tataku* ("strike, beat, hit or slap"). However, they cannot be translated exactly into English.

V2 governs the nominative and accusative cases.

However, Himeno (1999) points out that there are some problematic examples with Yamamoto's analysis. Consider (3).

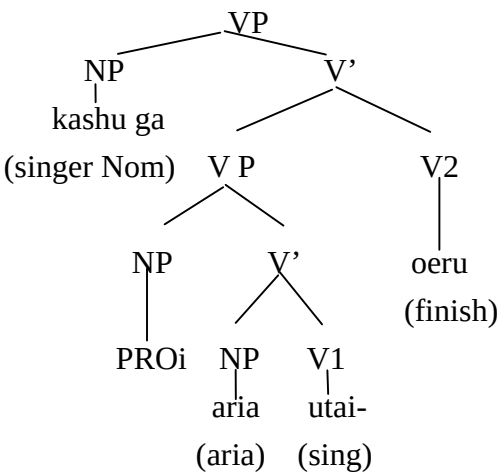
(3) Otoko ga eigo wo {narau / hajimeru}.
man Nom English Acc {learn/begin}
"A man {learns/*begins} English." (Himeno 1999: 15)

According to Yamamoto (1984), the compound *narai-hajimeru* should be classified as Type 2. However, Himeno (1999) claims Yamamoto's classification may not be able to fully describe Japanese V-V compounds. For example the aspectual predicate *-hajimeru* ("begin to do") cannot be ruled out in the above test because *-hajimeru* is also able to independently govern the nominative and accusative cases when it is used alone as a normal verb. This is also the case with other aspectual predicates like *-oeru* ("finish"), *-tsuzukeru* ("continue") and *-dasu* (start).

3.1.2 Kageyama (1993, 1996)

Kageyama (1993, 1996) proposes classifying V-V compounds into Type A and Type B. According to his proposal, Type B has the syntactical complement structure as in (4). They have greater productivity than Type A compounds, and the semantic relation between V1 and V2 is different from lexical compounds in that V2 of Type B compounds denotes aspectual meanings. (For details of the definition of a syntactic V-V compound, see Kageyama (1993).)

(4) **Complement structure for syntactic compounds**



Kashu ga aria wo utai-oeru
Singer Nom aria Acc sing-finish
"The singer finishes singing an aria."

On the other hand, Type A compounds are less productive than Type B because they are more or less constrained by the conventionality in the selection of their partner verbs. Type A compounds can further be classified into those formed through the embedding of the complement V1, and those formed through the linking of the arguments of the component verbs. For convenience, I will refer to the former type of compounds as an embedding compound, and the latter type as a "canonical" compound.

In embedding compounds, V2 takes the event denoted by V1 as its lexical complement. For example, in the compound *migaki-ageru* (polish-raise, "polish up"), V2 (*ageru*, "raise") denotes the completion of an event by taking as its argument the event denoted by V1 (< *migaku*, "polish").

In canonical compounds, V1 and V2 are compounded through the linking of their arguments. For example, V1 and V2 of the compound *arai-otosu* share an agent argument and a patient argument. The following examples show the compounding structures of an embedding compound and a canonical compound.

(5) a. Embedding compound: *migaki-ageru* (polish-raise, "polish up")
[V1 < Agent , Theme>] [V2 <Agent , Event>]

b. Canonical compound: *arai-otosu* (wash-drop, "wash off")
[V1 <Agent, Theme>] [V2 <Agent, Theme>]

Kageyama claims that both types of compounds follow the Relativized Right-headed Head Rule (Di Sciullo & Williams 1987)[3].

Furthermore, Kageyama (1993) claims that canonical compounds are generated at the argument structure level, and that the grammatical properties related to the argument structure of canonical compounds determines the combination patterns of compounds. He observes that transitive V1/V2 and unergative V1/V2 can compound with each other in all possible combination patterns. Consider (6):

[3] The headF (= head with respect to the feature F) of a word is the rightmost element of the word marked for the feature F. (Di Sciullo & Williams 1987)

(6) a. Unergative V1 + Unergative V2: *ii-yoru* (say-come.near, “make approaches to”)
b. Unergative V1 + Transitive V2: *naki-harasu* (cry-cause.to.swell, “cry out”)
c. Transitive V1 + Unergative V2: *machi-kamaeru* (wait-assume.posture, “be on the watch for”)
d. Transitive V1 + Transitive V2: *kai-toru* (buy-take, “buy up”)

These four patterns are possible because unergative verbs and transitive verbs have an external argument. But because unaccusative verbs do not have an external argument, they can only compound with an unaccusative verb, not with an unergative or transitive verb.

(7) a. Unaccusative V1 + Unaccusative V2: *suberi-ochiru* (slip-fall, “slip off”)
b. Unaccusative V1 + Unergative V2: **korobi-oriru* (stumble-climb.down)
c. Unaccusative V1 + Transitive V2: **ure-tobasu* (sell (vi)-fly (vt))
d. Unergative V1 + Unaccusative V2: **naki-hareru* (cry-swell)
e. Transitive V1 + Unaccusative V2: **arai-ochiru* (wash-come.off)

Kageyama generalizes these combination patterns into a unified condition called the Transitivity Harmony Principle (1993: 117), which states that a transitive verb or an ergative verb can choose a transitive verb or an ergative verb respectively as its partner, but an unaccusative intransitive verbs can only be compounded with an unaccusative intransitive verb.

3.1.3 Himeno (1999)

Himeno (1999) adopts Kageyama’s criteria to distinguish syntactic compounds (Type B) from canonical compounds (Type A), and she proposes a new set of four criteria to analyze the semantic properties of Type A and B compounds.

(8) Himeno’s Four Criteria for Semantic Analysis (Himeno 1999: 20)
a. The compound can be paraphrased with decomposed V1 and V2 because the original meanings of both V1 and V2 are transparently reflected in the meaning of the entire compound.
b. Only V2 needs to be paraphrased with different predicate(s).
c. Only V1 needs to be paraphrased with different predicate(s).
d. Both V1 and V2 need to be paraphrased with different predicate(s).

For Type B compounds, Criterion (a) or (b) holds:

(9) Criteria (a, b) and Semantic Relations in Type B Compounds

Criterion (a): i) Subject-predicate relation: *hataraki-sugiru* (work-excess, "working is excessive" > "overwork")

ii) Complement relation: *aruki-hajimeru* (walk-begin, "begin to walk")

Criterion (b): *tabe-tsukeru* (eat-put.on[4], "acquire a habit of eating" > "become used to eating")

For Type A compounds, Criterion (a), (b), (c) or (d) holds. Consider the examples in (10).

(10) Criteria (a, b, c, d) and Semantic Relations in Type A Compounds

Criterion (a):

A. Juxtaposed relation[5]

i) Succession : *nagare-tsuku* (flow-arrive, "drift (to)")

ii) Means/Cause : *nui-tsukeru* (sew-put.on, "sew on")

iii) Accompanying activity : *asobi-kurasu* (play-live, "play away the days")

iv) Co-occurrence : *naki-sakebu* (cry-yell, "cry out")

v) Similar activities : *kaki-shirusu* (write-mark, "write down")

B. Analogous relation : *kaki-naguru* (write-hit, "scribble")

C. i) Subject-predicate relation:

nomi-tariru (drink-suffice, "drinking is enough">"drink enough")

ii) Complement relation:

dashi-oshimu (give-be.unwilling.to.spare, "be unwilling to give" or "begrudge")

Criterion (b): *nage-komu*[6] (throw-.go.into, "throw into")

Criterion (c): *uchi-kiru*[7] (strike-cut, "break off")

Criterion (d): *ochi-tsuku*[8] (fall-stay, "calm/settle down")

---

[4] The verb *tsukeru* can also be translated as "put to," "stick" and "attach."

[5] This is the translation from the Japanese term *heiretsu kankei*, which represents that V1 and V2 are temporally or causally related, or two different actions denoted by V1 and V2 take place simultaneously or alternatively.

[6] The V2 *-komu* can only be used in a V-V compound. When the compound is paraphrased into a periphrastic expression, the verb *ireru* (put in) has to be used.

[7] The V1 *uchi-* (inf. *utsu*) here is used as a prefix to emphasize suddenness of V2.

[8] There are a few homonyms to *tsuku*: *Tsuku* 1 (着く) means "arrive." *Tsuku* 2 (付く) means "stick (to)"

The compound *ochi-tsuku* in Criterion (d) is fully lexicalized and cannot be decomposed into V1 and V2. If it is paraphrased, one needs to use an utterly different expression like *odayaka-na joutai ni naru*, (calm-NA[9] state Goal become, "become peaceful").

Based on the classifications of V-V compounds using the above criteria, Himeno closely examines the meanings of frequently used V2s to describe their various uses generated through metaphorical extension.

Himeno (1999) does not refer to the mechanism of such metaphorical extension. For a more detailed study on such a mechanism, see Saito (1992), who examines the process of metaphorical semantic extension of the V1 and V2, and attempts to formulate various abstraction processes of verbal meaning in relation to euphonic phenomena.

Himeno's paraphrasing tests provide important tools for further analyses of the headedness of Japanese V-V compounds. However, she does not make a special proposal as to a unified account for underlying linguistic principles that determine the selection/combination patterns of the V1 and V2.

3.1.4 Matsumoto (1996, 1998)

Matsumoto (1996, 1998) proposes a classification of V-V compounds primarily based on the argument linking patterns of the V1 and V2, and semantic relations between the component verbs.

(11) Matsumoto's Classification of Japanese V-V Compounds

a. Pair compounds:

naki-sakebu (cry-shout, "cry-out"), *tobi-haneru* (jump-hop, "jump (up and down / about) repeatedly")

b. Cause compounds:

yake-shinu (burn-die, "die from burning"), *ne-bokeru* (sleep-become.senile, "be absent-minded from not being fully awake")

c. Manner compounds:

1) Right-headed compounds with intransitive V2:

nagare-ochiru (flow-fall, "flow down"), *mai-agaru* (dance-go.up, "soar up")

2) Argument-mixing manner compounds:

tsure-saru (take-leave, "take away, kidnap"), *mochi-aruku* (have-walk, "carry

---

or "be attached (to)." *Tsuku* 3 (突く) means "poke", "pierce" or "stab." The first two verbs are historically related.

[9] A form of the inflectional ending of adjectival-verbs, which modifies a subsequent noun.

around”)

3) Right-headed compounds with transitive V2:

mochi-ageru (have-lift, “hold up in one’s hand”), *nori-ireru* (ride-bring.in, “ride in”)

d. Means compounds:

naguri-korosu (hit-kill, “kill by striking”), *mushiri-toru* (pluck-take, “pluck off”)

e. Other semantic relations:

nori-suteru (ride-abandon, “abandon (something) one rides”), *yuzuri-ukeru* (yield-receive, “inherit”)

f. Compounds with semantically derived V2:

shikari-tsukeru (scold-put.on, “scold-harshly”), *yomi-ageru* (read-raise, “read out”)

g. Compounds with semantically derived V1:

sashi-semaru (thrust-come.close, “become urgent”), *sashi-osaeru* (thrust-hold, “seize”)

Furthermore, Matsumoto (1998) adds to his list of compound types in (11) some more subclasses, including 1) Compounds of fictive motion, 2) Compounds with V1 depicting background, and 3) Compounds with metaphorically derived V2. They are exemplified below:

(12) Additional Subclasses of Compounds with Semantically Derived V2

a. Compounds of fictive motion:

mi-orosu (look-take.down, “look-down”), *mi-mawasu* (look-turn, “look-around”)

b. Compounds with V1 depicting background:

ure-nokoru (sell-remain, “remain unsold”), *yake-nokoru* (burn-remain, “be spared from the fire”)

c. Compounds with metaphorically derived V2:

kiki-toru (listen-take, “take dictation”), *mi-yaburu* (see-tear, “detect”)

Matsumoto admits that most Japanese verbs are right-headed, but he also discusses the applicability of the relativized Right-headed Head Rule (Di Sciullo & William 1987) to see whether it can capture the realization of the arguments of both right-headed compounds and left-headed compounds. He concludes that the RHR cannot capture the

formation of argument-mixing manner compounds listed in (11c-2). They are made up of an unergative intransitive motion verb (V2) and an activity verb (V1) that depicts an accompanying activity or state. This type of compound inherits the argument structure from both components. In the following example, the patient argument is inherited from the V1, and the Locative argument is inherited from the V2.

(13) *mochi-aruku* (have-walk, "carry around")

V1<ag, pt>+V2<ag-th, loc>=V<ag-th, pt, loc>

Based on this observation, he claims that "compounds do not simply copy a list of role names from the argument structure head," and concludes that the semantic relations need to be specified at the level of semantic structure. He then proposes the Shared Participant Condition for proper treatment of argument linking.

(14) Shared Participant Condition (Matsumoto 1996:230 (55))

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.

Yumoto (1996) claims that the formation of a V-V compound is conditioned by not only its semantic well-formedness, but also the identification of two subjects. Matsumoto (1998) agrees with her claim and proposes the Principle of Shared Subject.

(15) Principle of Subject[10] Identification (1998: 72 (69))

When two verbs are compounded with each other, the most salient participant in each semantic structure must refer to the same entity.

Matsumoto denies the view that arguments of component verbs are inherited by the argument structure of the compound. Instead, he claims that the semantic structures of V1 and V2 independently exist within the compound, and that the semantic entities associated with the arguments of the component verbs (such as agent arguments, patient arguments, locative arguments, etc.) are mutually linked. Matsumoto states that his analysis can better capture the compounding principles of V-V compounds than the percolation account by Yumoto (1996) (mentioned in the next section) because there are

[10] According to Matsumoto, the term "subject" here is not a syntactical notion but the semantically most salient argument, as stated in Fillmore 1977 and Dowty 1991.

cases where the argument identification between V1 and V2 cannot properly be established.

3.1.5 Yumoto (1996, 2001, 2005)

Yumoto (1996) proposes three fundamental conditions of the compounding process of Japanese V-V compounds.

Firstly, when two verbs are compounded, the LCS of the compound must satisfy the semantic well-formedness condition. This well-formedness condition allows limited types of semantic relations: 1) Pair relation; 2) Accompanying state/manner; 3) Means; 4) Cause-effect; and 5) Complement relation.

Secondly, the subject arguments of the V1 and V2 must be identified. The assumption of this condition automatically requires the identification of the subjects of the events denoted by the V1 LCS and V2 LCS, ruling out infelicitous compounds such as **naguri-shinu* (hit (vt)-die (vi), "hit dead"), and **narashi-wataru* (ring (vt)-cross (vi), "resound wide and far").[11]

Thirdly, Yumoto assumes the percolation principle of the case features to the compound. If an unaccusative component verb is the head of the compound, its case feature [-acc(usative)] is percolated to the compound. For example, the compound *nomi-tsubureru* is composed of transitive V1 and unaccusative V2. The feature of V2 [-acc] is percolated to the compound, which bans the realization of the object of the V1 (**shouchuu wo nomi-tsubureru*: spirits Acc drink-crush, "go into stupor by drinking spirits").

Yumoto (2001, 2005) furthermore observes that the compound preferentially inherits the unaccusative feature of its transitive component verb, as shown in (16).

(16) a. Unaccusative V1 + Transitive V2: *fuki-ageru* (blow-raise, "blow upward"), *teri-tsukeru* (shine-put.on, "shine down on relentlessly")

b. Transitive V1 + Unaccusative V2: *nomi-tsubureru* (drink-crush, "drink oneself into stupor"), *ki-bukureru* (wear-swell, "be thickly clad")

Yumoto generalizes these observations and proposes a new condition underlying the formation process of lexical compounds. This condition accounts for those cases that cannot be captured by the percolation principle of head features.

[11] The compounds *naguri-korosu* (strike (vt)-kill (vt)) and *nari-wataru* (ring (vi)-cross (vi)) are felicitous.

(17) Principle of Priority to Unaccusativity (Yumoto 2001, 2005)[12]

In the formation of lexical compounds, the case feature [-acc] must be inherited by the compound verb regardless of whether the feature is associated with the head or non-head component.

Yumoto claims that this principle only applies to the inheritance of case features at the level of lexical compounding, and that the unaccusativity of a lexical compound must be distinguished from unaccusativity as a syntactic feature.

Yumoto (2005) and Matsumoto (1998) both hold a view that the subjects must be identified between the V1 and V2, but they take a very different position in judging the headedness of the compounds listed below:

(18) a. *hare-wataru* (become.clear-cross, "(of sky) clear up")
b. *nari-wataru* (ring-cross, "resound wide and far")
c. *shikari-tsukeru* (scold-put.on, "scold-harshly")
d. *shizumari-kaeru* (become.silent-return?turn.over?,"fall completely silent")
e. *nade-mawasu* (stroke-turn.around, "rub one's hand over (something)")
f. *nori-awaseru* (ride-bring.together, "happen to ride with (someone)")
g. *umare-awaseru* (be.born-bring.together, "happen to be born (at a certain time)")
h. *i-awaseru* (stay-bring.together, "happen to be present")
i. *mi-kawasu* (see-exchange, "exchange glances")

Yumoto (2005) assumes the above compounds have a complement structure, in which, according to her definition, one complement slot of V2 is filled with the LCS of V1. In contrast, Matsumoto (1998) treats them as left-headed compounds, considering that their V2s simply add information as to how the V1 is performed.[13]

In 3.2, I will summarize the results of the statistic research I conducted on the Japanese V-V compound database, which consists of 2,397 canonical compounds and 238 embedding compounds. (See Appendixes B1 and B2 respectively.) Then I will discuss the distribution of the compound components as well as grammatical/semantic characteristics of V-V compounds in the following sections.

[12] This is the translation of the Japanese term *hitaikakusei yuusen no gensoku*.
[13] Kageyama (1993) also regards these compounds as having a complement structure.

3.2 General Semantic Characteristics of V-V Compounds

3.2.1 Types of V-V Compound Investigated in This Research

To build my V-V compound database, I first used the list of V2 made by Nakamura (1998)[14] and then collected from the Japanese dictionary *Daijirin* (1992), Electronic Book CD-ROM version, all compounds that include the V2s covered in Nakamura's list. Furthermore, I added all examples listed in Kageyama (1993, 1996) and Matsumoto (1996, 1998). In this process, I added those compounds that have not been discussed in the literature but seem relevant to this category, and excluded those that seem to be outdated or rarely used today. The number of entries in my database amounts to a total of 2,397 canonical compounds. In this study, I excluded syntactic compounds and embedding compounds. For each entry in our database, I determined the part of speech, grammatical properties and semantic features.

3.2.2 14 Types of Canonical Compounds

As I discussed in 3.1, the question of what can provide objective criteria to classify V-V compounds has been one of the main issues in past studies. In this study, I will start with the general classification of V-V compounds proposed by Kageyama (1993, 1996), Himeno (1999) and Yumoto (2001, 2005), who distinguish syntactic compounds and lexical compounds, and further classify the latter into two subclasses: embedding compounds and canonical compounds. The semantic relation of V1 and V2 of the canonical compounds is the central issue for most scholars studying Japanese V-V compounds.

The distinction between syntactic compounds and lexical compounds can be reduced to the distinct levels of linguistic domain: syntax and morphology. However, what is the linguistic nature of the difference between embedding compounds and canonical compounds? The former type retains an argument-predicate relation between V1 and V2 because the V1 event is the argument of the V2 predicate. But this is not the case with canonical lexical compounds. For canonical compounds, V1 and V2 are compounded based on a thematic identification of arguments, and the compounds represent semantic relations such as a cause-effect relation or a means-activity relation. The general classification of V-V compounds should be as shown in (19).

[14] Nakamura made a list of 457 frequently used V2 based on the data she had collected from dictionaries including *Daijirin* (1995, Sanseido) *Kojien* (Iwanami Shoten), and *Jukugorin* (Nichigai Associates). She does not refer to the editions and the publishing years of the latter two dictionaries.

(19) General Classification of V-V Compounds

- V-V Compound
  - Syntactic Compound
  - Lexical Compound
    - Embedding Compound
    - Canonical Compound

For part of canonical compounds, the selection of the partner verb is highly conventionalized and the semantic relation between V1 and V2 is opaque. Yet if one takes a closer look at the meaning of the relation between V1 and V2, one can classify canonical compounds into more subtypes than proposed in the previous literature. In particular, I made an attempt to further classify those that were otherwise handled as idiomatized or conventionalized because the semantic relation is so opaque that it cannot be fully captured by the argument structure approach. According to my native speaker intuition, I classified canonical compounds into 14 types, firstly examining whether the meanings of both components are fully reflected in the semantics of the compound, and secondly what semantic relation the auxiliarized verb has with the matrix verb.

It is important, however, to state that these 14 types are not necessarily exclusive, and some compounds can be understood as belonging to more than one type depending on the interpretation of the meanings. Furthermore, there are no objective criteria to properly classify canonical compounds into an appropriate compound type. This is largely due to the wordhood of V-V compounds. They are morphological compounds with no markers to represent grammatical relations, and their internal semantic structure is less clear than that of syntactic compounds. Thus, one is only able to classify V-V compounds depending on their semantic distinctiveness. Clearly, it is extremely difficult to set clear boundaries among the 14 types because some types seem to semantically overlap each other, but it is the only way to generalize their compounding patterns to seek a compounding principle.

(20) shows the examples of such 14 types of 2,397 canonical compounds.

(20) 14 Types of Canonical Compounds (2,397 Instances)

1. Pair compounds:
   naki-sakebu (cry-shout, “cry-out”)
2. Manner compounds:
   nagare-ochiru (flow-fall, “flow down”)
3. Means compounds:

naguri-korosu (hit-kill, “kill by striking”)

4. Cause compounds:
   yake-shinu (burn-die, “die from burning”)
5. Compounds with directional/path motion V2 (DPM compound):
   kashi-tsukeru (lend-put.on, “makes a loan to”)
6. Compounds with V1 depicting the scene for V2 to take place (Situation compound): *yake-nokoru* (burn-remain, “be spared from the fire”)
7. Compounds with V1 representing the preceding activity (Preceding activity compound): *yomi-suteru* (read-abandon, “throw away after a single reading”)
8. Compounds with V1 representing the purpose of V2 (Purpose compound):
   negai-deru (wish-come.out, “apply to the office for (something)”)
9. Compounds with V1 representing the condition of V2 (Condition compound):
   awase-motsu (combine-have, “have (two things)”)
10. Compounds with V1 representing the type of social interaction in which V2 takes place (Interaction type compound): *moushi-tsukeru* (say-put.on, “instruct”)
11. Compounds with V1 representing the activity type of V2 (Activity type compound): *ki-kuzusu* (wear-pull.down, “dress oneself in an informal way”)
12. Compounds with auxiliarized V1 (Emphasis compound):
    tori-tsukurou (take-mend, “patch things up (for the moment)”)
13. Compounds with V2 representing the extent of activity V2 (Activity extent compound): *odori-kuruu* (dance-become.insane, “dance frenziedly”)
14. Compounds with V2 representing the extent of the result of V2 (Result extent compound): *akire-kaeru* (be.appalled-turn.over, “be completely dumbfounded”)

The class names in the parentheses are abbreviated names for the convenience of notation. The types (20-1) through (20-4) are classic types of canonical compounds. In these types, the meanings of V1 and V2 are rather clearly reflected in the semantics of the compound. Therefore, as proposed by Himeno (1999: 20), one may be able to classify compounds of these types by paraphrasing them into a different expression such as those in (21), although such a paraphrasing is not always perfect.

(21) a. Pair: V1-*tari* V2-*tari suru*: “do V1 and do V2 alternately”
naki-sakebu (cry-shout, “cry out”)→*nai-tari saken-dari suru*
b. Manner: V1-*nagara* V2: “do V2 while doing V1”
naki-kurasu (cry-live, “spend one’s days in tears”)→*naki-nagara kurasu*
c. Manner: V1-*youni* V2: “do V2 in manner of V1”

hajike-tobu (burst-fly, “fly off”)→*hajikeru youni tobu*

d. Means: V1{-*kotode* / -*te*} V2: do V2 by doing V1

keri-tobasu (kick-make.fly, “kick off”) {*keru koto de* / *ket-te*} *tobasu*

e. Cause: V1-*te* V2:

yake-shinu (burn-die, “die from burning”)→*yake-te shinu*

f. Cause: V1-*ta node* V2-{*ta* / *da*}[15]:

yake-shinu (burn-die, “die from burning”)→*yake-ta node shin-da*[16]

In contrast, the canonical compounds in (20-5) through (20-14) have undergone semantic bleaching of either V1 or V2. In (20-5), (20-13) and (20-14), V2 plays a different linguistic role in the semantics of each compound. For the types (20-6) through (20-12), V1 undergoes semantic bleaching and provides a derived meaning to the compound. From here on, I will refer to canonical compounds simply as V-V compound or compound if not otherwise stated.

3.2.2.1 Pair Compounds

Pair compounds are usually made up of two synonymous verbs of the same event type. Various types of verbs can appear in this compound class as shown in (22). They are all right-headed and the verbal aspect is determined by V2. The majority of pair compounds are intransitive.

(22) Pair Compounds

a. Intransitive

naki-sakebu (cry-shout, “cry out”)	—Activity
kobi-hetsurau (fawn-flatter, “flatter”)	—Activity
yase-otoroeru (become.slim-weaken, “grow thin and worn out”)	—Change of state
hikari-kagayaku (shine-glitter, “shine brightly”)	—State
osore-ononoku (fear-shudder, “shudder with fear”)	—Psych-verb
odoroki-akireru (be.surprised-be.stunned, “be appalled”)	—Psych verb

b. Transitive

oshie-michibiku (teach-guide, “teach and guide”)

kaki-tsuzuru (write-spell, “put into writing”)

---

[15] The morphemes -*ta* and -*da* are inflectional endings for the perfect/past.

[16] The verb final -*da* is an inflectional ending for the past tense. This example sounds natural in the past tense because of the same past tense marker -*ta* attached to *yake*- (“burn”).

3.2.2.2 Manner Compounds

Manner compounds are all right-headed. Manner compounds incorporate a V1 which represents the manner of V2. This type of compound constitutes the second largest group of all compound classes, the largest being means compounds discussed in the next section. According to our corpus, the intransitive/transitive ratio of manner compounds is 337 to 177. The largest verb class for V2 of manner compounds is the class of goal motion verbs, such as *iku* ("go") and *hairu* ("enter"). This may suggest that manner components most typically modify motion events.

(23) Manner Compounds
a. *neri-aruku* (parade-walk, "parade")
b. *naki-kurasu* (cry-live, "spend one's days in tears")
c. *shinobi-iru* (sneak-enter, "sneak (into)")
d. *nagare-tsuku* (flow-arrive, "drift (to)")
e. *buchi-kowasu* (hit-break, "smash something" or "ruin (a plan or happy occasion such as a party")

The V1 *buchi-* (< *butsu* (hit)) in (23e) is auxiliarized and less productive than other V1s. The verb originally means to hit, but it is also used to emphasize the extent of the exerted force denoted by V2. Thus V1 of the verb (23e) means how thoughtlessly or thoroughly a plan or happy occasion is ruined, but it still retains a manner sense.

3.2.2.3 Means Compounds

Means compounds are right-headed, and they form the largest group of all classes of canonical V-V compounds. In this class, transitive compounds (886 transitive verbs) overwhelmingly outnumber intransitive compounds (69 verbs). The largest and second largest classes for V2 are verbs of causative change of state and verbs of causative change of location.

(24) Means Compounds
a. *kai-modosu* (buy-return, "buy back")
b. *keri-tobasu* (kick-make.fly, "kick off")
d. *nuki-toru* (pull-take, "pull out")
c. *oshi-akeru* (push-open, "push open")
d. *sashi-korosu* (stab-kill, "stab dead")
e. *uchi-ageru* (strike-raise, "launch").

f. *ii-arasou* (say-contest, “argue”)
g. *oyogi-wataru* (swim-cross, “swim across”)
h. *tobi-utsuru* (jump-move, “jump over (from one place to another)”)

Some transitive means compounds have corresponding intransitive cause compounds, as in (25).

(25) a. Transitive-Transitive: *ori-mageru* (break.off (vt)-bend (vt), “bend, fold”)
b. Intransitive-Intransitive: *ore-magaru* (break.off (vi)-bend (vi), “bend sharply”)

However, some means compounds seem to behave exceptionally and violate the Transitivity Harmony Principle and the Principle of Subject Sharing/Identification. For example, the transitive means compound *uchi-ageru* (strike (vt)-raise (vt), “launch”) morphologically corresponds to the intransitive cause compound *uchi-agaru* (strike (vt)-go.up (vi), “be launched”). In this case, the V1 lacks an intransitive form, remaining transitive in the intransitive cause compound. This means the transitive V1 and the intransitive V2 do not share the same subject.

In my research, I found 30 intransitive cause compounds[17] whose V1 and V2 do not share the same subject. To explain such a subject mismatch, another account needs to be provided or the existing grammatical conditions need to be further elaborated. I will continue this discussion in Section 3.2.2.5.

3.2.2.4 Cause Compounds

Cause compounds are mostly intransitive, although some of them have corresponding transitive means compounds. In this class, the majority of V2s represent an intransitive change of state event. Specifically, 51 V2 verbs out of 86 cases are intransitive (about 60%). The fact that such intransitive V2s can also be compounded with a transitive V1 poses a problem with respect to accounts based on the Transitivity Harmony Principle or the Principle of Subject Sharing/Identification. Matsumoto (1998) analyzes such mismatch compounds as being derived from means compounds.[18]

Again, I cite the examples of cause compounds in (26) in addition to the examples raised in (11).

[17] If one includes other types of compounds such as manner compounds, we can find more examples of subject mismatch. I have so far found a total of 57 such compounds.
[18] Kageyama (1993) explains this derivation as back-formation.

(26) Cause Compounds

a. *aruki-tsukareru* (walk-get.tired, “get tired from walking”)

b. *iri-tsuku* (roast-stick (to something), “stick (to a pan) by roasting”)

c. *mori-agaru* (heap-go.up, “swell” or “rise”)

d. *ni-tsumaru* (cook-be.packed, “be boiled down”)

e. *nuri-kawaru* (paint-change(vi), “(of territory distributions) be painted into a different appearance”)

f. *suri-mukeru* (chafe-peel.off, “be abraded”)

g. *tabe-chirakasu* (eat-mess.up, “eat untidily”)

h. *tsuke-kuwawaru* (attach-be.added, “be newly added”)

i. *yoi-tsubureru* (get.drunk-collapse, “drink oneself unconscious”)

Strictly speaking, as I stated in Section 3.2.2, the cause sense of the V1 can be interpreted somewhat differently depending on how one understands the contribution of V1 to the result denoted by V2. For example, *mori-agaru* in (26d) can also be used to denote a spontaneous event (such as the earth’s crustal movements) with no typical causer responsible for the activity denoted by V1. In such a case, one may interpret V1 as showing a manner sense rather than a cause sense, like the manner compound *seri-agaru* (move.slowly-go.up, “(of a stage floor, etc.) rise slowly”).

As for type classification, I classified verbs according to their typical meanings and usages when they can be considered to belong to more than one compound type. When multiple classification is unavoidable with certain lexical items, or when it is impossible to decide on a single class label for them, I count them out from the statistic data I show herein, or I explain what type of lexical items are included in the statistics counts.

Another distinctiveness of this type of compound is that there are many subject mismatch cases in this class. The compounds (26b) through (26i) are all subject mismatch compounds. In these compounds, the agent argument of the V1 is not linked to any argument of the argument structure of the head V2, and it does not realize in syntax. Many of these compounds have their transitive counterpart from which they were derived. For example, the intransitive compound *ni-tsumaru* in (26d) (cook-be.packed, “be boiled down”) was derived from the transitive compound *ni-tsumeru* (cook-packed, “boil down”).

Such subject mismatch seldom occurs to manner compounds and means compounds. This suggests that the notions of manner and means are strongly associated with the agent in transitive manner or means compounds, whereas the notion of cause is not necessarily limited to a volitional agent, and therefore the agent of transitive V1s can be

backgrounded when compounded with an intransitive V2.

3.2.2.5 Compounds with Directed/Path Motion V2 (DPM Compound)

In this type of compound, V2 denotes a directional motion or path motion. For convenience, I refer to compounds of this type as DPM compounds. DPM compounds are different from other types of compounds that incorporate a motion V2, such as manner compounds (e.g. *hai-deru*: crawl-go.out, "crawl out") in that V2 adds a sense of directed motion or path motion to the event denoted by V1. In the DPM compound *nagare-komu* (flow-go.into, "flow into"), for example, V1 denotes the flowing motion, and V2 denotes a directed motion whose meaning roughly corresponds to "into."

Some DPM compounds also denote a metaphorical motion. V2 of the compound *kaki-kudasu* (write-make.go.down) can denote either a physical or metaphorical motion. When V2 is interpreted in the former sense, the compound means "write downwards," and when interpreted in the latter sense, the compound means "translate (esp. Classical Chinese text) into (Japanese) by reordering words."[19]

V2 of DPM compounds includes verbs that denote an unbounded path motion, such as *-mawaru* (go.around, "around"), *-susumu* (go.forward, "do aggressively or do more"), etc. Since they also add a physical or metaphorical motion sense to the event denoted by V1, they are also classified into DPM compounds. (27) shows examples of DPM compounds.

(27) Compounds with Directional/Path Motion V2
a. *kajiri-tsuku* (bite-stick, "bite at")
b. *kai-susumu* (buy-go.forward, "buy aggressively")
c. *mi-mawaru* (watch-go.around, "patrol")
d. *moe-agaru* (burn-go.up, "blaze up")
e. *nage-komu* (throw-go.into, "throw into")
f. *nugi-chirasu* (undress-scatter, "take off (one's clothes) and scatter (them) all over")
g. *oi-mawasu* (chase-turn.around, "chase around")

In some DPM compounds, V1 seems to play the main role in the predication of the event. In contrast, V2 seems to only add information associated with the motion of the entity or entities depicted by V1. In such compounds, V2 is omissible but V1 is not. In

[19] Japanese is an SOV language, whereas Chinese is an SVO language. Therefore, ancient learned Japanese people annotated the text of classical Chinese literature with special marks so that they could read or rewrite it in the Japanese syntactical order.

this sense, V1 can be considered to be the center of predication. Consider (28).

(28) a. *kashi-tsukeru* (loan-put.on, “make a loan to”)
a’. *okane wo kasu*
money Acc loan (“loan money”)
a’’ **okane wo tsukeru* (in the sense of loaning)
money Acc put on (“*put money on (something)”)
b. *egaki-dasu* (draw-put.out, “depict”)
b’. *e wo egaku*
picture Acc draw (“draw a picture”)
b’’. **e wo dasu* (in the sense of depicting)
picture Acc put.out (“*put out a picture”)

The V2 *-tsukeru* of the compound *kashi-tsukeru* in (28a) does not mean physical causative change of location. It only emphasizes the direction of the activity done toward the goal/recipient (loanee) of V1. Thus V2 is omissible as in (28a’), but V1 is not. Likewise, the V2 *-dasu* of *egaki-dasu* in (28b) refers to a metaphorical change of location of an abstract idea, and V2 is omissible as in (28b’).

Some DPM compounds denote fictive motion events, such as those in (29).

(29) Compounds of Fictive Motion
a. *mi-ageru* (look-raise, “look upward”)
b. *mi-mawasu* (look-turn.around, “look around (oneself)”)
c. *mi-toosu* (look-penetrate, “see through”)

The compounds in (29) do not represent a physical causative change of location of the patient. In these compounds, V2 represents fictive motion events which involve a mental trace of the viewer’s sight along the path. For example, the V1 *mi-* of the compound *mi-ageru* in (29a) denotes the activity done by the agent, and the V2 *-ageru* denotes an event in which the viewer’s attention is directed upward quickly or slowly along a path.

Also it should be noted that some DPM compounds of fictive motion show different linking patterns of arguments from those of other typical DPM compounds as shown in (27). For example, (29a) and (29b) both have a transitive V1 and a transitive V2. However, the patient of V2 cannot be linked to the patient of V1 because V2 does not represent any concrete causative change of location. In this case, it should be considered

that the patient of V1 realizes as the object of the compound.

Finally, it is often very difficult to draw a clear line between DPM compounds and manner compounds. For example, the compound *sagashi-mawaru* (look.for-go.around, "look around for") is usually classified as a subtype of manner compound, in which V1 represents the activity accompanying the motion denoted by V2. In this case, the compound *sagashi-mawaru* is translated as "go around, looking for something." However, it is also possible to interpret this compound as a DPM compound if one understands that it is composed of a V1 that functions as the center of the predication and a V2 that denotes a directional or path motion associated with V1. In this case the compound can be translated as "look all over for something." This judgment is very subtle and a DPM compound reading may be preferred to a manner compound reading depending on the context where the compound is used.

3.2.2.6 Compounds with V1 Depicting Scene for V2 to Take Place (Scene Compounds)

This type of compound has a V1 that depicts the situation or scene where the event denoted by V2 takes place. I refer to this type of compound as a scene compound. In scene compounds, the two events denoted by V1 and V2 are cotemporal or overlapped with each other. V1 may be an activity verb, state verb or change of state verb, which indicates a preceding situation, in which the event denoted by V2 unfolds coextensively or takes place at the final stage of the event denoted by V1. The list in (30) shows some examples of scene compounds.

(30) Compounds with V1 Representing Scene
a. *ne-midareru* (sleep-go.out.of.order, "(of hair) become disheveled from sleep")
b. *ni-koboreru* (boil-spill, "boil over")
c. *nori-sugosu* (ride-pass, "(unintentionally) go past (one's station)")
d. *yake-nokoru* (burn-remain, "be spared from the fire")
e. *yuki-kureru* (go-grow.dark, "be overtaken by darkness")

Many scene compounds violate the Principle of Shared Subject. Among the examples above, V1 and V2 of (30a, d, e) refer to different subjects. For example, the compound *ne-midareru* in (30a) is composed of V1 (referring to the sleeper), and V2 (referring to the sleeper's hair or clothes). Matsumoto (1998) explains that the sleeper and his body parts or clothes share the same scene or situation, by way of which they can be coindexed. Therefore, he claims, the Principle of Shared Subject can be maintained in

terms of “proximity.”

The notion of “the proximity of the two subjects” can be better understood by explaining that the event denoted by V1 provides a scene where a V2 event takes place. Consider the compounds *yake-nokoru* in (30d) and *yuki-kureru* in (30e). In the compound *yake-nokoru*, the subject of V1 usually refers to burning objects in the fire or the burning area, and the subject of V2 refers to something that is spared from the fire. It seems difficult to link these two subjects simply because of spatial proximity because one undergoes burning and the other does not. The compound *yuki-kureru* depicts a situation where the sky grows dark before a traveler arrives at his destination. The subject of the V1 is the traveler, and the subject of the V2 is the sky. Rather than explaining that these two subjects are mutually identified via spatial proximity, I think it is reasonable to explain that the event denoted by V1 provides a scene for the V2 event to take place. In scene compounds, the compounding of V1 and V2 does not rely on a strict argument linking between V1 and V2, but it is based on a semantic relation between the V1 and V2 events: spatiotemporal continuity. All this, I believe, reflects the opaqueness distinctive to the internal grammatical structure of lexical compounds, unlike the grammatical structure of English AP resultatives, which are syntactically realized.

3.2.2.7 Compounds with V1 Representing Preceding Activity for V2 (Preceding Activity Compounds)

V1 precedes V2 in this type of compound. V1 and V2 usually share the same subject since the same subject undergoes two different sequentially related events. The event denoted by V1 only depicts the preceding activity and the event denoted by V2 depicts the subsequent activity. For some compounds of this type, one can have a reading that V1 and V2 occur simultaneously depending on the interpretation, but V2 always depicts the final stage of the event and V2 cannot temporally precede V1.

(31) Compounds with V1 Representing Preceding Activity for V2
a. *iki-ataru* (go-hit, “go and reach”)
b. *sute-oku* (abandon-leave, “leave as it is”)
c. *taore-fusu* (fall-lie, “fall facedown”)
d. *nori-suteru* (ride-abandon, “abandon (something) one rides”)
e. *nuki-kazasu* (pull.out-hold.up.high, “draw (a sword) and hold (it) up high”)
f. *yomi-suteru* (read-abandon, “throw away after a single reading”)

In all the examples above, there is no time interval between the V1 event and the V2 event. Preceding activity compounds may appear similar to situation compounds, but the former strictly follow the sequential occurrence of V1 and V2, while the latter allow the interpretation of two events unfolding coextensively.

Preceding activity compounds are right-headed because a locative argument is licensed by V2. Consider (32).

(32) a. *michi ni kuruma wo nori-suteru*
road Loc car Acc ride-abandon
"abandon on the road a car which one drove"
b. **michi ni noru*
road Loc ride
"*ride the street"
c. *#michi ni suteru*
road Loc abandon
"throw away on the street"

The object argument is shared by V1 and V2 in (32a), but the locative argument is licensed by V2, not V1, as shown in (32b, c).

The reading of the time sequence between V1 and V2 heavily depends on the pragmatic knowledge of the events denoted by the verbs. Some compounds of this type may also be classified as another type of compound. For example, the compound *oi-tsuku* (chase-arrive, "catch up") may allow three different interpretations of the compound: 1) A means compound ("catch up by chasing"); 2) A directional compound ("catch up"), and 3) A preceding activity compound ("chase and catch up").

3.2.2.8 Compounds with V1 Representing Purpose of V2 (Purpose Compounds)

Compounds of this type are quite limited in number, and there are not more than half a dozen purpose compounds in my database. Purpose compounds are also right-headed, and their V1 represents the purpose of the activity denoted by V2. Most of the compounds of this type are headed by intransitive motion V2s such as *deru* ("come out") and *kuru* ("come"). The V2 verbs *deru* and *kuru* are different from those in DPM compounds. V2 in DPM compounds depicts the direction to which the V1 event is directed, or the path along which the V1 event takes place. In contrast, in purpose compounds, V1 and V2 are fundamentally separate activities and V2 simply denotes the motion event of the agent who intends to do V1. Consider the examples in (33).

(33) Compounds with V1 Representing Purpose of V2
a. *motome-kuru* (request.come, “come in pursuit of”)
b. *moushi-deru* (say-come.out, “offer” or “report”)
c. *nanori-deru* (introduce.oneself-come.out, “come forward”)
d. *negai-deru* (wish-come.out, “apply to the office for (something)”)
e. *tazune-kuru* (visit-come, “come to visit”)
f. *todoke-deru* (report-come.out, “come to report (to the authorities)”)

The compound *negai-deru* (33d) is used in a situation where, for example, one expresses his wish to retire from his company. The V1 *negai-* means “wish” and the V2 *-deru* means “come (to the authorities to apply or ask for something).”

The compounds (33a) *motome-kuru* and (33e) *tazune-kuru* have the deictic motion verb *kuru* (“come”) in V2, which is paired with another deictic motion verb *yuku* (“go”). Interestingly, if one replaces V2 of (33a) and (33e) with *yuku*, these compounds (*motome-yuku* and *tazune-yuku*) can be interpreted as DPM compounds, rather than purpose compounds. In this case, the compounds *motome-yuku* and *tazune-yuku* mean “go seeking (something)” and “go visiting (various places).” I think this is because the verb *yuku* (“go”) is aspectually unbounded if no goal NP is manifested. On the other hand, the verb *kuru* lexically incorporates the endpoint of the motion—usually the speaker’s deictic center, and it maintains its aspectual boundedness in a compound.

3.2.2.9 Compounds with V1 Representing Condition of V2 (Condition Compounds)

Compounds of this type have a V1 that specifies the condition as to how the activity denoted by the paired V2 is conducted.

For example, V1 of *awase-motsu* (combine-have, “have (two things)”) specifies the condition of possession denoted by V2. In a sense, condition compounds may be considered as a subclass of manner compounds in that V1 refers to the manner in which V2 is conducted. However, condition compounds are different from manner compounds in that V1 of condition compounds represents an abstract or unperceivable aspect of the V2 activity. Such compounds are exemplified in (34).

(34) Compounds with V1 Representing Condition of V2
a. *awase-motsu* (combine-have, “have (two things)”)
b. *iki-wakareru* (live-part, “part (from somebody) and have no contact for a long time”)
c. *kake-hanareru* (hang-be.separated, “become far”)

d. *kane-sonaeru* (combine-have, “have (two different characteristics)”)
e. *meshi-tsukau* (summon-use, “take into one’s service”)
f. *more-kiku* (leak-hear, “overhear”)
g. *tsutae-kiku* (convey-hear, “hear what (people) say”)

3.2.2.10 Compounds with V1 Representing Type of Social Interaction in Which V2 Takes place (Interaction Type Compounds)

Interaction type compounds also form a small class with only 12 instances in my compound database. V1 of this type of compound specifies the type of social interaction in which the event denoted by V2 takes place. Interaction type compounds are different from scene compounds in that with interaction type compounds, V1 and V2 do not necessarily share the spatiotemporal continuity, rather V1 merely specifies the type of social interaction between two parties, through which V2 takes place. For example, in (35a) *moushi-tsukeru* (say-put.on, “instruct”) and (35a’) *moushi-ukeru* (say-receive, “accept (an instruction)”) are semantically paired in that they depict the same situation where an instructor gives an instruction to an “instructee.” The compound (35a) means that someone gives someone else an instruction to do something, and the compound (35b) means the “instructee” agrees to undertake the instruction given. Matsumoto (1998) points out that compounds of this type constitute an intransitive-transitive pair, and one is derived from the other. The examples below include three pairs (35a, a’), (35b, b’) and (35c, c’). Consider (35).

(35) Interaction Type Compounds
a. *moushi-tsukeru* (say-put.on, “instruct”)
a’. *moushi-ukeru* (say-receive, “accept”)
b. *morai-ukeru* (get-receive, “receive”)
b’. *morai-sageru* (get-lower, “get somebody released from custody”)
c. *uke-toru* (receive-take, “receive”)
c’. *uke-watasu* (receive-deliver, “deliver”)

In the case of the compound pair (35b, b’), it can be thought that (35b’) *morai-sageru* was derived from (35b) *morai-ukeru*, considering that V1 and V2 of (35b) are both transitive and share the same subject and object while those in (35b’) do not. (35c’) can also be considered to have been derived from (35c) for the same reason. In (35b) and (35b’), V1 represents someone being given something no longer necessary by the owner; in (35c) and (35c’), V1 represent someone receiving an item from someone else.

It seems that scene compounds, interaction type compounds and activity type compounds (explained in 3.2.2.11) form a semantic continuum that eventually leads to manner compounds in that V1 specifies a particular type of conceptual domain in which the V2 event takes place. I will take up this discussion again in 3.2.2.11.

3.2.2.11 Compounds with V1 Representing Activity Type of V2 (Activity Type Compounds)

V1 of this type of compound specifies the type or domain of activity depicted by V2. The modification by V1 motivates metaphorical derivation of the meaning of V2. Consider the examples in (36).

(36) Compounds with V1 Representing Activity Type of V2
a. *kui-tsumeru* (eat-block, "become unable to make a living any longer")
b. *ki-kuzusu* (wear-pull.down, "dress oneself in an informal way")
c. *omoi-egaku* (think-depict, "imagine")
d. *omoi-itaru* (think-reach, "come to realize")
e. *mi-otosu* (look-drop, "overlook")
f. *mi-orosu* (look-take.down, "take a bird's eye view over")
g. *mi-kudasu* (look-let.down, "look down" or "despise")

The V2 *-tsumeru* describes a situation where one is unable to go any further, and the V1 *-kui* (< *kuu*, "eat") refers to the conceptual domain in which the situation or activity denoted by V2 is to be interpreted. Therefore the compound is understood as meaning that one becomes unable to go any further in making a living.

Some compounds of this type represent mental activities. For example V1 of *omoi-egaku* specifies the domain of the activity denoted by V2 *egaku* ("depict"), and thus the compound is understood as meaning that one depicts something in one's mind, that is to 'imagine' something.

Matsumoto (1998) explains that fictive motion compounds[20] made up of the V1 *mi-* ("look" or "see") and a motion V2, such as *mi-orosu*, are semantically left-headed. But at the same time, he also points out that a perception verb is often used as V1 to metaphorically express an event of mental perception, as can be seen in *mi-wakeru* (look-separate, "distinguish") or *mi-yaburu* (look-break, "see through (a fraud)").

[20] They include *mi-orosu* ("have a bird's eye view over"), *mi-ageru* ("look upward"), *mi-mawasu* ("look around (oneself)"), *mi-kawasu* ("exchange glances"), *mi-watasu* ("look out over"), *mi-toosu* ("see through") and *mi-sueru* ("stare fixedly"). (Matsumoto 1998: 62, (35))

Matsumoto suggests that such metaphorically derived compounds[21] are right-headed because V1 simply specifies the background of V2. Matsumoto uses a negation test to distinguish fictive motion compounds from metaphorically derived compounds. When fictive motion compounds are negated, both V1 and V2 are negated, whereas when metaphorically derived compounds are negated, only the V2 is negated.

Matsumoto's observation is very insightful. However, I think it should be noted that the boundary between the fictive motion type and the metaphorically derived type is not necessarily clear-cut because of the nature of lexical compounding. The internal semantic structure of V-V compounds is not transparent and all 14 compound types in (20) seem to form a semantic continuum. In fact, some compounds span two or more different types. They are: *mi-ageru* ("physically look up" and "respect"), *mi-kaesu* ("look over," "return a look" and "have the last laugh"), *mi-naosu* ("look at something again" and "reconsider") and *mi-toosu* ("see through" and "foresee (the future)"). This suggests that the headedness of V-V compounds is not uniformly determined by the internal structure of the compound, but that it is primarily determined by the semantic relation between the two events denoted by V1 and V2.

3.2.2.12 Compounds with Auxiliarized V1 (Emphasis Compounds)

Prefixized compounds have a grammaticalized (or clitic) V1, which has lost its original meaning through auxiliarization. Most V1s of emphasis compounds represent an emphatic meaning added to the V2. Such auxiliarized V1 is exemplified in (37), although (37) is not an exhaustive list of such verbs.

(37) Examples of Auxiliarized V1

a. Violent force: *buchi-*/*buk-*/*bun-*/*but-*[22] (< *butsu*, "hit")

b. Force: *oshi-* (< *osu*, "push")

c. Momentum: *tsuki-*/*tsuk-*/*tsun-*/*tsut-* (< *tsuku*, "poke")

d. Falling motion: *uchi-* (< *utsu*, "strike")

e. Thoroughness or completeness: *uchi-* (< *utsu*, "strike")

f. Rapid unfolding of a situation: *uchi-* (< *utsu*, "strike")

g. Emergency: *sashi-* (< *sasu*, "plunge"), *tori-*(< *toru*, "take")

h. Carelessness: *tori-* (< *toru*, "take")

---

[21] They include *mi-wakeru* ("distinguish"), *mi-kiru* ("give up on"), *mi-yaburu* ("see through"), *mi-mamoru* ("keep watch over"), *mi-osameru* ("take a last look"), *mi-sadameru* ("discern"), *mi-ukeru* ("see"), *kiki-toru* ("catch (someone's words)"), *kiki-tsukeru* ("catch (the sound of)"), etc. (Matsumoto 1998: 65, (39))

[22] The variant verb forms in 1), 3) and 7) are euphonic alternants.

i. Extra effort: *tori-*/*tok-* (< *toru*, “take”)

The above usages are exemplified in (38). The parenthesized numbers on the right refer to the usages shown above in (37).

(38) Compounds with Auxiliarized V1

a. *bun-naguru* (hit-beat, “beat violently”) (37a)
b. *oshi-iru* (push-enter, “(of a burglar) break into”) (37b)
c. *tsut-tsuku* (plunge-plunge, “poke”) (37c)
d. *uchi-fusu*[23] (strike-lie.down, “lie down with one’s face on something”) (37d)
e. *uchi-suteru* (strike-throw.away, “abandon”) (37e)
f. *uchi-akeru* (strike-open, “confide”) (37e)
g. *uchi-tokeru* (strike-get.loose, “(of two people) throw off one’s reserve or open one’s heart) (37f)
e. *sashi-tomeru* (intervene-stop, “urgently ban (the publication of a book or one’s access to a facility)”) (37g)
f. *tori-tsukurou* (take-mend, “patch things up (for the moment)”) (37g)
g. *tori-nigasu* (take-let.go, “fail to catch”) (37h)
h. *tok-kumu* (take-tackle, “wrestle”) (37i)

Emphasis compounds have less transparent semantic structures, and some of them are so highly conventionalized or lexicalized that one cannot decompose the meaning into componential verbal meanings. For example, V1 *uchi-* of the compounds (38d) through (38g) has various meanings. It seems very difficult to find clear general principles that clearly explain the semantic relations between these meanings as far as the currently available data are concerned, and so far it seems reasonable to state that these meanings are just conventionally determined in combination with the partner V2. It might be possible to identify certain general principles of the semantic conventionalization of auxiliarized V1s, by thoroughly studying their historic changes from their original, archaic usages. However, this is out of the scope of our study, and thus I will not discuss the issue of historical semantic changes of these V1s any further.

[23] According to the Japanese dictionary *Daijirin* (1992), interestingly, the compound, in its archaic usage, used to mean “lie down for a moment” when used as an intransitive verb and “hold somebody down” when used as a transitive verb. Its transitive use has association with its modern usage via the notion of “force,” but its intransitive meaning is so different from the modern usage that it seems as if there were no principled rules in the semantic changes.

3.2.2.13 Compounds with V2 Representing Extent of Activity V1 (Activity Extent Compound)

Activity extent compounds, together with result extent compounds discussed in the next section, are left-headed compounds. Matsumoto (1998) handles these types of compound types in the same type under the label of left-headed compounds. However, they should be classified separately because V2s of activity extent compounds are usually compounded with agentive verbs[24], and they modify a different semantic component of V1 from that modified by V2 of result extent compounds. V2 of the activity extent compounds provides additional meaning to the manner component of the ACT predicate of agentive V1. For convenience of understanding, I schematize these modifying relations by means of LCS representation in (39). (For the modification schema of result extent compounds, see (46) in 3.2.2.14.)

(39) *odori-kuruu* (dance-frenziedly (< become.insane), "dance frenziedly")

V1[[x ACT in-MANNER-of [ ]]

Extent of activity: V2 [y BECOME [BE AT[INSANE]]

"frenziedly"

V2 of activity compounds only functions as the modifier[25] of the manner component of V1, and emphasizes the intensity of the manner in which the activity denoted by V1 is performed. The subject of V1 (x) and the subject of V2 (y) are linked with each other as the most salient participant in each event, but the compounding of argument structures does not take place. This can be confirmed by the texts in (40).

(40) a. *Kare wa odori-kurut-ta*
he Nom dance-become.insane-Pst
"He danced frenziedly."

[24] Some V1s of this type of compound may not look like activity verbs. For example, V1 of *are-kuruu* (get.rough-become.insane, "(of the weather or person) become very rough or angry") is from the intransitive verb *areru*, which is basically classified as a verb of change of state. However, I think it is safe to treat this verb as an activity verb because it has an activity reading meaning "behave roughly" when it takes a person or weather as the subject. Such other V1 verbs include *niou* ("smell"), *fuku* ("blow"), *furu* ("fall"), *moreru* ("burn"), etc.

[25] Matsumoto (1998) explains the relation between V1 and V2 by stating that V2 is embedded in the "Effect" component of 1.

b. *Kare wa odot-ta.*
he Nom dance-Pst
"He danced."
c. **Kare wa kurut-ta*.
he Nom become.insane-Pst
"*He became insane."

(40a) can be paraphrased as (40b) by omitting V2, but (40c) cannot by omitting V1. Based on this observation, it is reasonable to consider that V2 of activity extent compounds has been degraded to a modifier through auxiliarization, and it cannot be compounded with V1 at the level of argument structure.

I list other major V2 examples of activity extent compounds together with their example sentences in (41).

(41) Major V2s of Activity Extent Compounds

a. -*ageru* (raise, "loud and clearly"): *utai-ageru* (sing-raise, "sing with enthusiasm")
b. -*areru* (get.rough, "go wild"): *fuki-areru* (blow-get.rough, "blow wildly")
c. -*chirasu* (scatter, "act on those around the agent"): *atari-chirasu* (take.it.out.on-scatter, "take it out on the surrounding people")
d. -*haru* (stretch, "assert"): *ii-haru* (say-stretch, "insist on")
e1. -*iru* (enter, "alertly"): *mi-iru* (watch-enter, "watch alertly")
e2. -*iru* (enter, "violently") *seki-iru* (cough-go.into, "cough violently")
f. -*koboreru* (overflow, "abound"): *nioi-koboreru* (smell-overflow, "be filled with a fragrance")
g1. -*komu* (go.into, "amply"): *ki-komu* (wear-go.into, "put on many layers of clothes")
g2. -*komu* (go.into, "deeply"): *ne-komu* (sleep-go.into, "sleep because of sickness")
g3. -*komu* (go.into, "thoroughly"): *hashiri-komu* (run-go.into, "do training runs")
h. -*kuruu* (become.insane, "violently"): *odori-kuruu* (dance-become.insane, "dance frenziedly")
i. -*nuku* (penetrate, "thoroughly"): *kangae-nuku* (think-go.into, "think out thoroughly")
j. -*sakaru* (become.vigorous, "wildly"): *moe-sakaru* (burn-become.vigorous, "blaze")
k. -*shimeru* (tighten, "tightly/strongly"): *nigiri-shimeru* (squeeze-tightly, "grip tightly")
l. -*sumasu* " (strain one's ears, "intently (-*sumasu*),"): *nerai-sumasu* (aim-make.clear, "take a careful aim at")
m. -*susabu* (grow.wild, "wildly"): *fuki-susabu* (blow-grow.wild, "blow strongly and

coldly”)

n. *-tataku* (hit, “beat down the market price”): *uri-tataku* (sell-hit, “sell off at a loss”)[26]

o. *-tateru* “(make.stand.up, “excessively/excitedly (*-tateru*),”): *sawagi-tateru* (make.noise-stand.up (vt), “make a great fuss”)

p. *-tateru* (make.stand.up, “thoroughly”): *migaki-tateru* (polish-make.stand.up, “polish thoroughly”)

q. *-tsukeru* (put.on, fiercely (*-tsukeru*), “(shine) harshly on”): *teri-tsukeru* (shine-put.on, “shine down on relentlessly”)

r. *-tsumeru* (pack, “in a pressing manner”): *toi-tsumeru* (question-pack, “press for an answer”)

s. *-tsunoru* (grow violent, “become harder and harder”): *furi-tsunoru* (fall-grow.violent, “(of rain) fall harder and harder”)

All of the V2 examples above represent the extent of the event denoted by V1. For example, *-ageru* in (41a) has lost the original meaning of “raise,” adding the sense of “loud and clearly” to V1. Likewise, the V2 *-komu* of *ki-komu* in (41g1) also represents the meaning of “amply,” not the meaning of physical motion.

The verbs *-iru* (41e1, e2) and *-komu* (40g1 through g3) have acquired multiple meanings through semantic extension. I will not discuss the underlying principles of such semantic extension of these verbs here. However, it seems to safe to say that the verb meanings have commonly extended to an emphasis on “thoroughness” in the agent’s attitude (*mi-iru*, *ne-komu*), the amount of effort made by the agents (*hashiri-komu*), and quantity of consumed objects (*ki-komu*).

It should also be noted that there is an interesting correspondence between activity result compounds and Mandarin complex stative construction (CSC), which is also known as V-*de* complement construction.[27] In CSCs, the matrix verb embeds a complement phrase/clause headed by the degree/manner complement marker *de* (得) to represent the subjective evaluation, description or result of the event denoted by the main verb. (42) is an example of CSCs.

(42) *Ta pao-de hen kuai*.

---

[26] Interestingly, this compound, while maintaining the same meaning, allows the inversion of the V1 and V2 (*tataki-uru* (“sell off at a loss”)). This may also support the claim that the V2 functions as an adverbial component modifying the V1.

[27] The corresponding Mandarin term is 状态补语 *zhuangtai buyu* (Zhu Dexi (1982) *Yufa Jiangyi* (朱德熙《语法讲义》) or 情态补语 *qingtai buyu* (Liu et al. (1983), *Shiyong Xiandai Hanyu Yufa* (刘月华等《实用现代汉语语法》)). Also see footnote 55, Section 4.6.1.1.

he run-DE very fast
(他跑得很快。)
"The way he {runs is/ran was} very fast."

The relationship between the matrix verb (*pao*, "run") and the complement (*hen kuai*, "very fast") can imply extent reading.[28] The sentence (42) is uttered to emphasize the extent of the agent's activity denoted by the verb. (For details, see Li & Thompson (1981): 623-630). CSCs can be used to depict an activity done to an intense degree, but not to depict an activity that involves a moderate extent of manner or result. Consider (43).

(43) **Ta pao-de youdianr man*.
he run-DE a little slow
(他跑得有点儿慢。)
"The way he {runs is/ran was} a little slow."

Mandarin CSCs and Japanese activity extent compounds seem to share the same word order. In both constructions, the main predicate precedes the predicate that represents the extent of the main predicate, as shown in (44).

(44) a. CSC: Matrix verb + de-[predicate representing extent]
b. Japanese degree compound: V1 (main verb) + V2 (verb representing extent)

In fact, these constructions are formed at a different linguistic level: CSCs have a bi-clausal structure and thus they are syntactically compounded, whereas Japanese degree compounds are lexical compounds. It is an interesting question as to whether or not there is a general grammatical rule that principles the word order of compounded predicates, sharing the same semantics despite their different compounding levels. This question will not be further examined here since it goes beyond the scope of this study. However, it is worth exploring with a typological viewpoint in future research.

3.2.2.14 Compounds with V2 Representing Extent of Result of V1 (Result Extent Compound)

Result extent compounds are similar to activity extent compounds in that the V2 refers

[28] It also represents a manner inference in a sentence like *Ta xue-de hen renshen* (he study-DE very serious, "He studies/studied very seriously").

to the extent or magnitude of the event denoted by V1. V2 of a result extent compound modifies the result predicates of V1. Major V2 examples of result extent compounds are listed in (45), together with corresponding compound examples.

(45) Result Extent Compounds

a. -*agaru* (go.up, “up”): *hare-agaru* (swell-go.up, “swell up”)

b. -*ageru* (raise, “up”): *shime-ageru* (tighten-raise, “choke up”)

c. -*hateru* (end, “completely/totally”): *kuchi-hateru* (become.rotten-end, “decay completely”)

e. -*iru* (go.into, “trail off”): *kie-iru* (go.out-go.into, “gradually vanish”)

f. -*kareru* (turn.over, “completely”): *akire-kaeru* (be.appalled-turn.over, “be completely dumbfounded”)

g. -*komu* (go.into, “to a considerable extent”): *fuke-komu* (become.aged-go.into, “become aged a lot”)

h. -*midareru* (go.out.of.order, “all over”): *saki-midareru* (bloom-go.out.of.order, “bloom in wild profusion”)

i. -*saru* (leave, “without leaving any trace”): *keshi-saru* (erase-leave, “erase completely”)

j. -*wataru* (cross, “all over”): *saki-wataru* (bloom-cross, “bloom all over the land”)

The majority of V2 predicates of this type of compound are motion verbs, such as -*agaru* (go.up), -*ageru* (raise), -*iru* (go.into), -*komu* (put/go.into), -*saru* (leave), -*wataru* (cross), etc. It can be considered that this is because notions of motion are metaphorically extended to the establishment of various types of change of state events. Such motion verbs include -*ageru* and -*komu*, which also appear in activity extent compounds. (46) schematizes the modification patterns of result extent compounds with -*komu* and -*wataru* in the V2 position.

(46) Major Modification Patterns of V2 -*komu*

a. *fuke-komu* (become.aged-to.considerable.degree (< put/go.into)), “become aged a lot”

V1[y BECOME [BE AT[<u>AGED</u>]]]

↑

Extent of result: V2 [x GO [TO [IN y]]]

|

“TO CONSIDERABLE EXTENT”

b. *keshi-saru* (erase-without.leaving,trace (< leave), “erase completely”)

V1 [[x ACT-ON y] CAUSE [y BECOME [BE AT[ERASED]]]]

↑

Extent of result: V2 [x GO-AWAY [FROM[ ]]]

|

“WITHOUT LEAVING TRACE”

The above LCS representations are not intended to stipulate the linking of the argument structure to the syntax, but they simply show what component of V1 is modified by V2. In (46a), the original meaning of V2 (“go into”) is extended to the meaning of “to a considerable extent,” and it modifies the result component “AGED” of V1. Then the entire compound is interpreted to have a meaning of “erase completely.” V2 of (46b), originally meaning “leave,” is extended to mean “without leaving any trace,” which is interpreted as “completely” in the compound when V2 modifies the result component of V1.[29]

3.2.2.15 Boundary between Activity Extent Compounds and Result Extent Compounds

With some compounds, it is extremely difficult to classify them into a single compound type. This suggests that all the 14 types of compounds mentioned previously are not distributed exclusively from one another, but they seem to be fairly overlapped with one another. The semantic boundary between activity extent compounds and result extent compounds is also very subtle since the internal structure of the semantically extended V2 is not transparent enough to classify some of these compounds in a principled manner. Consider (47).

(47) a. *saki-hokoru* (bloom-boast, “bloom in full glory”)

b. *saki-wataru* (bloom-cross, “bloom all over the land”)

c. *saki-midareru* (bloom-go.out.of.order, “bloom in wild profusion”)

d. *nari-wataru* (ring-cross, “resound far and wide”)[30]

---

[29] The causative compound *keshi-saru* has an associated intransitive compound *kie-saru* (vanish-leave, “vanish without leaving any trace”). In the intransitive use, however, V2 *-saru* can be interpreted as representing the extent of the result (“vanish away”) or the direction of the motion (“vanish into (somewhere)”).

[30] The V2 predicate *-hibiku* (“echo”) in *nari-hibiku* (ring-echo, “ring throughout”) is very difficult to classify. The compound *nari-hibiku* can be understood as an activity result compound, manner compound, cause compound or even pair compound. However, V1 of the compound can be omissible. For this reason, it should be treated as any of three right-headed compounds: manner compound, cause compound or pair compound.

The verb *saku* (*saki-*) used as V1 of (47a, b, c) is originally a change of state verb which means "go into bloom." However, when it is used in these compounds, it strikes as simply referring to the state of blooming. The verb *naru* (*nari-*) in (47d) originally has semelfactive aspect, but it can also be understood as representing a stative event in compounds like (47d). This difference in these aspectual properties becomes more distinct when they are represented in the past tense. Consider (48).

(48) a. ??*Nohara de hana ga saki-hokot-ta.*
field Loc flower Nom bloom-boast-Pst
"In the field flowers bloomed in full glory."
b. ??*Nohara ni hana ga saki-watat-ta.*
field Loc flower Nom bloom-cross-Pst
"Flowers bloomed all over the field."
c. ??*Nohara ni hana ga saki-midare-ta.*
field Loc flower Nom bloom-go.out.of.order-Pst
"In the field flowers bloomed in wild profusion."
d. *Machi ni kane no ne ga nari-watat-ta.*
city Loc bell Gen sound Nom ring-cross-past
"The bell resounded wide and far in the city."

The sentence (48d) is felicitous in the past tense, but the sentences (48a, b, c) sound a little strange because they are interpreted as events of an instantaneous change of state. However (48a, b, c) are felicitous when they are put in the *-te ita* form, which means the past state. For this reason, the compounds in (48a, b, c) can be classified as result state compounds. But those in (48c, d) should be treated as a subtype of activity extent compound because their V2 describes the magnitude of an acoustic phenomenon, not of the result of a process.

As I mentioned in 3.2.2.14, some V2 predicates can denote the extent of either an activity or result. A typical case is the V2 predicate *-wataru* (*-watat-ta*) in (48a, d). This verb even can appear in a means compound such as *oyogi-wataru* (swim-cross, "swim across"). This strongly suggests that the verb *-wataru* basically maintains its original verbal meaning ("cross"), and that based on the conventionalized semantic relation between V1 and V2, the verb is reinterpreted as an extent modifier of the activity or result denoted by V1, or as a main verb in a means compound.

3.2.3 General Statistics of Component Verbs of Compounds

For all verbs found in my database, the type count of V1 is 603 whereas the type count of V2 is 459. When we take a look at the statistics of the distribution of component verbs in terms of the transitive/intransitive/labile distinction, we can see that transitive verbs clearly outnumber intransitive verbs both as V1 and V2, as shown in (49). The term "transitive verb" refers to those that can license an accusative object marked by *wo*, and the term "intransitive " to those that cannot license an accusative object. Transitive verbs included in this group range from causative verbs, such as *kiru* ("cut") to non-causative verbs such as *yomu* ("read"). Intransitive verbs include those that only license a nominative subject, or those that can additionally license a dative and/or locative noun. The term "labile" refers to verbs which can be employed both transitively and intransitively with no formal change in the verb, like an English verb *break* (for details see Shibatani & Pardeshi 2002: 91).

(49) Distribution of Transitive, Intransitive and Labile Verbs for V1 and V2 (Type Count)

Verb Type	V1 (603)	V2 (459)	Average Percentage
Transitive	355 (58.9%)	273 (59.5%)	59.2%
Intransitive	225 (37.3%)	168 (36.6%)	37%
Labile	22 (3.6%)	14 (3.1%)	3.3%
Unknown	0	1 (0.9%)	0.4%

When we examine the distribution data in terms of semantic types of V1 and V2, we can see a correlation between the semantic type of a component verb and the V1/V2 status. Consider the data in (50). The table lists the 20 most frequently used V1 and V2 verbs by token count.

(50) Most Frequently Used Verbs and Rankings

Rank	V1	Reading	Tokens	V2	Reading	Tokens
1	取る	*toru* (take)	81	込む	*komu* (go into)	170
2	引く	*hiku* (pull)	78	出す	*dasu* (put out)	110
3	見る	*miru* (see/look/watch)	67	上げる	*ageru* (raise)	98
4	言う	*iu* (say)	58	付ける	*tsukeru* (put on)	80
5	押す	*osu* (push)	49	合わせる	*awaseru* (put together)	59
6	突く	*tsuku* (poke)	46	上がる	*agaru* (go up)	53

7	書く	*kaku* (write)	39	取る	*toru* (take)	52
8	切る	*kiru* (cut)	38	立てる	*tateru* (stand up (vt))	48
9	打つ	*utsu* (strike)	37	回る	*mawaru* (turn (vi))	41
10	吹く	*fuku* (blow)	36	付く	*tsuku* (stick to)	40
11	思う	*omou* (think)	34	落とす	*otosu* (drop (vt))	37
12	差す	*sasu* (come/put into)	34	切る	*kiru* (cut)	36
13	立つ	*tatsu* (stand)	33	入る	*iru* (go into)	34
14	踏む	*fumu* (step on)	32	掛ける	*kakeru* (hang (vt))	34
15	掻く	*kaku* (scratch)	31	返す	*kaesu* (return (vt))	31
16	聞く	*kiku* (hear/listen)	31	回す	*mawasu* (turn, vt)	31
17	振る	*furu* (wave/shake)	28	入れる	*ireru* (put in)	29
18	乗る	*noru* (ride)	27	立つ	*tatsu* (stand (vi))	28
19	食う	*kuu* (eat)	26	替える	*kaeru* (replace)	26
20	飛ぶ	*tobu* (fly)	26	出る	*deru* (go out)	26
21	泣く	*naku* (cry)	24	掛かる	*kakaru* (hang (vi))	24
22	買う	*kau* (buy)	23	去る	*saru* (leave)	23
23	持つ	*motsu* (hold)	22	行く	*yuku* (go)	21
24	打つ	*utsu* (beat)	21	分ける	*wakeru* (separate)	21
25	読む	*yomu* (read)	20	返る	*kaeru* (turn over (vi))	19

The above table shows that the majority of the verbs for V1 license an agentive subject. Specifically they include causative verbs such as *kiru* (“cut”), intransitive activity verbs such as *tatsu* (“stand”), and non-causative transitive verbs involving a physical impact such as *osu* (“push”), and those not such as *miru* (“see/look/watch”). In contrast, the greatest majority of verbs for V2 are related to change of location or orientation, outnumbering those related to change of state.

This tendency can also be confirmed by the figures in (51), which show the frequency of verb classes in the V1 or V2 position respectively. An example verb is provided under the label of each verb type. As can be seen in (51), transitive and causative verbs account for the vast majority of V1s, whereas, in V2, verbs of causative change of location (512 tokes) and verbs of intransitive motion (505 tokens) are almost the same in the token count.

(51) Ranking of Verb Classes by Token

Rank	V1	Tokens	V2	Tokens
1.	Transitive verbs *miru* (“see/watch/look”)	1033	Verbs of causative change of location *toru* (“take off”)	521
2.	Verbs of causative change of state *kiru* (“cut”)	239	Verb of Intransitive motion *deru* (“go out”)	505
3.	Verb of change of state *midareru* (“go out of order”)	144	Verbs of causative change of state *kiru* (“cut”)	361
4.	Verbs of causative change of location *toru* (take off)	137	Verbs of change of state *midareru* (“go out of order”)	180
5.	Activity verbs *naku* (“cry”)	107	Transitive verbs *miru* (“see/watch/look”)	178
6.	Auxiliarized verbs for emphatic use *bun* (<*butsu*, “hit”) in *bun-naguru* (“beat violently”)	113	Causative change of posture/orientation *tateru* (“stand up”)	141
7.	Verbs of manner of motion *tobu* (“fly”)	98	Verbs of putting and adding *oku* (“put”)	104
8.	Verbs of intransitive motion *deru* (“go out”)	93	Verbs of posture and orientation *okiru* (“get up”)	99
9.	Verbs of causative change of posture *tateru* (“stand up”)	88	Verbs of appearance *saru* (“leave”)	44
10.	Verbs of posture and orientation *okiru* (“get up”)	56	Verbs of combining *kumu* (“assemble”)	43
11.	Psych-verbs *odoroku* (“get surprised”)	39	Verb of manner of motion *tobu* (“fly”)	41
12.	Verbs of mental activities *omou* (“think”)	35	Activity verbs *naku* (“cry”)	40
13.	Phenomenon verbs *hibiku* (“echo”)	25	Verbs of existence *iru* (“exist,” or “stay”)	21
14.	Verbs of combining *kumu* (“assemble”)	21	Psych-verbs *kanashimu* (“feel sad”)	19
15.	Verbs of appearance *umareru* (“be born”)	21	Phenomenon verbs *hibiku* (“echo”)	9

16.	Verbs of putting and adding *oku* (“put”)	16	Verbs of mental activities *oboeru* (“memorize”)	7
17.	Verbs of existence *iru* (“exist,” or “stay”)	14	Unable to classify *sawaru* (“hinder”)	5
18.	Weather verbs *furu* (“fall”)	10	Aspectual verbs *tsuzukeru* (“continue”)	4
19.	Verbs of mode of being involving motion *tobu* (“fly”)	9	Verbs of mode of being involving motion *haneru* (“leap”)	2
20.	Sensation verbs *niou* (“smell”)	4	Causative psych-verbs *sainamu* (“torment”)	2
21.	Unable to classify *ureru* (“(of goods) sell”)	2	Sensation verbs *niou* (“smell”)	1
22.	Aspectual verbs	0	Weather verbs	0
23.	Causative psych-verbs	0	Auxiliarized verbs for emphatic use	0

The classification of verb types employed in (51) is primarily based on the transitive/intransitive distinction of verbs, and secondly on the semantic distinctiveness of verbs. However, some verbs cover more than a single verb type. In this case, such verbs are excluded from the count in (51). For example, the verb *haneru* (“leap”) can be considered as either an activity verb or verb of manner of motion depending on the type of the verb component with which it is paired, or on its position in the compound.

While I tried to determine the verb classifications as simply as possible in the list (51), I distinguish verbs of mental activities from other transitive verbs, and verbs of mode of being involving motion from verbs of manner of motion. Verbs of mental activities are different from other transitive verbs in that they do not involve transmission of physical force. Verbs of mode of being involving motion seem very similar to verbs of manner of motion, but verbs of the former type inherently do not imply change of location.

Sensation verbs include verbs of perceptions such as *niou* (“smell”), *mieru* (“be visible”), *kikoeru* (“be audible”), etc., but only *niou* participates in V-V compounds.

In the research (51), causative verbs are subclassified into seven types. They are verbs of: 1) causative change of state, 2) causative change of location, 3) causative change of position, 4) verbs of putting and adding, 5) verbs of combining, 6) causative change of posture/orientation, and 7) other causative verbs (sase-derived verbs such as *kikaseru*). Intransitive motion verbs are classified into two different types: manner of motion and change of location.

Japanese psych-verbs are basically intransitive, and there are not many causative psych-verbs. Causative psych-verbs include *sainamu* ("torment"), *kurushimeru* ("afflict"), *nayamasu* ("distress"), *wazurawaseru* ("annoy"), etc., but only *sainamu* appears in a V-V compound.

On the whole, causative change of state verbs outnumber causative change of location verbs in the V1 position. But interestingly, one can see that one's dominance over the other is clearly inverted in the V2 position. The reason for this is not clear for now. But we may be able to find a clue in the way V2 predicates contribute to the semantics of compounds. Verbs of causative change of location (as well as intransitive motion verbs) in the V2 position can add a sense of physical or metaphorical motion to the event denoted by various types of V1. For example, in the compound *tsumi-ageru* (heap-raise, "heap up"), V2 *ageru* provides the motion sense "up" to the causative change of state event denoted by *tsumi-* (<*tsumu*, "heap"). But verbs of causative change of location do not have this function when they appear in the V1 position like **age-tsumu* (rise-heap). Interestingly, the tendency that directional predicates appear in the right-most position in complex predicates can be also observed with English resultatives and Mandarin V-V compounds. In English resultatives, directional predicates such as PPs or verbal particles such as *up* and *down* appear in the post-verbal position. In the case of Mandarin V-V compounds, directional predicates regularly appear in the V2 position. (See Chapter 4.)

In the next section, I will examine the agentivity of Japanese V-V compounds in comparison with the agentivity of English AP resultatives observed in Chapter 2.

3.3 Agentivity/Causativity of Japanese Causative Verbs

3.3.1 Strong Animate Instigator Constraint on Japanese Verbs

In Chapter 2, I claimed that Goldberg's Animate Instigator Constraint does not necessarily hold true for English resultatives. Although such a constraint can be generally observed in English AP resultatives, some AP resultatives and PP resultatives allow inanimate causers.

In Japanese, on the other hand, there is a strong animate instigator constraint on causative verbs. Consider the examples in (52). The verb in (52a) is a lexical causative verb, and the one in (52b) is referred to as a (causative) *suru*-verb or light verb.[31] Inanimate causers are generally unacceptable in Japanese causative sentences, as shown

[31] This type of verb is usually called *suru*-verbs or light verbs, and they have a stem typically made up of two Chinese characters, followed by an ending *-suru* (roughly corresponding to the English verb *do*), such as *hakai-suru* (destruction-do, "destroy"). They are also referred to as *sa-hen doushi* or *ni-onsetsu kango doushi* in Japanese linguistics.

in (52).

(52) General Constraints on Inanimate Causer of Japanese Causative Verbs

a. *korosu*: kill, “kill”

{*Tarou*/*??Sono doku*/*??Sono jyuu*/**Sono jiko* /**Sono byouki} ga kare wo koroshi-ta.*

{Taro /that poison /that gun /that accident/that disease} Nom he Acc kill-Pst

“{Taro/That poison/That gun/That accident/That disease} killed him.”

b. *hakai-suru*: destroy-do, “destroy”

{*Guntai*/??*taifuu*/**Sono bakudan*/**Sono bakuhatsu*}*ga shisetsu wo hakai-shi-ta*.

{troops/typhoon/that bomb /that explosion} Nom facility Acc destroy-do-Pst

“{The troops/The typhoon/That bomb/That explosion} destroyed the facility.”

As can be seen in (52), only animate causers are acceptable. In a lexical causative sentence like (52a), an inanimate causer is usually demoted to an oblique case in an intransitive expression, where it is marked with the cause marker *de*, as in (53a). Otherwise, an inanimate causer may appear in the passive construction, and it is marked by the causer maker *ni*(*-yotte*) as in (53b).

(53) a. {**Taro*/*Sono doku*/*Sono jyuu*/*Sono jiko* /*Sono byouki*}

{Taro/That poison/That gun/That accident/That disease}

de kare ga shin-da.

because-of he Nom die-Pst

“He died because of {Taro/that poison/that gun/that accident/that disease}.”

b. {*Guntai*/*taifuu* /*Sono bakudan*/*Sono bakuhatsu*}*ni-yotte shisetsu ga*

{troops /typhoon/that bomb /that explosion} by facility Nom

hakai-s-are-ta.

destroy-Pass-Pst

“{The troops/The typhoon/That bomb/That explosion} destroyed the facility.”

Ikegami (1985) explains such a grammatical constraint as a manifestation of a broad typological classification, i.e. “do-type” languages and “become-type” languages. According to Ikegami, English comes under the former class. In this type of language, transitive verbs are generally goal-oriented and they tend to encode the achievement of the goal. In contrast, Japanese can be classified as a “become-type” language, in which verbs represent the transitive activity as a process, rather than the achievement of the intended goal. Therefore, the achievement of the goal is not necessarily implied.

Consider (54).

(54) a. *I burned it but it didn't burn.
b. *moyashi-ta kedo, moe-na-katta*.
burn (vt)-Pst but burn (vi)-Neg-Pst
"burned (it), but (it) did not burn" (Ikegami 1985: 273, (24) and (25))

Ikegami examines various related parallelisms in the verbal semantics, and he claims that the human noun subject focuses on the actional aspect of a goal-directed action, while the abstract noun subject tends to concentrate on the achievement aspect of a goal-directed action. He observes that in causative sentences, Japanese verbs are action-oriented and thus favor human noun subjects, whereas English verbs are achievement-oriented allowing an abstract noun subject.

(55) a. *Dare ga kanojo ni sou s-ase-ta no ka?*
who Nom she Oblq so do-make-Pst Comp Intrg
"Who made her do so?"
b. ??*Nani ga kanojo ni sou s-ase-ta no ka?*
what Nom she Oblq so do-make-Pst Comp Intrg
"What made her do so?" (Ikegami 1985: 298, (89a, b))

The English translations of (55a, b) are felicitous. But the Japanese sentence in (55b) may only appear in translations of texts written in English or other similar foreign languages where inanimate causers appear as subjects. For this reason, the causative sentence (55b) is usually expressed as in (56), which is perfectly natural.

(56) *Nan de kanojo wa sou shi-ta no ka*?
what because-of she Top so do-Pst Comp Intrg
"For what did she do so?"

3.3.2 Two Types of Inanimate Causers

It is true that Japanese causative expressions generally do not allow inanimate causers to appear in the subject position. Interestingly, however, two types of causative verbs allow inanimate causer subjects: periphrastic causatives of *suru*-verbs (also known as *-sase*-causatives) and V-V compounds. It is not that all periphrastic causatives of *suru*-verb and V-V compounds behave like this, but part of them allow inanimate causer subjects when semantic conditions are adequately met.

3.3.2.1 *Suru*-Verbs that Allow Inanimate Causer Subjects

Inanimate causer subjects can appear in some causative expressions using *suru*-verbs. In this case, the verb appears in a periphrastic causative construction marked by the causative morpheme *-sase-*. Shibatani (1976) states that the periphrastic causative has a matrix VP headed by *-sase-* that embeds a non-finite clause, and that this construction is able to represent either direct or indirect causation.

As shown in (57a), inanimate causers, unlike animate causers, usually cannot appear in the subject position of a lexical causative verb or causative *suru*-verb. However, inanimate causers can appear as the subject of a periphrastic (*-sase-*) causative sentence, as in (57b). Consider (57).

(57) a. {*Kare*/**Kare no ayamatta sousa*} *ga* *kikai* *wo*
{he /he Gen improper operation} Nom machine Acc
teishi-shi[32]*-ta*. (Causative use)
stop-do-Pst
"{He/??His improper operation (of the machine)} stopped the machine."

b. {*Kare*[33]/*Kare no ayamatta sousa*} ga *kikai* *wo*
{he /he Gen improper operation} Nom machine Acc
teishi-sase-ta. (Intransitive use)
stop-Caus-Pst
"{He/His improper operation} caused the machine to stop."

It is important to note that this use is possible when the object noun is interpreted as having certain spontaneity like a self-driving machine or a social trend that evolves beyond human control.[34] Intransitive verbs, as well as labile verbs when used as intransitive, usually depict an event in which a subject undergoes a particular situation without relying on external control. If so, one might assume that all intransitive verbs and labile verbs allow inanimate causer subjects. However, it does not always hold. Licensing of an intransitive causer in a causative expression denoted by a *suru*-verb is not necessarily determined by whether the verb has an intransitive use, but by the semantics of the causee noun and the verb. Consider (58).

---

[32] The labile *suru*-verbs in (57a) allow both transitive and intransitive uses.

[33] If an animate causer is used here, the event is interpreted as an indirect causation event, in which the causer did something, which eventually caused a particular result.

[34] *Sono seisaku ga keizai wo kaifuku-sase-ta*. (that policy Nom economy Acc recover-Caus-Pst, "The policy made the economy recover.")

(58) a. **Ookina doryoku ga shukudai wo kansei-s-ase-ta*. (Labile)
great effort Nom homework Acc complete-do-Caus-Pst
"*One's great effort caused his homework to be completed."

b. **Fukeiki ga futastu no kaisha wo gappei-s-ase-ta*. (Labile)
bad economy Nom two Gen company Acc merge-do-Caus-Pst
"*The bad economy caused the two companies to get merged."

c. ??*Kare no iken ga mise no saabisu wo koujou-s-ase-ta*. (Intransitive)
he Gen opinion Nom shop Gen service Acc rise-do-Caus-Pst
"*His opinion caused the service of the shop to be improved."

d. ??*Teiden ga koutsuu wo konran-s-ase-ta* (Intransitive)
power failure Nom traffic Acc disorder-do-Caus-Pst
"The power failure caused the traffic to fall into disorder."

The causees in (58a, b) *shukudai* ("homework") and *kaisha* ("company") do not have a reading of spontaneity in the completion process or merging process, but they are constantly under the control of external force in such a process. Furthermore, the verbs in (58a, b) *kansei-suru* ("complete") and *gappei-suru* ("merge") depict a situation where an agent works on an patient(s) until a particular result takes place to the patient(s). In this sense, these verbs are essentially causative although they also have an intransitive use. The intransitive verbs in (58c, d) do not depict an event where something evolves spontaneously. In other words, these verbs imply that their subject nouns ("shop" and "traffic" in this case) are controlled by an "implicit causer" which is not encoded in the semantic structure of the verbs.

Causative expressions allowing inanimate causer subjects commonly denote causative events which do not rely on the transmission of physical force from the causer to the causee. I call this type of causative expressions *non-physical causation*. Non-physical causative events can be considered lower in causativity than physical causative events because the former type of events do not undergo a direct manipulation by the causer, which is one of the important parameters that characterize the prototype of causation (Lakoff & Johnson 1980: 70). In this sense, physical causative events can be considered to have higher causativity than non-physical causative events in that they are brought about through the direct manipulation by the causer.

Other *suru*-verbs that can participate in non-physical causation include those in (59).

(59) Other Suru-verbs that Participate in Non-Physical Causation

a. *fujou-suru* ("float (to the surface)")

b. *gensoku-suru* (“slow down”)
c. *ippen-suru* (“change completely”)
e. *kaifuku-suru* (“recover”)
f. *kasoku-suru* (“accelerate”)
g. *kakudai-suru* (“expand”)
h. *kouten-suru* (“change for the better”)
i. *teitai-suru* (“stagnate”)
j. *touketsu-suru* (“freeze”)

A reading of spontaneity of the causee in non-physical causation seems to be a trade-off with the animacy of the causer in a causative relation that involves the exertion of physical force by the causer. In a typical causal chain in which the animate causer exerts its force upon the causee, enough energy flow is secured in the causing-event segment of the flow. In non-physical causation, however, the energy transmitted from an inanimate causer is not enough for the causee to undergo a change of state. Instead, the causee needs to have a good self-evolving force to drive itself through the change of state event.

In conclusion, inanimate causer subjects are allowed in non-physical causative events denoted by *suru*-verbs suffixed with the periphrastic causative morpheme *-ase-*. Licensing of an inanimate causer subject is determined by the semantics of the causee noun and of the verb.

3.3.2.2 V-V Compounds that Allow Inanimate Causers

Like *suru*-verbs seen in the previous section, some V-V compounds also allow inanimate causers, without being suffixed by the causative morpheme *-sase-*. Not all V-V compounds take inanimate causers, but it seems there are a fair number of V-V compounds that can do so. Part of such V-V compounds are listed in (60).

(60) V-V Compounds that Allow an Inanimate Causer[35]
a. *fuki-tobasu* (blow-make.fly, “(for news) dispel (one’s fears)”)
b. *hiki-okosu* (pull-cause, “(for activity) make happen”)
c. *hiki-tateru* (pull-stand.up, “(for background) make look better”)
d. *oshi-ageru* (push-raise, “(for a force) push up”)
e. *oshi-nagasu* (push-make.drain, “(for a flood) wash away”)

[35] The V2 *-tsukusu* can take an inanimate causer as in *ooi-tsukusu* (cover-exhaust, “(for a phenomenon, such as an economic recession) pervade entirely”). However this V2 is used in a syntactic compound.

f. *oshi-sageru* (push-lower, “(for a force) push down”)
g. *sui-yoseru* (suck-bring.near, “(for attractiveness) attract”)
h. *terashi-dasu* (shine-put.out, “(for a fact) shed light on”)
i. *tsuki-ugokasu* (thrust-move, “(for an impulse) spur into action”)
j. *tsuki-kuzusu* (thrust-break, “break down (a wall of a social problem)”)
k. *ubai-saru* (take.by.force-leave, “(for a catastrophe) take away (lives and possessions)”)
l. *utsushi-dasu* (reflect-put.out, “(for a fact) portray”),
m. *uchi-kudaku* (strike-break.into.pieces, “(for bad news) smash”)
n. *yuri-ugokasu* (shake-move, “(for a scandal or event) shake”[36])

Some of the above compounds can depict a physical causative event, but they denote a metaphorical or non-physical causative event when they take an inanimate causer. The sentences in (61) are the examples of the compounds *fuki-tobasu* and *hiki-okosu* taking an inanimate causer.

(61) a. *Sono nyuusu wa minna no fuan wo fuki-tobashi-ta*.
that news Top everyone Gen uneasiness Acc blow-make.fly-Pst
“The news drove away everyone’s uneasiness.”
b. *Kare no hatsugen ga betsu no mondai wo hiki-okoshi-ta*.
he Gen remark Nom different Gen problem Acc pull-make.happen-Pst
“His remark caused another problem.”

In either event above, no physical force is transmitted from the causer and the causee. Furthermore, in (61b) there can be a temporal gap between the causing event (“his remark being made”) and the caused event (“another problem being caused”). The natural interpretation of (61b) is that someone made his remark, and it caused another problem some hours or days later. It is possible to think that another problem took place as soon as his remark is made, but this interpretation goes against the grain. It seems that V-V compounds in non-physical causative expressions do not specify a particular mode of the temporal relation between the causing event and caused event, and that the temporal relation is determined by the interpretation of the component verbs. If verbs involving a physical impact are used in the compound, the temporal relation tends to be interpreted as overlapping as in (61a). However, it is not always the case. Consider (62).

[36] It is often used in a context like *Sono skyandaru wa seifu wo yuri-ugokashi-ta* (The scandal shook the government).

(62) *Atarashii seisaku ga keiki wo oshi-age-ta*
New policy Nom economy Acc push-raise-Pst
"The new policy boosted the economy."

The above expression only refers to the result and it says nothing about the temporal relation of the causing event and the caused event. Thus one can interpret that the economy was improved either immediately or a while after the new policy was enacted.

There is a paradoxical question: why can some V-V compounds take inanimate causers despite the fact that lexical causative verbs, often used as the component verbs of these V-V compounds, do not allow inanimate causers? I think that this is associated with the configuration of V-V compounds. Firstly, they are composed of V1 and V2. In V-V compounds that allow inanimate causers, V1 usually denotes a manner, means or cause, and V2 denotes the result of a causative event. Such compounds encode the full segments of the causal chain, denoting an accomplishment event with a clear aspectual boundary. A typical example is *uchi-kudaku* (strike-break.into.pieces, "smash") in (60m). As pointed out by Ikegami (1985), some Japanese verbs are action-oriented, and this holds true with the verb *kudaku*. The verb denotes a change of state event, but its event aspect is not necessarily telic. However, when the verb is used in a compound, it represents a telic event. Consider (63).

(63) a. *kudai-te-mo kudaki-owara-nai*
smash-even.if smash-finish-Neg
"One smashes something, but he does not finish smashing it."
b. **uchi-kudai-te-mo uchi-kudaki-owara-nai*
strike-smash-even.if strike-smash-finish-Neg
"One smashes something, but he does not finish smashing it."

The sentence (63a) is felicitous, but (63b) is not because in (63b) the causing event and the caused event are denoted by V1 and V2 respectively, and the aspectual boundary of the result is more clearly represented than that of the lexical causative verb in (63a).

Secondly, lexical causative verbs usually denote physical causative events, but they tend to denote events of non-physical or metaphorical causative change of state, even when they are used as V2 of a V-V compound. In (64), I exemplify such verbs compounded with V1 *uchi-* (<*utsu*, "strike"), which is considered to emphasize the intensity of the action denoted by V2.

(64) a. {*iwa* /??*yume to kibou*} *wo* *kudaku*
{rock/dream and hope} Acc smash
"smash {a rock/one's hopes and dreams}"

a'. {*iwa* /*yume to kibou*} *wo* *uchi-kudaku*
{rock/dream and hope} Acc smash
"smash {a rock/one's hopes and dreams}"

b. {*bin* /*shinkiroku*} *wo* *tateru*
{book/new record} Acc stand.up/set
"{stand a bottle up/set a new record}"

b'. {**bin*/*shinkiroku*} *wo* *uchi-tateru*
{book/new record} Acc establish
"establish a {*bottle/new record}"

c. {*burokku*/**joushiki*} *wo* *kuzusu*
{block /long-held belief} Acc upset
"upset {blocks/*a long-held belief}"

c'. {??*burokku*/*joushiki*} *wo* *uchi-kuzusu*
{block /long-held beliefs} Acc dispel
"dispel {*blocks/a long-held belief}"

The lexical verbs like those in (64a, b, c) basically denote events of a physical causative nature and they tend to take an animate subject or a concrete object, although some of these verbs also have metaphorical or idiomatic uses like *shinkiroku wo tateru* ("set a new record") as shown in (64b).

In contrast, V-V compounds in (64a'), (64b') and (64c') can express non-physical or metaphorical causative events. This can be confirmed by the types of objects these compounds take. For example, *uchi-kuzusu* ("break") can only take abstract objects like *joushiki* ("long-held belief"), but not *burokku* ("block"). This tendency can also be observed with other V-V compounds in (60).

I assume that the licensing of inanimate causer subjects in some V-V compounds is associated with their ability to denote non-physical or metaphorical causative events. However, it is not clear why the addition of V1 makes it possible for the compound to denote more abstract events.

3.3.2.3 Another Type of Causative Verbs that Can Take Inanimate Causers

It should be noted that some Japanese causative psych-verbs take inanimate causer subjects. Such verbs include *odorokasu* ("surprise"), *sainamu* ("torment"),

kanashimaseru (“sadden”), *kurushimeru* (“afflict”), *yorokobaseru* (“please”), etc. Many of these verbs are considered to have been derived from their intransitive counterparts since they incorporate causative markers *-asu*, *-aseru*, *-eru*, etc. While few causative psych-verbs participate in V-V compounds, only the verb *sainamu* appears in the pair V-V compound *seme-sainamu* (blame-torment, “torment”), which can also take an inanimate causer in a sentence like (65).

(65) *Shain toshite no chuuseishin ga kare wo seme-sainan-da*.[37]
employee as Gen loyalty Nom he Acc blame-torment-Pst
“His loyalty as an employee tormented him.”

3.3.3 Constraints on Argument Nouns and Event Semantics

In Chapter 2, I claimed that the reading of the ability to exert a physical force upon the patient is one of the most important semantic factors involved in licensing English AP resultatives. English AP resultatives license an inanimate causer if such a causer can be construed as an entity that transmits its physical force to the patient/causee. In other words, the notion of force-exertion ability justifies the semantic extension of the agent from human to natural force, instrument or more abstract entity.

In Japanese, on the other hand, such semantic extension is not basically available to the agent of Japanese lexical causative verbs except for causative psych-verbs[38]. However, inanimate causers can be licensed by some *suru*-verbs suffixed by *-sase-* as well as by some V-V compounds, because of different semantic factors other than a reading of the subject’s ability to exert a physical force.

In the case of *suru*-verbs suffixed by *-sase-*, inanimate causer subjects are licensed when the object noun is interpreted as having certain spontaneity. As for V-V compounds, some of them allow inanimate causers because: 1) the compound structure made of V1 and V2 makes it possible for the compound to denote an accomplishment event with a clear aspectual boundary, which is not necessarily the case with a lexical causative verbs; 2) the addition of V1 to V2 makes it possible for the compound to denote a non-physical or metaphorical causative event, which is lower in causativity than a physical causative event.

Based on the above discussions, animacy constraints on the causer of Japanese causative events can be generalized as follows.

---

[37] The passive form of this sentence sounds more natural.

[38] *Totsuzen no kaminari ga minna wo kowagawase-ta*.
sudden Gen thunder Nom everyone Acc surprise-Pst
“The sudden thunder scared everyone.”

(66) Semantic Constraints on Argument Nouns by Predicate Type

Predicate type / Grammatical item	Lexical causative	*Suru*-verbs with *-sase-*	V-V Compounds	Causative Psych-verbs
a. Causation	Physical	(Non-)physical	(Non-)physical	(Non-)physical
c. Subject	Animate	(In)animate	(In)animate	(In)animate
d. Object	In(animate)	Noun with spontaneity reading	Concrete/abstract noun	Animate

Both in English and Japanese, animacy functions as a major semantic constraint on the causer subject. However, different semantic factors are involved when an inanimate causer is licensed in English and Japanese. As discussed in Chapter 2, English causative expressions are based on the causal chain where an agent must have a strong causativity over the patient by exerting a physical force on it. The prototype of such an agent is an animate causer, and inanimate causers, such as natural forces and instruments, are required to satisfy this semantic feature if they appear in the subject position.

Japanese causative verbs are also subject to animacy constraints in general. However, different strategies are employed to justify inanimate causer subjects. In the case of V-V compounds, inanimate causer subjects are licensed when the event denoted by the verb represents a non-physical or metaphorical causative event, or "events of low causativity" in other words. When an inanimate causer appears in the subject position of *suru*-verbs suffixed with *-sase-*, the object (causee) is required to have a reading of spontaneity. In the previous discussion, I did not analyze why causative psych-verbs allow both animate and inanimate causer subjects. However, it can be assumed that this is because events denoted by causative psych-verbs presuppose animate objects, and such animate objects can be interpreted as maintaining a certain spontaneity in the psychological reaction process.

Based on the above discussions, comparisons can be made, as shown in (67), on the causativity of denoted events and the semantic constraints on the argument nouns among English AP resultatives, English PP resultatives, Japanese *-sase-* causatives and Japanese V-V compounds.

(67) Causativity of Events and Constraints on Argument Nouns

	Causativity	Animate Sbj	Inanimate Sbj
a. English AP resultatives	High	OK	Must imply the ability to exert a physical force
b. English PP resultatives	High/Low	OK	OK
c. Japanese -*sase*- causatives	High/Low	OK	Object must imply spontaneity in -*sase*- causative form
d. Japanese V-V compounds	High/Low	OK	Allowed in events of low (non-physical) causation

In English AP resultatives, animacy is one of the prototypical semantic features of physical causation. Thus an animate noun, i.e., a volitional agent is usually selected for the subject noun. Like English PP resultatives (see the discussions in Section 2.6.2), some Japanese -*sase*- causatives and Japanese V-V compounds can denote events of low causativity such as non-physical causative events or metaphorical causative events, and in such events these two types of verbs license inanimate causer subjects.

In the next section, I will discuss the issue related to aspectual features of Japanese V-V compounds.

3.4 Aspect of V-V Compounds

3.4.1 Head of V-V Compounds and Event Aspect

As for compounded verbs, it is generally believed that the entire event aspect denoted by the compound is usually determined by the head predicate. According to this criterion, the majority of Japanese V-V compounds can be considered right-headed. If V2 is unbounded, the entire event inherits this unbounded feature from the head V2. For example, the V-V compound *nusumi-mawaru*[39] ("steal (something) in many places") represents a motion event, and its V2 -*mawaru* ("move around or rotate") is unbounded. Thus the entire event is also atelic.

(68) a. *san nen kan nusumi-mawat-ta*
three year for stole-move.around-Pst
"stole in many places for 3 years"

[39] This compound is not entered in the Japanese dictionary *Daijirin* (1992), but many compounds can be productively made with the V2 -*mawaru*. For the definition of canonical compounds, see 3.2.2.

b. **san nen kan de nusumi-mawat-ta*
three year for in stole-move.around
"*stole in many places in 3 years"

For most V-V compounds, the aspectual property is consistently inherited from V2. Thus, if the V2 is bounded, the matrix event becomes bounded. In (69), the V1 *oshi-* (< osu, "push") is unbounded, but the V2 *-akeru* (open, "open") is bounded. The matrix event denoted by the compound is considered bounded because (69b) is felicitous but (69a) is not. This confirms that the compound inherits the aspectual property from V2.

(69) a. **san pun* (*oshi-*)*akeru*
three minute (push-)open
"push open for 3 minutes"
b. *san pun de* (*oshi-*)*akeru*
three minutes in (push-)open
"push open in 3 minutes"

However, not all V-V compounds follow this aspectual principle. For some compounds, V1 is considered to determine the aspect of the matrix event. The compound *odori-kuruu* (dance-frenziedly (< become.insane), "dance frenziedly") shown in (39) is one of the typical left-headed compounds. V1 and V2 are bounded, and the matrix event is atelic. Thus V1 is the head of the compound.

The compound *fuki-tsukeru* (blow-put.on, "(of wind) blow against" or "(of paint) spray on") is considered to be right-headed. This compound is made up of an unbounded V1 and a bounded V2. The matrix event is atelic when it refers to a weather phenomenon, but it can be telic or atelic when it refers to a painting job. The aspectual criterion mentioned above cannot be simply applied to such a compound. Interestingly, the V-V compound *fuki-tsukeru* depicts the verbal process related to the most salient participant by means of V1 when the compounds refers to a weather phenomenon. In this case, the event denoted by V1 seems to be the center of the predication, and V2 simply adds a directional meaning to the motion of a wind. On the contrary; when the compound refers to a painting job, V2 seems to be the center of predication, and V1 adds a means sense to the activity denoted by V2. Consider (70). In the compound, either V1 (*fuku*, "blow") or V2 (*tsukeru*, "put on") can be the center of predication depending on the type of the subject that the compound takes. In either case, the compound is interpreted as being atelic.

(70) a. *kaze ga fuku*
wind Nom blow
"The wind blows."
a. **kaze ga tsukeru*
wind Nom put.on
"*The wind puts (something) on."
b. **penki wo fuku*
paint Acc blow
"*blow paint"
b. *penki wo tsukeru*
paint Acc put.on
"put paint on (something)"

Furthermore, the transitive/intransitive distinction is determined by V1 when the compound means a weather phenomenon, and by V2 when it means a painting job. In the former usage, the compound is intransitive and in the latter usage it is transitive. However, such a transitive/intransitive test cannot always be applicable since in some compounds both of the two component verbs are either transitive or intransitive.

It is possible to classify the majority of V-V compounds into the right-headed type and the left-headed type by using the above mentioned aspectual criterion (or even together with a transitive/intransitive test). However close analyses of individual V-V compounds show that the right-headed compounds and left-headed compounds are located at either end of a single semantic continuum.

In this relation, I will discuss ambiguous interpretations of the boundedness of V-V compounds in Section 3.4.3.

3.4.2 Temporal Relations between Component Verbs

3.4.2.1 Possible Temporal Relations of English Resultatives

As to the temporal relation between the causing event and the caused event, Lakoff & Johnson (1980) state that prototypical causations share the semantic features as in (71).

(71) The agent touches the patient either with his body or an instrument (i.e., there is a spatiotemporal overlap between what the agent does and the changes in the patient). Lakoff & Johnson (1988: 70)

Goldberg and Jackendoff (2004) also observe that there are pragmatically three possible types of temporal relation between the verbal subevents:

(72) a. Cause cotemporal with effect
Bill made the ball go up the hill by pushing it.
b. Cause overlaps with inception of effect
Bill made the vase fall on the floor by knocking against it.
c. Cause completely precedes effect
Bill made himself get sick on Tuesday by eating mushrooms on Monday.

Goldberg and Jackendoff (2004) state that the first two types of temporal relations (72a, b) are possible with resultatives, but unlikely with (72c).

L&RH (1999) and RH&L (1999a, 1999b, 2001a) propose the principle of event coidentification, which states as follows:

(73) Principle of Event Coidentification: Predicates which can be construed as predicates of the same simplex event must be so construed.
(RH&L 1999b: 55, (103))

They analyze a bare XP resultative such as, *Robin danced out of the room*, as having a simplex event structure. The two subevents (Robin's dancing and his going out of the room) are temporally dependent through the principle of event coidentification, and the subevents are interpreted as unfolding together.

However, L&RH (1999) and RH&L (1999a, 1999b, 2001a) claim that a two-argument causative event has a complex event structure, and that the causing subevent and the caused subevent are not necessarily temporally dependent. Causative verbs with such a complex event structure include lexical causative verbs such as (74a) and resultatives as (74b) and (74c).

(74) a. The widow murdered the old man by putting arsenic in his coffee.
(RH&L 1999b: (52a))
b. Frank sneezed the tissue off the table. (ibid: (28a))
c. Peter quickly read himself into an inferiority complex, after a few slow deliberate readings of his classmates' theses. (L&RH 1999: (23))

They claim that the primitive requirement for direct causation is that there be no

intervening event in the causal chain between the causing subevent and the result subevent, and that this requirement is tantamount to the requirement of temporal contiguity of the two subevents. Thus the two subevents do not have to be contiguous or overlapping.

3.4.2.2 Possible Temporal Relations of V-V Compounds

Now let us assume four types of temporal relations of V-V compounds. The first type is the relation in which the V1 event and the V2 event are temporally coextensive. L&RH (1999) and RH&L (1999a, 1999b, 2001a) use the term *coindexed* for this relation, and Goldberg & Jackendoff (2004) call it *cotemporal*. I will hereafter use the term *cotemporal* to refer to this temporal relation.

The second type is what Goldberg & Jackendoff (2004) call an *overlapping* temporal relation. As shown in (72b), the causing event overlaps the inception of the result event. L&RH and RH&L call this relation *contiguous*. I will use the term *contiguous* to refer to this temporal relation because it is more generic than the term *overlapping*. This relation includes all situations where the V1 event starts before the inception of the V2 event, and there is no intervention between the V1 event and V2 event. Thus, not only accomplishment events (such as wiping something clean), but also punctual events (such as knocking something off a place in (72b)) can also be included in this type regardless of the length of the overlapping time between the V1 event and the V2 event.

The third type is a *non-contiguous* relation, in which a temporal gap is allowed between the V1 event and the V2 event. This temporal relation conflicts with one of the semantic parameters of prototypical causation – temporal overlapping of subevents – proposed by Lakoff & Johnson (1980). L&RH (1999) and RH&L (1999a, 1999b, 2001), however, propose that non-contiguity be considered as a temporal relation that causative events present.

Finally, it should be noted that some V-V compounds present no clear temporal relation between the subevents. The activity extent compound *odori-kuruu* (dance-become.insane, “dance frenziedly”) is an example of this. Since V2 has lost its original verbal meaning and has been auxiliarized to emphasize the extent of the activity of V1, it is extremely difficult to identify a clear temporal relation between the subevents.

Likewise, embedding compounds present no specific temporal relation between V1 and V2 either because V1 is embedded in the semantic structure of V2 as its complement (see the discussions in Kageyama (1993)). Consider (75).

(75) a. *kaki-otosu* (write-drop, “forget to write”)
b. *nori-awaseru* (ride-bring.together, “happen to ride with (someone)”)

In such complement relations, V1 is temporally neutral like an English infinitive, as shown in the parenthesized translations above.

3.4.2.3 Treatment of V-V Compounds Representing Non-Contiguous Relation

As discussed in 3.3.2.3, V-V compounds denoting a non-physical causative event allow a temporal gap between the V1 event and the V2 event. The question is whether or not to treat such V-V compounds as a type of causative V-V compound. These V-V compounds denote a non-physical or metaphoric causative event with an inanimate causer, and the denoted events are lower in causativity than physical causative events. The sentence (76) is such an example.

(76) *Kageki-na houdou ga ryoukoku no tairitsu wo aori-tateta*.
sensational media-reporting Nom both-country Gen antagonism Acc stir-stand-Pst
“The sensational media reporting inflamed the antagonism between the two countries.”

The temporal contiguity between the reporting and the development of the antagonism is not necessarily found in (76). The sentence can be read as meaning that the media reporting was done last week, which resulted in the incremental development of the antagonism this week.

English PP resultatives can also denote non-physical or metaphoric causative events, in which an inanimate causer subject appears. Interestingly, such PP resultatives also allow a temporal gap between the causing event and the result event, just like non-physical causative V-V compounds do. Consider (77).

(77) He says this decade's real estate boom tricked many buyers into thinking they'd be able to make a fortune on a vacation.
(http://www.askmen.com/fine_living/travel/49_travel_tips.html)

In (77), the causer “real estate boom” lead the causee “many buyers” into a particular belief by metaphorically tricking them. The buyers might have been tricked by the real estate boom as soon as it began. Another possible reading of the event is that some buyers had been aware of the boom long before, but it took some years before they

gradually came to think that they would be able to make a fortune on a vacation. In either case, it seems practically impossible to specify a punctual point of time when the change of state occurred.

Non-physical (or metaphorical) causatives with an inanimate causer subject allow a temporal gap between the causing event and the result event. But this does not mean that non-physical causatives allow an intervening event in the causal chain. Given this, we should treat them as a subtype of direct causation although they are lower in causativity than physical causatives.

3.4.2.4 Temporal Relations by Compound Type

There have not been many studies that have closely analyzed all possible temporal relations between the V1 and V2 of V-V compounds by the compound type, perhaps because seemingly most V-V compounds can easily be classified as either a cotemporal type or contiguous type, and this may seem self-evident to native speakers.

In fact, many compounds tend to share a common temporal relation by the compound type. For example, a cotemporal relation is found in pair compounds (*naki-sakebu* (cry-shout, “cry out”)) and the majority of manner compounds (*nagare-ochiru* (flow-fall, “flow down”), while a contiguous relation obtains in many cause compounds (*yake-shinu* (burn-die, “die from burning”)).

Pair compounds are made up of two synonyms describing different aspects of the same situation or a series of activities done by the same agent in a particular situation. As in the compounds *machi-wabiru* (wait-long.for, “long for”) and *oshie-michibiku* (teach-lead, “teach and lead”), serialization of the two agentive verbs has the effect of vividly or specifically depicting the agent’s activities or psychological state. The two events denoted by the verbs are coindexed, referring to the same single situation. I do not think a non-contiguous relation is likely with pair compounds. For example, the compound *oshie-michibiku* (“teach and lead”) describes the way someone patiently educates a youth, not the situation where the activities of teaching and leading alternate with intervals.

Manner compounds, like the verb *nagare-ochiru* (flow-fall, “flow down”), contain a V1 that describes the manner of the activity or process denoted by the V2. Therefore it is reasonable to think that these two types of compounds represent a cotemporal relation, and neither a contiguous or non-contiguous relation is unlikely. Exceptionally with some compounds like *hajike-tobu* (crack.open-fly, “pop away”), the V1 event (“crack open”) may appear to precede the V2 event (“fly”). However, this compound denotes a single event, in which V1 is used, in effect, to depict the instantaneous manner of the

motion denoted by V2.

Cause compounds are made up of a transitive or intransitive cause V1 and an intransitive result V2. This word order is iconic to the actual temporal order for the cause event and the result event to occur. However, the temporal relation between V1 to V2 is not necessarily unified. For example, in the compound *yake-useru* (burn-be.lost, "perish in fire"), the V2 event ("perish") specifies the endpoint of V2 ("burn"), and thus this temporal relation is contiguous. However, the compound *yake-shinu* (burn-die, "die from burning") can have different readings in this temporal relation. If the subject slowly dies in fire, the temporal relation can be considered overlapping because the burning process partially shares the same temporal stage with the preparatory process of dying. Also, even a non-contiguous reading may be possible if there is a certain temporal gap between the burning and the dying.[40]

Furthermore, if a cause compound allows a reading of cotemporal relation, it may be interpreted as a manner compound. For example, the compound *moe-ochiru* (burn-fall) may be interpreted as a cause compound and a manner compound. The former reading refers to the situation where a construction burns and falls down to the ground, and the latter reading to the situation where an aircraft, for example, falls down in fire. Such differences in these readings are very subtle and it is virtually impractical to classify these compounds into mutually exclusive compound types.

Means compounds may represent a contiguous or cotemporal relation. For example, the compound *kiri-taosu* (cut-bring.down, "cut down") with an accomplishment V2 is typically interpreted as representing a contiguous relation. In such compounds, the V2 event usually involves a physical causation though a direct manipulation by the agent.

Compounds like *tataki-kowasu* (hit-break, "break by hitting") may be interpreted as a punctual event or accomplishment event. In either case, the temporal relation should be understood to be contiguous because V1 does not imply the result denoted by V2.

A non-contiguous relation is possible with some means compounds. For example, compound like *uchi-korosu* (shoot-kill, "shoot dead") or *noroi-korosu* (curse-kill, "kill by a curse") can represent a non-contiguous relation in a situation where the agent shoots or curses the patient and the patient dies on the next day.

Interestingly, there are some means compounds whose V1 and V2 are temporally coindexed. Let us examine the compound *nage-tobasu* (throw-make.fly, "fling off"). In

[40] The most typical example of this situation may be the compound *yake-butoru* (burn-become.fat, "become richer from receiving fire insurance money"). In this case, there must be a time interval between the V1 event and the V2 event. However, the compound is considered to be derived from a noun *yake-butori.* The V2 *-butoru* is a voiced form of *futoru*. This voicing usually does not occur in compound verbs, but does so in compound nouns. For this reason, this compound is not included in our compound database.

this compound, V1 depicts the manner of the agent's activity, and at the same time it implies the result denoted by V2.

In addition to the above four types of compounds, there are other types of compounds that represent a temporal relation: situation compounds (compounds with V1 depicting the scene for V2 to take place, and preceding activity compounds (compounds with V1 representing the activity preceding V2). These two types of compounds both represent a contiguous or non-contiguous relation.

(78) Situation Compounds and Preceding Compounds

a. Situation compounds:

yake-nokoru (burn-remain, "be spared from the fire")

ne-shizumaru (sleep-become.quiet, "(people or place) become quiet after (the people) fall asleep")

b. Preceding compounds[41]:

nori-suteru (ride-abandon, "abandon (something) one rides")

yuki-tsuku (go-arrive, "arrive after a long journey")

In all examples in (78), the V1 event always precedes the V2 event in the temporal relation in order to provide a preparatory stage for the V2 event to occur. The situation compound *ne-shizumaru* (sleep-become.quiet, "(people or place) become quiet after (the people) fall asleep") depicts a situation where people start falling asleep and the surroundings gradually become quiet. In this case, the V2 event becomes more and more evident as the V1 event unfolds.

The preceding compound *nori-suteru* (ride-abandon, "abandon (something) one rides") describes the situation where a driver stops the vehicle that he was driving/riding, and abandons it there on the spot without any time interval. For both situation compounds and preceding compounds, it is very difficult to assume a time interval or an intervening event between the V1 event and the V2 event.

Finally, DPM compounds (compounds with directional/path motion V2) are different from those mentioned above in that V2s of some DPM compounds have lost their verbal aspect through an auxiliarization process or metaphoric extension. Some examples of DPM compounds are listed in (79).

[41] Matsumoto (1996) uses the term "precondition" for this type of compound, although the second compound example in (72b) is not in his list of this compound type.

(79) DPM Compounds
a. *hakobi-mawaru* (carry-go.around, “carry around”)
b. *nozoki-komu* (look/peep-put/go.into, “look into”)
c. *uri-tsukeru* (sell-put.on, “pressure (someone) into buying”)

Among DPM compounds, only those with the V2 *-mawaru* (go.around, “around”) present a temporal relation between V1 and V2. In this case, the relation is usually cotemporal. For example, V2 of the compound *hakobi-mawaru* (“carry around”) in (79a) denotes an unbounded motion event of the carrier, and it is cotemporal to V1.

However, in the case of the compound *nozoki-komu* (“look into”) in (79b), the aspect of the compound is determined by V1 since V2 *-komu* has lost its verbal aspect though the auxiliarization process and it only represents the direction of the activity denoted by V1.

The compound (79c) has the V2 *-tsukeru* (“put.on”), but this V2 has changed through a metaphoric extension into a component that only represents the direction of an activity done by the agent toward the patient without the patient’s consent. If the V2 *-tsukeru* is interpreted as a full-fledged verb, the compound is understood as a manner or means compound like *kosuri-tsukeru* (rub-put.on, “rub (something) against (something else)” as a manner verb; “put something on (a surface) by rubbing” as a means verb).

The table in (80) shows the abovementioned seven types of V-V compounds and the possible temporal relations they represent.

(80) Compound Classes and Possible Temporal Relations

Compound Types	Cotemporal	Contiguous	Non-Contiguous
a. Pair compounds	Yes	No	No
b. Manner compounds	Yes	No	No
c. Cause compounds	No	Yes	Possible
d. Means compounds	Yes	Yes	Possible
e. Situation compounds	No	Yes	No
f. Preceding compounds	No	Yes	No
g. DPM compounds	Yes (*-mawaru* only)	No	No

3.4.2.5 Other Types of Compounds

There are seven types of compounds that do not represent a temporal relation between V1 and V2. In these types of compounds, V1 or V2 has been auxiliarized and has lost its original aspectual meanings. (81) is the list of such compounds. The compound

examples below are repeated from part of those listed in (20).

(81) Compounds that Do Not Have Temporal Relation between V1 and V2

a. Purpose compound (Compounds with V1 representing the purpose of V2):
negai-deru (wish-come.out, “apply to the office for (something)”)

b. Condition compound (Compounds with V1 representing the condition of V2):
awase-motsu (combine-have, “have (two things)”)

c. Interaction type compound (Compounds with V1 representing the type of social interaction in which V2 takes place): *moushi-tsukeru* (say-put.on, “instruct”)

d. Activity type compound (Compounds with V1 representing the activity type of V2):
ki-kuzusu (wear-pull.down, “dress oneself in an informal way”)

e. Emphasis compound (Compounds with auxiliarized V1 that represents an emphasis of the intensity of V2):
tori-tsukurou (take-mend, “patch things up (for the moment)”)

f. Activity extent compound (Compounds with V2 representing the extent of activity V2): *odori-kuruu* (dance-become.insane, “dance frenziedly”)

g. Result extent compound (Compounds with V2 representing the extent of the result of V2): *akire-kaeru* (be.appalled-turn.over, “be completely dumbfounded”)

In conclusion, among 14 types of V-V compounds, seven types represent a temporal relation between V1 and V2 and the remaining seven types do not. Represented temporal relations come in three types: cotemporal, contiguous and non-contiguous. The non-contiguous type is usually observed with cause compounds and means compounds. My observation that Japanese causatives expressions allow a non-contiguous relation agrees with the claim by L&RH (1999) and RH&L (1999a, 1999b, 2001). However, Goldberg and Jackendoff (2004) do not consider a non-contiguous relation for English resultatives. I think this results from a typological difference that English causative expressions, especially AP resultatives, denote a physical causation whereas causative events denoted by Japanese V-V compounds include non-physical causative events.

3.4.3 Telicity

3.4.3.1 Ambiguity in Reading of Telicity

The telicity of the event is generally considered to be primarily determined by the aspectual property of the head component verb, which is usually V2. For example, the compound *oshi-taosu* (push-bring.down, “push down”) has a bounded V2 *-taosu*, and its boundedness determines the boundedness of the entire compound.

However, as I touched on in 3.4.1, many Japanese causative V-V compounds show the ambiguity in the reading of the telicity of the event they present. Consider the cases in (82).

(82) V-V Compounds Showing Ambiguity in Reading of Telicity

a. *tsuchi wo san pun* {*kan*/*de*} *fumi-katameru*
soil Acc three minute {for/in} step.on-harden
"harden the soil by treading it down {for/in} 3 minutes"

b. *nendo wo san pun* {*kan*/*de*} *oshi-nobasu*
clay Acc three minute {for/in} push-spread
"spread clay {for 3 minutes/in 3 minutes} by pressing it"

c. *renga wo san pun* {*kan*/*de*} *tsumi-ageru*
brick Acc three minute {for/in} pile-raise
"pile up bricks {for/in} 3 minutes"

d. *kyabetsu wo san pun* {*kan*/*de*} *kiri-kizamu*
cabbage Acc three minute {for/in} cut-cut.finely
"cut a cabbage finely {for/in} 3 minutes"

The compounds above can allow the reading of a telic or atelic event. They represent an accomplishment or incremental change state with no terminus. In each case, the boundedness of the object is relevant for the reading of the telicity of the event.

(83) a. *nendo wo san pun* {**kan*/*de*} *kanzen-ni oshi-nobasu*
clay Acc three minute {for/in} completely push-spread
"spread clay completely {*for 3 minutes/in 3 minutes} by pressing it "

b. *hyak-ko no renga wo san pun* {**kan*/*de*} *tsumi-ageru*
hundred Gen brick Acc three minute {for/in} pile-raise
"pile up 100 bricks {*for/in} 3 minutes"

An incremental event can be changed to an accomplishment by setting a terminus to the incremental change of state process. (83a) has such an expression *kanzen-ni* ("completely"), and the event is interpreted as an accomplishment. In (83b), the object is modified by a quantifier *hyak-ko* ("hundred"), and the bounded object measures out the entire event as telic. This observation agrees with what Tenny (1992) states in her theory named Aspectual Interface Hypothesis. In this theory, she claims that an entity

that measures out an event is affected by the event[42]. Tenny (1994) proposes that there are three ways of measuring out the event: incremental themes, direct objects of changes of state, and path objects.

3.4.3.2 Source of Aspectual Ambiguity of V-V Compounds

Now we have a question: where does the aspectual ambiguity of V-V compounds result from? The first answer to this question is that many of the component verbs inherently have such aspectual ambiguity. Consider (84).

(84) a. *kami wo san pun {kan/de} kiru*
paper Acc three minute {for/in} cut
"cut the paper {for/in} three minutes"

b. *denki wo san pun {kan/?de} kesu*
light Acc three minute {for/in} turn.off
"turn off the light {*for/in} three minutes"

c. *mizu wo san pun {kan/de} dasu*
water Acc three minute {for/in} take.out
"drain the water {for/in} three minutes"

d. *bin wo san pun {kan/de} tateru*
bottle Acc three minute {for/in} stand.up
"stand up the bottle {for/in} three minutes"

e. *chi wo san pun {kan/de} toru*
blood Acc three minute {for/in} take
"take one's blood {for/in} three minutes"

As touched on in 3.3.1, this can be explained by Ikegami's typological account: Japanese is a become-type language, and in such a language verbs represent the transitive activity as a process, rather than the achievement of the intended goal. For example, the verb *kiru* ("cut") in (84a) can be understood as a bounded or unbounded process, the reading of the event telicity relies on the presence of measure out expressions in the sentence like the examples in (83).

[42] Jackendoff (1996) points out that the measuring out of motion events is different from other cases, states that "all syntactic variables affecting telicity in the motion case have to do with the PP or measure phrase rather than with the direct object," but "the PP is not affected by the event."

3.4.3.3 How Does V1 Contribute to Aspectual Interpretation of Event?

One might think that lexical causative verbs and causative V-V compounds share the same aspectual properties although not all lexical causative verbs appear in the V2 position of V-V compounds. It can be said that V-V compounds are different from lexical causative verbs in that the event aspect of V-V compounds is determined by the cooperation of V1 and V2.

Most causative compounds are means or manner compounds. In such compounds, V1 not only specifies the causative means of V2 or the manner of the activity of V2, but also indirectly specifies the boundedness of subcategorized objects by tightening the selection limits on the types of objects which V1 can potentially take as patients. Consider (85).

(85) a. {*jouhou*/*haisui*/*dosha*/*hana*/#*ie*} *wo* *nagasu*
{information/waste water/earth and sand/flower(s)/house} Acc flow
"make {*information/waste water/earth and sand/flower(s)/*a house} flow"
b. {**jouhou*/**haisui*/*dosha*/*hana*/*ie*} *wo* *oshi-nagasu*
{information/waste water/earth and sand/flower(s)/house} Acc push-flow
"wash away {*information/waste water/earth and sand/flower(s)/a house}"
c. {*jouhou*/*haisui*/??*dosha*/**hana*/**ie*} *wo* *tare-nagasu*
{information/waste water/earth and sand/flower(s)/house} Acc drip-flow[43]
"discharge {*information/waste water/earth and sand/*flower(s)/*a house}"

(85a) is an independent use of V2. The verb can take most types of objects although the object *ie* ("house") sounds unnatural pragmatically[44]. When a verb involving impact appears in the V1 position as in (85b), the verb selects concrete nouns including mass nouns and bounded nouns as patient objects, but not abstract nouns like *jouhou* ("information"). In contrast, V1 *tare-* in (85c) usually takes liquid as its object, and thus *hana* and *ie* ("flower" and "house") cannot appear as objects. It is not that V1 always plays this role in all V-V compounds, but this tendency can be widely observed with means compounds or causative manner compounds.

Furthermore, in some cases V1 plays an important role in determining the aspectual properties of the compound. As a general principle, if V1 denotes a punctual event, the event denoted by the compound is also interpreted as punctual; if V1 denotes a durative event, the event denoted by the compound is interpreted as an accomplishment

[43] V2 *-nagasu* is translated as "flow" for comparison, but it is translated as "drain" in other sections.
[44] There is no grammatical problem with this object, but it usually appears in the passive form.

involving a durative process. Compare the compounds in (86).

(86) a. {*suu fun kan* /*suu fun de* /*isshun de*} *yogore wo otosu*
{for a few minutes/in a few minutes/instantly} something Acc drop
"remove dirt {for a few minutes/in a few minutes/instantly}"

b. {*suu fun kan* /*suu fun de* /*isshun de*} *yogore wo kosuri-otosu*
{for a few minutes/in a few minutes/instantly} dirt Acc rub-drop
"rub off the dirt {for a few minutes/in a few minutes/instantly}"

c. {*suu fun kan* /*suu fun de* /*isshun de*} *yogore wo arai-otosu*
{for a few minutes/in a few minutes/instantly} dirt Acc wash-drop
"wash off the dirt {for a few minutes/in a few minutes/instantly}"

d. {*suu fun kan* /*suu fun de* /*isshun de*} *hokori wo harai-otosu*
{for a few minutes/in a few minutes/instantly} dust Acc brush-drop
"brush off the dust {for a few minutes/in a few minutes/instantly}"

e. {**suu fun kan* /??*suu fun de* /*isshun de*} *kabe no mushi wo tataki-otosu*
{for a few minutes/in a few minutes/instantly} wall Gen insect Acc hit-drop
"knock down an insect on the wall {*for a few minutes/??in a few minutes/instantly}"

f. {**suu fun kan* /??*suu fun de* /*isshun de*} *hito wo tsuki-otosu*
{for a few minutes/in a few minutes/instantly} person Acc push-drop
"push someone off (a high place) {*for a few minutes/?in a few minutes/instantly}"

The verb *otosu* in (86a) means "remove" or "drop" and it can select various types of nouns including things or humans as objects. The event which the verb denotes can be interpreted as activity, achievement or accomplishment depending on other temporal expressions in the sentence, or the type of an object which the verb takes in the sentence.

The sentences (86b), (86c) and (86d) all allow an atelic activity reading, in which the objects "dirt" and "dust" are interpreted as incremental themes.

On the other hand, (86e) and (86f) have compounds with a punctual V1, and they do not allow an atelic activity reading or an accomplishment reading. An accomplishment reading could be possible by adding with the expression *suu fun de* (in a few minutes) to (86e) and (86f). But in this case, this process lasting for a few minutes would be understood not as the duration of the event, but as a preparatory stage before the event takes place.

Normally, the expression *suu fun kan* ("for a few minutes") is not felicitous in (86e) and (86f), but it can be used if an iterative reading is available for these events. In such a case, the objects need to be modified by an indefinite quantifier such as *ikutsumo no* ("(of things) many") or *nanninmo no* ("(of people) many").

In conclusion, many Japanese lexical causative verbs can depict an activity segment and the result segment in the causal chain when it is used as a "bare" verb. When it is compounded with a punctual V1, the compound measures out a single cycle of a causative change of state, and thus the entire event represents an achievement. But the reading of achievement can be cancelled by the addition of an indefinite quantifier to the object. Consequently, the entire event is reinterpreted as an unbounded process of multiple cycles of achievement subevents.

3.4.4 Aspect Type and Internal Aspectual Structure

Kindaichi (1950) proposes four verb classes[45]: stative verbs, durative verbs, punctual verbs, and verbs of the "fourth type." Kindaichi's classification is based on the *-te iru* form, and it is similar to Vendler's situation aspects[46] based on the progressive form test.

The stative verb class has only two verbs: *iru* ("(of animate subjects) exist, be or stay") and *aru* ("(of animate subjects) exist or be"), and they do not appear in the *-te iru* form. Durative verbs like *hashiru* ("run") have a progressive reading in the *-te iru* form, while punctual verbs like *kowareru* ("become broken") expresses the result of a change of state in the *-te iru* form. Verb of the fourth like *sobieru* ("(of high structures) rise") depicts the state, properties or shape of an entity, and they are usually used in the *-te iru* form when they are predicated of subject nouns. The table in (87) shows the examples of these four types of verbs and their aspectual reading in the *-te iru* form.

(87) Kindaichi's Four Verb Types and *-Te Iru* Form Test

Class	Example	Reading in *-Te Iru* Form
a. Stative verbs	*aru* ("exist" or "be")	Unavailable
b. Durative verbs	*hashiru* ("run")	Progressive: *hashit-te iru* ("be running")
c: Punctual verbs	*kowareru*	Result of change of state: *koware-te iru*

[45] They are translated from *joutai doushi*, *keizoku doushi*, *shunkan doushi*, and *dai yon no doushi* respectively.

[46] Vendler (1967) proposed these four types of time schemata represented by various verbs. State refers to a phase of being like *knowing somebody*; activity refers to a process going on in time with no goal as in *pushing a cart*; achievement refers to an instantaneous event transitioning from one state to another as in *reaching the summit*; accomplishment is made of a preparatory activity process and an achievement that follows, like *drawing a circle*.

	(“become broken”)	(“be broken”)
d. Verbs of the fourth class	*sobieru* ((of high structures) “rise”)	State/Properties/Shape: *sobie-te iru* (“rise”)

We may expect that the *-te iru* test can also be used to determine the aspectual properties of V-V compounds. Now let us examine the possible aspectual readings of some V-V compounds of major compound types.

(88) V-V Compounds Subjected to the *-te iru* Test

a. Pair	*machi-nozomu* (wait-hope, “anticipate”)	*machi-nozon-de iru* (“be anticipating”)	progressive
b. Pair	*yase-otoroeru* (become.thing-weaken, “become emaciated”)	*yase-otoroe-te iru* (“be emaciated”)	result state
c. Manner	*mai-agaru* (dance-go.up, “soar up”)	*mai-agat-te iru* (“be soaring up”)	progressive/ result state
d. Manner	*midare-tobu* (go.out.of.order -fly, “fly wildly about”)	*midare-ton-de iru* (“be flying wildly about”)	progressive
e. Means	*oshi-tsubusu* (push-flatten, “crush”)	*oshi-tsubushi-te iru* (“be crushing”)	progressive
f. Means	*tataki-waru* (hit-break, “smash to pieces”)	*tataki-wat-te iru* (“be smashing to pieces”)	progressive/ iterative
g. Cause	*uchi-agaru* (strike-go.up, “be launched up”, or “be washed onto the beach”)	*uchi-agat-te iru* (“be being/have been launched up” or “have” been washed onto the beach”)	progressive/ iterative/result state
h. Cause	*yake-shinu* (burn-die, “die from burning”)	*yake-shin-de iru* (“have been dead from burning”)	result state
i. DPM	*hashiri-mawaru* (run-go .around, “run around”)	*hashiri-mawat-te iru* (“be running around”)	progressive
j. DPM	*tobi-saru* (fly-leave, “fly away”)	*tobi-sat-te iru* (“have flown away”)	result state

Activity events and accomplishment events denote a process in progress. Therefore if a

compound has a progressive reading, the event is either of these. For example, the compounds (88a), (88d), (88e) and (88i) allow a progressive reading. (88a) and (88d) are activity and (88e) and (88i) are accomplishment.

If a compound denotes an achievement event, it has a reading of a result state in the *-te iru* form. (88b) and (88j) express achievement events although they may be interpreted as expressing a progressive event if a special context is given.

Some compounds like (88c), (88f), (88g) and (88h) show multiple readings. For example, if the cause compound (88g) depicts a single shoot of fireworks or a launch of a rocket, it has a progressive reading. If the verb depicts a series of punctual events like explosions of fireworks, it may be interpreted as iterative. The verb also has a meaning of being washed onto the beach. In this usage, the verb denotes a result state. The other cause compound (88h) only denotes a result state. It could have a progressive reading only if one is watching a scene of someone burning in the fire in slow motion.

As far as the test results in the above table are concerned, it seems that the aspectual properties of V-V compounds are largely determined by the semantics of individual compounds, without depending on the types of the compounds.

To confirm this tendency, I conducted the *-te iru* test to the 14 semantic types of canonical V-V compounds (2,397 compounds) to examine their aspectual properties by judging the compounds have a progressive reading or result state reading. The table in (89) shows the results of the tests. For each of the 14 semantic types of compounds, the results were counted as intransitive class, transitive class or labile class respectively.

(89) Progressive & Result State

14 Semantic	Intransitive		Transitive		Labile	
Types	Prg	Res	Prg	Res	Prg	Res
a. Pair	13 (27)	4 (12)	12 (17)	0 (0)	0 (0)	0 (0)
b. Manner	104 (228)	41 (112)	52 (162)	2 (26)	2 (7)	1(1)
c. Means	20 (53)	4 (22)	550 (879)	18 (132)	0 (3)	0 (2)
d. Cause	2 (31)	61 (93)	1 (8)	4 (10)	0 (0)	0 (0)
e. DPM	41 (103)	9 (43)	54 (198)	1 (34)	2 (5)	0 (1)
f. Situation	0 (10)	9 (22)	0 (3)	3 (7)	0 (0)	0 (0)
g. Preceding activity	2 (17)	3 (23)	5 (21)	3 (10)	0 (0)	0 (1)
i. Purpose	0 (4)	1 (3)	0 (1)	2 (2)	0 (0)	0 (0)
j. Condition	0 (0)	1 (2)	5 (6)	0 (2)	0 (0)	0 (0)
h. Interaction	0 (0)	0 (0)	10 (15)	0 (2)	0 (0)	0 (0)

type						
k. Activity type	1 (15)	3 (11)	5 (43)	3 (20)	0 (0)	0 (1)
l. Emphasis	3 (30)	1 (17)	5 (89)	0 (17)	0 (1)	0 (1)
m. Activity extent	45 (72)	4 (13)	57 (82)	0 (4)	0 (2)	0 (1)
n. Result extent	9 (28)	44 (60)	6 (20)	2 (13)	0 (0)	0 (0)

For the intransitive class, transitive class and labile class, there are two columns respectively: *Prg* and *Res*. The figures in the column *Prg* represent the number of compounds having a progressive reading; those in the column *Res* having a result state reading. Figures outside the parentheses are the counts of those compounds that exclusively belong to each compound type on the left. For example, in the line of manner compounds (89b), the left-most figure "104" represents that there are 104 intransitive compounds that solely belong to the manner type and that they only have a progressive reading in the *-te iru* form. The counts for those compounds which also belong to another semantic type or those which have another aspectual reading (such as result state or iterative) are put in the set of parentheses to the right. In the case of the above 104 manner compounds with a progressive meaning, there are a total of 228 manner compounds which belong to one or more different semantic types and/or have (a) different aspectual reading(s).

Most noticeably, compounds having a progressive reading overwhelmingly outnumber those having a result state reading both in the intransitive and transitive classes. This tendency is more conspicuous in transitive compounds than in intransitive compounds. This shows that the majority of Japanese V-V compounds are also action-oriented, as Ikegami (1985) observed with lexical verbs.

However, cause compounds (89d) and result extent compounds (89n) are exceptional in that they show a strong preference for a result state reading when used in the *-te iru* form. It is quite reasonable that result extent compounds have such a tendency because their V2 mostly denotes the temporal terminus of the V1 event. Consider (90).

(90) a. *fuke-komu* (become.aged-go.into, "become aged a lot")
b. *hare-agaru* (swell-go.up, "swell up")
c. *nari-wataru* (ring-cross, "resound wide and far")
d. *tae-hateru* (become.extinct-end, "die out")

e. *waki-kaeru* (boil-turn.over, “boil up,” or “get wildly excited”)
f. *wasure-saru* (forget-go.away, “forget completely”)

V2 -*komu* in the compound in (90a) originally means “to go into,” but it emphasizes one’s aging degree in this example. V2 -*wataru* in (90c) means “to cross” when it is used independently. But in this compound, V2 means “out to the boundary.” Some V2s have a close meaning to English particles *up*, *out*, *over*, *away*, etc., as seen in (90b), (90d), (90e) and (90f).

Many cause compounds share the same V2 as other types of compounds, which are typically manner compounds. Cause compounds generally show a strong preference for a result state reading when put in the -*te iru* form. Accordingly, such compounds tend to be interpreted as denoting a telic event. Contrarily, manner compounds usually show a greater preference for a progressive reading to a result state reading because manner compounds generally denote an atelic event. Interestingly, such different aspectual properties between a manner compound and a cause compound are maintained in many cases even if the two compounds share the same V2. Compare the examples in (91).

(91) a. Manner compound:
san pun {kan/de} kake-agaru
three minute {for/in} run-go.up
“run up {for/in} three minutes”
a’. Cause compound:
san pun {(?)?kan[47]*/de} uchi-agaru*
three minute {for/in} strike-go.up
“be launched up {for/in} three minutes”
b. Manner compound:
san pun {kan/?de} nagare-ochiru
three minute {for/in} flow-fall
“flow down {for/in} three minutes”
b’. Cause compound:
san pun {??kan/de}moe-ochiru
three minute {for/in} burn-fall
“fall down in flames {(?)for/in} three minutes”
c. Manner compound:
*san pun {kan/*de}midare-tobu*

[47] The durative reading seems to be only possible in an iterative event.

three minute {for/in} go.out.of.order-fly
"fly about wildly {for/in} three minutes"

c'. Cause compound:

san *pun* {??*kan*/*de*} *chigire-tobu*
three minute {for/in} be.torn-fly
"be torn away {??for/in} three minutes"

This shows that aspectual properties of these types of compounds can also be affected by the interpretation of V1 in the semantics of the entire compound. If the V1 event can be coindexed with the V2 event, the entire compound is interpreted as a manner compound. In (91c), for example, the event denoted by V1 *midare-* ("moving about widely") can be understood as being cotemporal with the V2 event. But in (91c') the event denoted by V1 *chigire-* ("be torn away") cannot be coindexed with the V2 event, but it can be understood as preceding the V2 event. Accordingly, the compound in (91c') is interpreted as a cause compound.

In conclusion, the aspectual structures of V1 and V2 are determined by the semantics of each verb respectively, and then based on such information, the most appropriate temporal relation is established between the V1 event and the V2 event. If the two component verbs have a cotemporal relation, the compound may be interpreted as a manner (or pair compound). If the components have a temporally overlapping relation, the compound is interpreted as another type of compound such as cause compounds, means compounds, etc.

3.5 Compounding Principles Reviewed

3.5.1 Unified Accounts for Compounding Patterns

When we discuss the grammatical principles or constraints on the compounding patterns of Japanese VV compounds, we need to begin with this fundamental question: should there be a unified grammatical principle that determines the compounding patterns of the V1 and V2 of thematic V-V compounds? To answer this question, various unified accounts have been proposed. They include Kageyama's Transitivity Harmony Principle, Yumoto's (1996, 2005) Principle of Subject Identification and Principle of Priority to Unaccusativity, Matsumoto's (1996) Shared Participant Condition, and Matsumoto's (2008) Principle of Subject (Salient Argument) Sharing. These unified approaches are all based on an assumption that the serial construction of V1 and V2 encodes a particular underlying semantic relation of the compounds and that relation can be captured by a single grammatical principle.

The Transitivity Harmony Principle is the first theory to account for the formation of V1 and V2 in terms of the argument structure of the compound. Yumoto (1996, 2005) and Matsumoto (1998) present counterevidence to Kageyama's account, and respectively claim that the notion of subject identification or subject sharing can better capture the compounding principles of V-V compounds. The subject identification/subject sharing account seems to be able to appropriately describe the general compounding patterns of V-V compounds. However, neither account explains adequately why Japanese V-V compounds have to follow such a grammatical principle.

In the sections to follow, I will closely examine the distribution of the compounding patterns of thematic V-V compounds, and will explain the relevant grammatical rules that principle the combination patterns of V-V compounds.

3.5.2 Transitive/Intransitive Opposition

In the Principle of Shared Subject, the matching of two subjects of the component verbs is closely associated with the transitive/intransitive opposition of V-V compounds. Most Japanese verbs have a clear transitive/intransitive distinction. This grammatical property plays an important role in the formation of V-V compounds. The theory assumes that when V1 and V2 are compounded, the most salient argument is selected from each component for matching.

To begin with, let us take a look at the distribution of the transitive-intransitive opposition of V-V compounds to examine any possible relations between the semantic types of V-V compounds and the transitive/intransitive distinction. The following table shows the distribution of 14 compound types of 2,397 canonical V-V compounds by transitive/intransitive opposition. The figures outside the parentheses are the counts of those compounds that exclusively belong to each semantic type on the left. The figures in the parentheses show the number of compounds that also belong to one or more different semantic types from the labeled semantic type. Accordingly, the total of such figures may outnumber the total counts of actual instances. Those compounds which are difficult to classify into any of these 14 compound types are not included in the counts in (92).

(92) Overall Distribution of Intransitive, Transitive and Labile Verbs

14 Compound Types	Intransitive	Transitive	Labile	Total
a. Pair Compound	23 (41)	16 (20)	0 (0)	39 (61)
b. Manner Compound	240 (351)	72 (191)	5 (9)	317 (552)
c. Means Compound	40 (71)	742 (943)	1 (4)	783 (1019)

d. Cause Compound	77 (111)	8 (15)	0 (0)	85 (126)
e. DPM Compound	73 (149)	76 (218)	2 (6)	151 (373)
f. Situation Compound	16 (27)	8 (11)	0 (0)	24 (38)
g. Preceding Activity Compound	10 (34)	15 (29)	1 (1)	26 (64)
i. Purpose Compound	3 (6)	3 (3)	0 (0)	6 (9)
j. Condition Compound	8 (8)	8 (10)	0 (0)	16 (18)
h. Interaction Type Compound	0 (0)	12(15)	0 (0)	12 (15)
k. Activity Type Compound	7 (30)	13 (66)	0 (1)	20 (98)
l. Emphasis Compound	6 (51)	8 (110)	0 (3)	14 (165)
m. Activity Extent Compound	79 (87)	71 (87)	0 (2)	150 (176)
n. Result Extent Compound	80 (92)	14 (29)	0 (0)	94 (121)

The pair compound class has more intransitive verbs than transitive verbs. There are few causative verbs of change of state or location. The majority of compounds in this class use psych-verbs, activity verbs, non-causative transitive verbs and intransitive verbs of change of state as V1 or V2. This suggests that pair compounds can represent the activity segment of the causal chain, but that they are not optimized for representing the entire causal chain. This can be explained as follows: since causative verbs have a theme object, if two causative verbs are paired in the compound, these two themes must be linked to each other, and the linked theme of the compound undergoes two different causal events. This violates Goldberg's (1995) Unique Path Constraint.

Likewise, intransitive compounds outnumber transitive compounds in the manner compound class. A closer look at the distribution of manner compounds shows that most of them depict the manner of intransitive motion (100 instances), such as *kake-agaru* (run-go.up, "run up") and *suberi-komu* (slip-go.into, "slide into"). Also some represent the manner of change of state (22 instances) like *kaki-kieru* (scratch-disappear, "vanish suddenly"). There are some manner compounds that depict events of causative change of location, but they are not large in number (21 instances).

Most means compounds are transitive, and they depict events of causative change of location (289 instances) like *arai-otosu* (wash-drop, "wash off"), causative change of state (197 instances) like *uchi-kowasu* (hit-break, "smash" or "ruin"), and causative

change of position (44 instances) like *tate-kakeru* (stand-hang, “stand against”).

Cause compounds are typically intransitive, and they depict events of intransitive change of state (42 instances) like *yake-shinu* (burn-die, “die from burning”) or intransitive change of location events (7 instances) like *uchi-agaru* (strike-go.up, “be launched”).

Directional compounds have a V2 of metaphorical change of location, and they seem rather neutral to the transitive/intransitive opposition, unlike compounds in other major classes such as pair compounds, means compounds, manner compounds, and cause compounds. As Himeno (1999: 225) points out, many directional V2s form transitive/intransitive pairs, such as *-ageru* (vt, “raise”) and *-agaru* (vi, “go up”); *-mawasu* (vt, “turn around”) and *-mawaru* (vi, “go around”); *-tsukeru* (vt, “put on”) and *-tsuku* (vi, “stick”). In this class, a transitive V1 is usually paired with a transitive directional V2, and an intransitive V1 with an intransitive directional V2. However this is not always true: there are exceptions such as *kami-tsuku* (bite (vt)-stick (vi), “bite at”), *naguri-kakaru* (hit (vt)-hang (vi), “hit at”), and *teri-kaesu* (shine (vi)-return (vt), “reflect”).

Result extent compounds and activity extent compounds tend to be intransitive. Result extent compounds usually describe the extent of the change of state. Since these two classes of compounds are both left-headed, the transitive/intransitive status of the V2 is not usually inherited by the compound, as exemplified by the activity extent compound *ganari-tateru* (yell (vi)-stand.up (vt), “yell madly (vi)”) and the result extent compound *yowari-kiru* (weaken (vi)-cut (vt), “be utterly exhausted (vi)”).

3.5.3 Principle of Subject Sharing/Identification Reviewed

3.5.3.1 Yumoto (1996) and Matsumoto (1998)

The Principle of Subject Identification was originally proposed by Yumoto (1996). The principle states that the subject argument of V1 must be identified with the subject argument of V2. This captures the “default” compounding pattern for a majority of V-V compounds. Yumoto defines the term “subject” as subject argument. However, her definition seems too rigid to account for the following cases in (93).

(93) a. Cause compound: *mai* (vi)-*ageru* (vt) (dance-raise, “raise (a cloud of dust)”)
b. Situation compound: *ne-midareru* (sleep-go.out.of.order, “(of hair) become disheveled from sleep”)
c. Situation compound: *ure-nokoru* (sell-be.left, “remain unsold”)
d. Result extent compound: *hare-wataru* (become.clear-cross, “(of sky) clear up”)

The notion of "shared subject argument" cannot apply to the above compounds because their V1 and V2 do not actually share the same argument.

Matsumoto (1998) employs a broader definition for the notion of shared subject. He defines the shared subject of V1 and V2 as the shared salient participant. He explains that the Principle of Subject Sharing holds as long as the same salient participant is shared in the event frames (Fillmore 1971, 1982) depicted by V1 and V2. For example, in (93d), V2 refers to the effect of the change of state which the subject of V1 undergoes.

Matsumoto explains that subject mismatch compounds like (93a) are derived from their intransitive counterparts. For example, transitive *mai-ageru* is derived from intransitive *mai-agaru*, which perfectly complies with the Principle of Shared Subject.

Examples (93b, c) follow Matsumoto's proposed condition because the subject of V2 in each compound (93b) and (93c) virtually refers to the subject of V1. Specifically, these two compounds describe situations where something happens to the agent's possession or his body part while he is conducting a particular activity.

3.5.3.2 Transitive/Intransitive/Labile Opposition and Combination Patterns of V-V Compounds

Now, let us take a closer look at the combination patterns of V-V compounds in terms of the transitive/intransitive/labile opposition. My corpus research on the combination possibilities of V1 and V2 in terms of the transitive/intransitive/labile opposition between the component verbs shows a considerably distinct tendency: intransitive verbs prefer to combine with intransitive verbs, whereas transitive verbs prefer to combine with transitive verbs. The table in (94) lists the major combination patterns of V-V compounds (a total of 2,397 compounds) as classified by transitive/intransitive/labile distinction. The column *Descriptions & Examples* provides the typical types of component verbs used and their compound examples.

(94) Top 12 Combination Patterns in Terms of Transitive/Intransitive Distinction

No. Pattern	Instance	%	Descriptions & Examples
1. Vt1-Vt2=Vt	1,106	48.18%	*tataki-kowasu* (hit-break, "break by hitting")
2. Vi1-Vi2=Vi	453	18.91%	*nagare-ochiru* (flow-fall, "(of water) run down")
3. Vt1-Vi2=Vi	160	7.06%	*oshi-damaru* (push.hold.tongue, "remain silent"), *sui-tsuku* (suck-put.on, "stick to")
4. Vlb1-Vt2=Vt	123	5.14%	Auxiliarized V1: *hik(i)-* (<*hiku*[48]) and s*ashi-* (<*sasu*)

[48] *sasu* (hold.up/insert/put.into/put.forward/thrust, "upward, in urgency, compulsorily, etc.") and *hiku*

			hik-kakeru (pull-hang, “catch/put on”), *sashi-tomeru* (intervene-stop, “ban urgently”)
5. Vt1-Vlb2[49]=Vt	116	4.84%	Most V2: -*fuseru* (“turn/lie down”), -*hiraku* (“open”), -*komu* (“put/go into”), -*yoseru* (“bring/come near”) *oshi-hiraku* (push-open, “push open”), *nage-komu* (throw-go.into, “throw into”)
6. Vt1-Vi2=Vt	78	3.26%	Non-causative activity V1+ Intransitive motion V2: *sagashi-mawaru* (look.for-go.around, “look around for”)
7. Vlb1-Vi2=Vi	68	2.84%	Manner V1 + V2 of change of state/location *fuki-deru* (blow-go.out, “spout/gush out”)
8. Vi1-Vlb2=Vi	53	2.21%	Most V2: -*komu* (put/go.into, “into”) *fuke-komu* (become.aged-go.into, “become aged a lot”)
9. Vi1-Vt=Vi	49	2.05%	Result extent compound *akire-kaeru* (be.appalled-turn.over, “be completely dumbfounded”)
10. Vt1-Vt2=Vi	38	1.59%	Reflexive V2; -*kakeru* (hang, “at/to/on”), -*tsukeru* (put.on, “at”); Result extent compound *oshi-kakeru* (push-hang, “throng to”), *ganari-tateru* (yell-stand.up, “yell madly”)
11. Vi1-Vt2=Vt	36	1.50%	Means/Manner V1+ V2 of causative change of state/location *hane-ageru* (leap-raise, “splash up”)
12. Vt1-Vlb2=Vi	33	1.38%	Most V2: -*komu* (“put/go into”), -*yoseru* (“bring/come near”) *seme-komu* (attack-put/go.into, “invade”)

There are 27 logical combination patterns of component verbs. Furthermore, if we include compounds incorporating component verbs that are unclear in the transitive/intransitive/labile distinction, there are a total of 40 patterns. However, the listed top 12 patterns cover about 96.95% (2,322 instances) of the total instances (2,397 instances), while the remaining patterns only account for 3.13% (75 instances).

(pull, “pull” or “in a quick and forceful manner”). They change to *sashi-* and *hiki-* respectively when followed by V2s.

[49] Vlb represents labile verb.

Therefore they are not listed in (94).

As for the count details of transitive/intransitive/labile compounds, there are 1,472 transitive compounds (61.5%), 898 intransitive compounds (37.5%), and 19 labile compounds (0.8%).

The distribution data in (94) clearly show that the transitive/intransitive/labile distinction serves as one of the most important grammatical factors when two verbal components are compounded. The combination patterns No.1 and No. 2 account for about 65% (1,559 instances) of the total number of canonical V-V compounds. In other words, component verbs mutually tend to select homogeneous partner verbs in V-V compounds. This homogeneity of component verbs can be one of the basic principles in compounding.

3.5.3.3 Further Explorations into Compounding Principles

As we have just seen, there is a general tendency that a component verb is more likely to choose a homogeneous partner in the transitive/intransitive distinction. But there remains a question: what is the underlying linguistic principle that motivates this tendency?

To find an answer to this question, I classified component verbs of 2,397 canonical V-V compounds into 25 event types based on the semantics of the events they denote. The list in (95) shows lists all of the 25 event types of component verbs together with a few examples.

(95) 25 Types of Component Verbs

1. ACT (Agentive activity):
   makeru (“be defeated”), *neru* (“sleep”), *noru* (“ride”)
2. TRS (Non-causative transitive):
   harau (“pay”), *tsukau* (“use”), *ukeru* (“receive”)
3. MNT (Mental activity):
   omou (“think/feel”), *kangaeru* (“think”), *kimeru* (“decide”)
4. DES (Desire):
   motomeru (“demand”), *negau* (“wish”), *nozomu* (“hope”)
5. PSY (Psychological):
   awateru (“be flurried”), *komaru* (“be perplexed”), *osoreru* (“fear”)
6. SNS (Sensation):
   itamu (“hurt”), *kanjiru* (“feel/sense”), *niou* (“smell”)
7. CCS (Causative change of state):

hirogeru (“widen”), *kiru* (“cut”), *kuzusu* (“pull down”)

8. CCL (Causative change of location):

hakobu (“carry”), *nageru* (“throw”), *yoseru* (“bring near”)

9. CCP (Causative change of posture/orientation):

kakeru (“hang”), *taosu* (“bring down”), *tateru* (“stand up”)

10. PLC (Setting and placing)

haru (“paste”), *oku* (“place”), *tsukeru* (“put on”)

11. CMB (Combining):

awaseru (“bring together”), *kumu* (“assemble”), *musubu* (“tie”)

12. CPS (Causative change of psychological state)

sainamu (“torment”)

13. OCS (Other causative events)

kikaseru (“let hear”), *shiraseru* (“let know”)

14. COS (Change of state):

katamaru (“harden”), *kawaru* (“change”), *magaru* (“bend”)

15. COL (Change of location):

noboru (“rise”), *ochiru* (“fall”), *shizumu* (“sink”)

16. MOM (Manner of motion):

afureru (“overflow”), *nagareru* (“flow”), *tobu* (“fly”)

17. APR (Appearance and disappearance):

kieru (“disappear/vanish”), *umareru* (“be born”), *useru* (“disappear”)

18. PST (Posture/orientation):

narabu (“stand in a line”), *okiru* (“get up”), *tatsu* (“stand”)

19. CFG (Spatial configuration):

hedateru (“leave (a distance between)”), *kakomu* (“surround”)

20. EXT (Existence):

aru (“exist”), *iru* (“stay”), *nokoru* (“remain”)

21. MOD (Specific mode of being):

furueru (“tremble”), *mureru* (“crowd”), *tagiru* (“boil wildly”)

22. PHN (Phenomenon) :

hibiku (“echo”), *kagayaku* (“shine”), *moeru* (“burn”)

23. WTH (Weather):

furu (“fall”), *fuku* (“blow”)

24. ASP (Aspect):

tsuzuku (“continue”)

25. ETC (Unclassifiable):

(*ari*)-*au* (“happen to”), (*sashi*-)*sawaru* (“hinder”)

The above 25 verbal event types can further be classified into the following larger four semantic groups:

Group 1: Agentive events ((95-1) through (95-6))
Group 2: Causative events ((95-7) through (95-13))
Group 3: Unaccusative events[50] ((95-14) though (95-22))
Group 4: Miscellaneous types, which include weather, aspect and unclassifiable verbs.

I counted the number of instances of V1 and V2 based on the above event classification. However, some component verbs are quite difficult to classify into a particular class, and others may be classified into multiple verb classes. Therefore, such compounds are excluded from the figures in (96). The following table is the result of such statistics counts, and the labels on the left-most vertical column represent event types of V1, and the labels on the top of each column represent the event types of V2. The largest and the second lar
gest figures in each horizontal line are emphasized in bold.

(96) Combination Patterns as Classified by Event Types of Component Verbs

	V2	Group 1						Group 2							Group 3									Group 4		
	V1	ACT	TRS	MNT	DES	PSY	SNS	CCS	CCL	CCP	PLC	CMB	CPS	OCS	COS	COL	MOM	APR	PST	CFG	EXT	MOD	PHN	WTH	ASP	ETC
Group 1	ACT	7	**10**	0	0	1	0	7	**11**	5	2	2	0	0	**18**	**31**	2	0	6	0	2	0	0	0	0	0
	TRS	**13**	**121**	4	2	6	0	**221**	**284**	**69**	**55**	**14**	1	3	**31**	**140**	**11**	**10**	**20**	0	1	0	1	0	1	2
	MNT	0	5	2	0	3	0	4	4	1	1	0	0	1	2	6	0	1	1	0	2	0	1	0	0	0
	DES	0	1	0	0	0	0	0	1	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
	PSY	2	1	0	0	9	0	0	1	1	0	0	0	0	1	**12**	1	2	7	0	1	0	0	0	0	0
	SNS	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0
Group 2	CCS	0	5	0	0	0	0	**47**	**68**	**26**	**16**	**13**	1	0	**11**	**37**	3	1	5	1	1	0	1	0	0	0
	CCL	1	8	0	0	0	0	**12**	**60**	**9**	**10**	3	0	0	5	**23**	1	2	2	0	0	0	0	0	0	0
	CCP	1	6	0	0	0	0	**15**	**34**	**16**	3	1	0	0	1	7	0	0	3	1	0	0	0	0	1	0
	PLC	0	1	0	0	0	0	1	1	0	4	1	0	0	3	4	0	1	0	0	0	0	0	0	0	0
	CMB	0	0	0	0	0	0	3	1	2	3	7	0	0	3	2	0	0	0	0	0	0	0	0	0	0
	CPS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	OCS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Group 3	COS	3	1	0	0	0	1	4	0	0	1	0	0	0	**37**	**47**	6	**14**	**18**	0	7	2	0	0	0	0
	COL	6	2	0	0	0	0	3	3	1	0	1	0	0	**11**	**51**	2	4	5	0	0	0	0	0	0	0
	MOM	1	0	0	0	0	0	0	4	0	1	0	0	0	6	**69**	5	4	3	0	0	0	0	0	0	0
	APR	0	0	0	0	0	0	0	0	0	0	0	0	0	4	9	0	4	1	0	1	0	2	0	0	0
	PST	2	3	0	0	0	0	2	3	1	0	0	0	0	**12**	**13**	3	1	**13**	0	1	0	0	0	1	1
	CFG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	EXT	0	0	0	0	0	0	1	0	0	0	0	0	0	3	4	1	0	2	0	2	0	0	0	0	1
	MOD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0
	PHN	0	0	0	0	0	0	0	2	0	2	0	0	0		**10**	0	0	2	0	0	0	4	0	0	0
Group 4	WTH	0	0	0	0	0	0	2	2	0	0	0	0	0	3	1	0	0	1	0	0	0	0	0	0	0
	ASP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	ETC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0

The figures in the above table represent the counts of V-V compounds of respective combination patterns. For example, the top left-most figure “7” represents the instance counts of V-V compounds composed of ACT V1 and ACT V2 (V1 of agentive event +

[50] Events denoted by verbs whose theme arguments (or internal arguments) realize as the subjects.

V2 of agentive event). For the convenience of viewing, the counts of 10 or greater are all highlighted.

The above data show some characteristic features of the compounding patterns of component verbs. Group 1-V1s can compound with Group 1-V2s, Group 2 and Group 3 considerably freely. However, Group 2-V1s and Group 3-V1s have less freedom in selecting their partner V2s. In particular, Group 2-V1s do not have as much freedom in selecting Group 1-V2s as Group 1-V1s do. Furthermore, Group 3-V1s are subject to more constraints on the selection of V2. The majority of Group 3-V1s usually compound with Group 3-V2s, and a very few Group 3-V1s can be paired with V2s of Groups 1, 2 and 4.

This shows that there is a hierarchical relation among V1s of Group 1, Group 2 and Group 3 in the selection of their pair V2. Group 1-V1s have the greatest freedom in the selection of V2, then Group 2-V1s, and finally Group 3-V1s. In other words, activity verbs rank at the top of the hierarchy, then causative verbs, and finally unaccusative verbs. Accordingly, these verbs can be aligned as in (97). Group 4-V1s are not included in this hierarchy because they have an extremely limited number of instances. Thus I will not further analyze them, but will refer to them only when necessary.

(97) Verb Hierarchy for Selection of V2

Agentive verbs > Causative verbs > Unaccusative verbs

In this hierarchy, an agent is ranked higher than a theme. An agent acts on a theme through a causal relation, and it eventually brings about a change in the status of the theme. The hierarchy (97) seems to reflect the three segmental structure of the causal chain, showing agreement with the segments of the causal chain by Croft (1991, 1994). He states: " The prototypical event type that fits this model is unmediated volitional causation that brings about a change in the entity acted on (i.e. the manifestation of the transmission of force), that is, the prototypical transitive event) . . . Other event types must be 'coerced' into this model." (Croft 1991:173)

(98) Croft's Causal Chain Model (1994)

Three segments of the causal chain in *Harry broke the vase*:

(i) Harry acts on the vase;
(ii) the vase changes;
(iii) the vase is in the result state.

Harry		vase		(vase)		(vase)
●	→	●	→	(●)	→	(●)
SBJ	CAUSE	CHANGE			STATE	OBJ
###		break				###

In this model, the causal direction is single-directed from left to right, and an event starts with a higher node and ends at a lower node. Thus when an event starts at the agent, it can end at either the second node before the change of state of a theme, or the third node after the change of state of the theme. The event of the former case is interpreted as an agentive event, and the latter case as an event of causative change of state. Also an event can start with the second node and the third node. In this case, the event is interpreted as a change of state/location event. But no event can end at a higher node.

Now let us look at the verb hierarchy in (97). It is repeated in comparison with the causal chain in (99). The two-ended arrows show the chain segment that the indicated verb can respectively denote.

(99) Verb Hierarchy for Selection of V2 (Repeated)

Agentive verbs > Causative verbs > Unaccusative verbs

Agentive verbs ←→

Causative verbs ←→

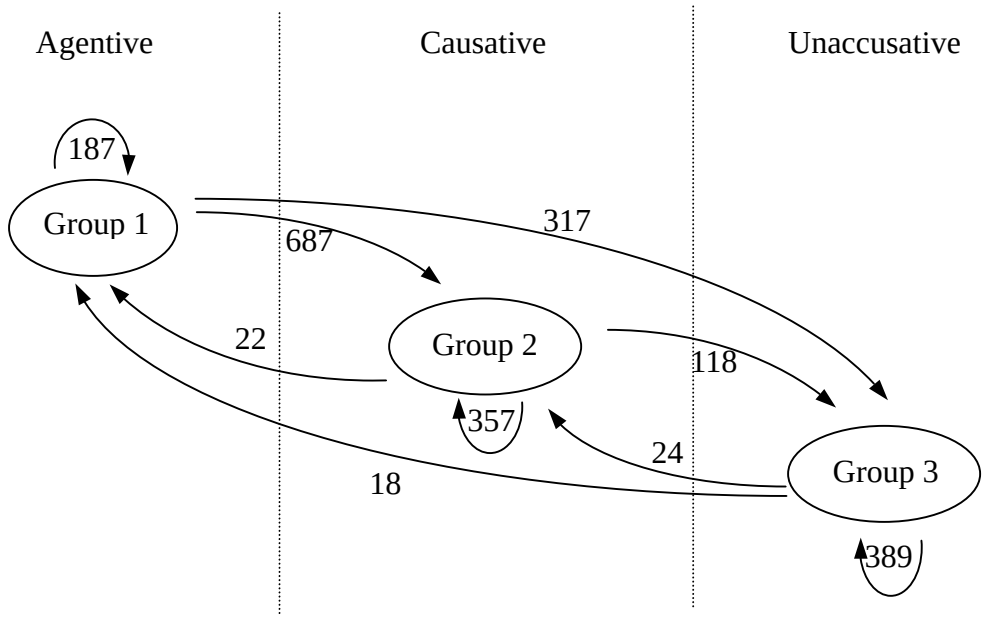
Unaccusative verbs of inchoative event ←→

●	→	●	→	(●)	→	(●)
SBJ	CAUSE		CHANGE		STATE	OBJ
###			causative event			###

An agentive V1 can choose an agentive V2, causative V2 or unaccusative V2 because none of these selection patterns violate the single-directed energy flow of the causal chain: the causal chain must be directed downstream (ie. to the right). A causative V1 can select either a causative V2 or unaccusative V2 for the same reason. Finally, an accusative V1 can select an unaccusative V2 only.

The chart (100) below shows the hierarchical distribution of selectable verb types. Groups 1, 2 and 3 represent agentive verbs, causative verbs and unaccusative verbs respectively.

(100) Verb Hierarchy and Distribution of Verb Combination Patterns[51]



The hierarchical structure can be seen very clearly in the chart (100) since higher-ranked V1s combined with lower-ranked V1s remarkably outnumber lower-ranked V1s combined with higher-ranked V2s in the data. For example, there are 317 compounds made up of Group 1-V1 and Group 3-V2, whereas there are only 18 compounds made up of Group 3-V2 and Group 1-V1.

At the same time, there are many compounds that incorporate the same type of V1 and V2: Group 1 (187), Group 2 (357) and Group 3 (389). The following table shows such correlations.

Now let us examine the relation between the verb combination patterns and the semantic distribution of V-V compounds. The table in (101) shows the total number of the V-V compound of respective combination patterns, and the major semantic types of compounds of that combination pattern together with the number of their instances. The figures in the table do not include compounds that are classified into more than a single semantic type. Also, Group 4 component verbs are not counted in the statistics. Note that I will not exemplify the semantic types of the combination patterns: causative-agentive, unaccusative-agentive and unaccusative-causative because their instance counts are very small, but I will discuss their semantics later.

[51] Of all examined compounds (2,397), 252 compounds are not included in the counts because there are some difficulties in judging the types of their component verbs. Thus the combination patterns of a total of 2,143 compounds are covered in the chart. This is also the case with the table in (96).

(101) Verb Combination Patterns and Semantic Distribution of V-V Compounds

V1 \ V2	Agentive	Causative	Unaccusative
Agentive	Total: 187 Means (58) Manner (16) Activity extent (11)	Total: 687 Means (390) Activity extent (39) DPM (34) Manner (21)	Total: 317 Manner (53) DPM (35) Activity extent (30) Cause (22) Means (15)
Causative	Total: 22 (Omitted)	Total: 357 Means (200) Manner (14) DMP (13)	Total:118 Cause (9) Manner (7) DMP (6)
Unaccusative	Total: 18 (Omitted)	Total: 24 (Omitted)	Total: 389 Manner (93) Result extent (51) Cause (24) DPM (24)

Firstly, one can see that manner compounds and means compound are widely distributed in the table. In general, means compounds are found in the combination patterns where V1 is agentive or causative, and manner compounds where V1 is unaccusative.

Cause compounds are found in the patterns where V2 is unaccusative. This is understandable if we consider that many of intransitive cause compounds are paired with or derived from transitive means compounds.

DPM compounds are only present in the patterns where V2 denotes change of location: causative V2 and unaccusative V2.

Result extent compounds mainly occur in the combination pattern of unaccusative V1 and unaccusative V2. This coincides with the semantics of such compounds because they emphasize the result state of an object. However, outside this table, there are another 12 instances of this type of compound in different combination patterns.

In contrast, activity extent compounds mainly appear in a combination pattern where V1 is agentive or causative. This tendency agrees with the function of this type of

compound: it represents the extent of the activity done by an agent. In addition, there are some activity extent compounds whose V1 is a weather verb.[52] For details, see Appendix B3.

3.5.3.4 Brief Look at Exceptional Compounding Patterns

Though not many, there are some compounds that exceptionally violate the verb selection hierarchy in (97) as shown below:

(102) Compounding Patterns Violating Selection Hierarchy (64 Compounds)

a. Causative V1 + Agentive V2: 22 instances

i) *nage-uru* (throw-sell, "sell at a loss")

ii) *furi-kaburu* (wave-put.on.head, "hold aloft")

b. Unaccusative V1 + Agentive V2: 18 instances

i) *nare-shitashimu* (become.familiar-become.friendly, "cherish through familiarity")

ii) *midare-sawagu* (go.out.of.order-make.noise, "be seized by anxiety")

c. Unaccusative V1 + Causative V2: 24 instances

i) *tare-komeru* (hang.down-put.into, "(of clouds) hang lower")

ii) *kayoi-tsumeru* (go.to.place.regularly-pack, "make frequent visits")

Of all 64 compounds, 27 instances are manner or means compounds; the rest includes activity extent compounds (5), condition compounds (3), pair compounds (3), result extent compounds (3), etc.

Many of these compounds apparently violate the verb selection hierarchy, but closer examinations show that they do not necessarily contradict the hierarchy. For example, the compound *nage-uru* (throw-sell, "sell at a loss") in (102a-i) takes a verb of causative change of location *nageru* ("throw"). But the verb in this compound does not denote a throwing activity but is metaphorically used to express a manner of disposing of a worthless thing.

(102b-i)) is a pair compound. The V1 *nare-* (<*nareru*, "become familiar") is unaccusative when it is used as a lexical verb, but it is virtually used as an agentive verb meaning "to accustom oneself." Contrariwise, the agentive V2 *sawagu* ("make.noise") in (102b-ii) is used as unaccusative verb expressing the restlessness of one's heart. Therefore, it can be considered that the same type of component verbs are paired in these compounds.

[52] They include *furu* ("fall"), *fuku* ("blow") and *teru* ("shine").

V2s of the compounds in (102c) are considered to be auxiliarized and have lost their original meaning. For example the verb *komeru* ("put.into") in (102c-i) is used as a causative verb when used independently. But in this case, it denotes a reflexive motion event of clouds. The verb *tsumeru* ("pack") in (102c-ii) only adds a meaning of high frequency to the compound. Finally, the verb *tsukeru* ("put on") in (102c-iii) emphasizes the extent of the event denoted by V1.

3.5.3.5 Verb Compounding Principle

To sum up the above discussions, it is safe to conclude that component verbs of V-V compounds are compounded in accordance with the verb selection hierarchy in (97). As a general principle, V1 selects as its compounding partner a verb of the same rank or a lower rank, but not a verb of a higher rank. In other words, compounding of V1 and V2 is constrained by what segment of the causal chain the verbs denote. I call this constraint the Causal Hierarchy Condition, and define it as follows.

(103) Causal Hierarchy Condition
V1 of Japanese V-V compounds preferentially selects V2 of the same rank or a lower rank on the Verb Hierarchy for the Selection of V2

3.5.3.6 Constraints on Compounds like *Uchi-Shinu*

In this section, we will consider why the subjects of V1 and V2 have to be matched in a V-V compound like *uchi-korosu* ("killing by shooting").

In Japanese V-V compounds, an expression like *uchi-shinu* (shoot-dead, intending to mean "shoot dead") is ungrammatical. Kageyama's Transitivity Harmony Principle would explain that it is ungrammatical because a transitive V1 and an unaccusative V2 cannot compound. Matsumoto's Principle of Shared Subject would explain it is ungrammatical because the subject of V1 (agent) and the subject of V2 (theme) do not match with each other. In this example, V2 of this compound has to be a causative verb *korosu* ("kill"), so that the agent subjects of V1 and V2 can match.

However, English AP resultatives allow an expression like *shoot someone dead*. Likewise, in Mandarin the expression *she-si* (射死: shoot-dead/die, "shoot dead") is grammatical. In English and Mandarin examples, the result predicates are adjectives[53]. In this respect, the above two grammatical theories do not provide a good explanation for such differences between English resultatives, Mandarin V-V compounds and Japanese V-V compounds.

[53] Mandarin result V2 also has properties of an intransitive verb.

Contrary to the constraints of the Transitivity Harmony Principle, an agent argument and a theme argument can be linked mutually if the compound denotes an event of intransitive motion or change of state as in (104).

(104) a. *hashiri-mawaru* (run-go.aroud, “run around”)
b. *aruki-tsukareru* (walk-get.tired, “get tired from walking”)

In (104a, b), the agent arguments in V1 are linked to the theme arguments in V2 respectively. However, the linking between the agent in V1 and the theme in V2 cannot be allowed in causative compounds. This can be explained in terms of a causal chain.

(105) Causal Chain and Different Segments Expressed by Japanese Verbs

Agentive verbs ←→

Causative verbs ←→

Unaccusative verbs of inchoative event ←→

Unaccusative verbs of result state ←→

1st Segment		2nd Segment		3rd Segment		
●	→	●	→	(●)	→	(●)
SBJ	CAUSE	CHANGE			STATE	OBJ
###		causative event				###

In the above schema, agentive verbs denote an event representing the 1st segment of the causal chain. Unaccusative verbs of result state denote an event of the 3rd segment. Causative verbs denote an event that covers the 1st and 2nd segments of the causal chain.

In English AP resultatives and Mandarin V-V compounds, causative events can be shown without expressing the 2nd segment by means of lexical components.

(106) a. I shot him dead.
b. *Wo ba ta she-si le*.
I BA he shoot-dead Prt
(我把他射死了)
“I shot him dead.”

Neither the English verb *shoot* nor the Mandarin verb *she* are causative, and they do not

imply the result of shooting. The English result predicate *dead* is an adjective, and the Mandarin result predicate *si* is also an adjective (or adjective-equivalent). In these languages, it is possible to compositionally represent a causative event by means of two separate predicates: an agentive verb and a result predicate. These two different predicates encode the causing segment and the caused segment separately, and they compositionally denote a single causal event.

On the other hand, Japanese V-V compounds are lexical compounds. Their components are independent lexical verbs. Lexical causative verbs, because of their lexical nature, encode both the causing segment and the caused segment in a single, compact structure. Since no verbs can encode both the manner component and the causal event structure in a single lexical structure, V1 represents the manner component, and V2 represents the causative event.

3.6 Summary

In the previous sections, I examined the various facets of the semantics of Japanese V-V. It has generally been believed that V2 determines the aspect of the compound. However, we have seen that the semantics of V1 are also involved in the process of determining the aspectual structure of the compounds. Also, I discussed that Japanese V-V compounds generally follow the causal hierarchy condition based on the causal chain.

In the next chapter, I will examine the semantics of Mandarin resultatives, which are expressed in V-V compounds, and will discuss the grammatical constraints of Mandarin V-V compounds, comparing with those of English resultatives and Japanese V-V compounds.

Chapter 4

Mandarin Resultative Verb Constructions

I will begin this chapter with general views on the literature of early studies on Mandarin resultative verb constructions (RVC). In the sections to follow, I will next discuss the grammatical issues of Mandarin RVCs including 1) the agentivity (or causativity), 2) the aspectual structure, 3) the compounding principles, and 4) the headedness.

Except for cited example sentences, the data used in Chapter 4 come in two types: sentences and phrases created by me and the data gained from the corpus I created from the text of modern Chinese novels. (See 4.5.1) Example sentences of the former category are usually shown with no source information. The data from my corpus are mainly used in the statistical counts of various grammatical distribution patterns.

4.1 Nature of Verbal Complements

4.1.1 General Descriptions of RVCs and DVCs

In the traditional view of the Mandarin grammar, predicates affixed to the preceding verbs/adjectives are classified as "complement" (Chao 1968, Zhu 1981, Liu et al. 1991). This affixal category has two subcategories: resultative complement[1] and directional complement.[2] Resultative complements express the result state of the activity denoted by the preceding verb, while directional complements denote the path, source or goal of the directed motion of the subject or object. Resultative complements form resultative verb compounds (RVC), also known as V-R (Verb-Result) constructions, when they are affixed to the preceding verb, as shown in (1a). Likewise, directional complements, when being affixed to the preceding verb, form directional verb compounds (DVC), as shown in (1b).

(1) a. *tui-kai* (推开; push-open), *da-si* (打死; hit-dead/die), *da-sui* (打碎; hit-broken), *he-zui* (喝醉; drink-drunk)

b. *zou-guo* (走过; walk-pass), *pao-jin* (跑进; run-enter), *pa-shang* (爬上; climb-go up), *kai-guolai* (开过来; drive-pass.come)

[1] The Mandarin term is *dongbu jiegou* (动补结构).

[2] Called *quxiang buyu* (趋向补语) in Mandarin.

These two types of compound verbs are both classified as V-V compounds because of their morphological formation. In the traditional Mandarin grammar, resultative complement V2 and directional complement V2 are both considered auxiliary elements to the main verbs. Thus the structural or syntactical head of RVCs or DVCs is considered to be the main verb (V1) in the two types of V-R compounds. Despite these shared morphological features, RVCs and DVCs are usually distinguished from each other in traditional grammar because RVCs and DVCs exhibit somewhat different morphosyntactical behaviors.

In recent years, however, there have been attempts to uniformly account for the semantics of change of state events and change of location events, which are expressed by RVCs and DVCs respectively, in terms of their event structure in cognitive linguistics (Tai 1989a, 2003; Talmy 2000b; J. Shen 2003). In this chapter, we will handle RVCs and DVCs separately and will use the term "resultative" to refer to an event denoted by RVCs.

Liu et al. (1991) classify RVCs into the following two subclasses (the resultative complements are underlined): productive type (2a) and grammaticalized type (2b).

(2) Mandarin Resultative Complements

a. *jiu-huo* (救活; help-alive, "save one's life"), *zhao-hong* (照红; shine-red, "shine red"), *tui-fan* (推翻; push-turn.over, "overthrow"), *da-si* (打死; hit-die, "beat to death"), etc.。

b-1. *kan-wan* (看完; read-finish, "finish reading"), *zhao-dao* (找到; look.for-reach, "find"), *zhu-jiu* (住久; reside-long, "reside in one place for a long time"), etc.

b-2. *kan-jian* (看见; watch-see, "see"), *zhan-zhu* (站住; stand-still, "stand still"), *jie-zhao* (借着; borrow-touch, "manage to borrow"), *tan-dao* [*shi dian*](谈到[十点]; talk-reach [ten o'clock], "talk until [ten o'clock]"), *kun-hao* (捆好; bind-good, "bind properly"), *chao-zai* [*benzi shang*](抄在[本子上]; copy-on [notebook up], "copy into [the notebook]"), etc.

(Liu et al. 1991)

The productive type (2a) denotes the activity-result relation. The V2 is usually an unaccusative verb or adjective, and it depicts the result state of the subject or object.

The complements in (2b-1) represent the aspectual status of the preceding V1. Those in (2b-2) have undergone a semantic extension from the original meanings, and they specify the aspectual phase of the preceding activity denoted by V1. For example, the complement *-zhu* (住, "still") of the compound *zhan-zhu* (站住; stand-still, "stand still")

originally means to “live,” but in this compound it is used to represent the manner of subject/object staying unchanged in location or state.

On the other hand, the Mandarin directional complements include those in (3):

(3) Mandarin Directional Complements

a. *shang* (上, “up”), *xia* (下, “down”), *jin* (进, “into”), *chu* (出, “out”), *hui* (回, “back”), *guo* (过, “pass/over”), *qi* (起, “up”), *kai* (开, “away”), [-*dao* (到, “to/reach”)][3]

b. *shanglai* (上来; up-come, “come up”), *xialai* (下来; down-come, “come down”), *jinlai* (进来; into-come, “come into”), *chulai* (出来; out-come, “come out of”), *huilai* (回来; back-come, “come back to”), *guolai* (过来; over-come, “come over”), *qilai* (起来; up-come, “come up”), *kailai* (开来; away-come, “come away”), *shangqu* (上去; up-go, “go up”), *xiaqu* (下去; down-go, “go down”), *jinqu* (进去; into-go, “go into”), *chuqu* (出去; out-go, “go out of”), *huiqu* (回去; back-go, “go back to”), *guoqu* (过去; over-go, “go over”), [*dao…lai* (到…来; to…come, “come to”), *dao…qu* (到…去; to …go, “go to”)]

(Liu et al. 1991)

The complements in (3a) are called *simple directional complements*, which express the direction of a moving person or object in a transitive or intransitive motion event. Those in (3b) are called *complex directional complements*. They are made up of a simple directional compound and a deictic directional complement -*lai* (来, “come”) or -*qu* (去, “go”).

4.1.2 Major Differences between RVCs and DVCs

DVCs and RVCs share the same morphological structure for V-V compounds, and they typically represent an event of achievement aspect. (For details, see Li & Thompson (1981: 54-68)) Semantically, DVCs and RVCs present the complementary distribution in that the former denote intransitive/transitive change of location events and the latter denote intransitive/transitive (or causative) change of state event.

Despite the above similarities, there are some striking differences between DVCs and RVCs: DVCs normally allow the insertion of an object NP or the perfect aspect marker

[3] There has been no uniform agreement among researchers as to whether the verb *dao* (到, “reach/to”) used in the V1+*dao* construction should be treated as a resultative or directional complement. The verb *dao*, in its original sense, represents the arrival to the goal in a physical motion event, but it metaphorically represents the achievement of an activity event. Liu et al. (1991) classifies the verb *dao* in this use as a resultative complement and that used in the construction *dao* ... *lai*/*qu* as a directional complement. I will follow Liu’s classification in this paper.

le (了) between V1 and V2, whereas RVCs do not[4].

(4) a. RVC:	*xie-hao*;	**xie-ta-hao*;	**xie-le-hao*.
	write-well;	write-it-well;	write-Pst-well
	写好;	*写他好;	*写了好
	"write well;	write it well;	wrote it well"
b. DVC:	*na-chu.lai*;	*na-ta-chu.lai*;	*na-le-chu.lai*
	take-out.come;	take-it-out.come;	take-Asp-out.come
	拿出来	拿他出来	拿了出来
	"take out;	take it out;	have taken out"

In this respect, it can be said that DVCs are more syntactically structured than RVCs because the components allow the insertion of an object NP. Furthermore, The complements of DVCs maintain their verbal properties when used in the compound because they can optionally allow the post-verbal aspectual marker *le* before them. (I will discuss in 4.4.4.1.)

On the other hand, RVCs rather seem to be morphologically structured because they do not allow the insertion of an object or the aspectual marker le. Moreover, the result predicates are usually interpreted as adjectives in the compound even if they behave as full-fledged verbs when used independently. Consider (5).

(5) *Ta qi-zou le*.
He get.angry-walk LE
(他气走了。)
"He left in anger."

The result predicate *zou* means to "run" as a verb, but it has lost its original meaning in the compound adding the meaning of "away" to the compounds. However, RVCs allow the insertion of the potential maker *de* (得) and the negative marker *bu* (不) to make a potential form as in (6).

[4] Many RVCs, as well as DVCs, can form the potential mode by allowing the insertion of the potential complement marker *de* (得) or the negation adverb *bu* (不) between V1 and V2. Such morphosyntactic productivity is presumably due to the inherent nature of Mandarin as an isolating language. For this reason, many scholars including T.-C. Tang, C.-T. Huang, Y.-F Li, Audrey Li, Yang. Gu, Niina Zhang, etc., attempt to analyze RVCs at the syntactical level.

(6) a. *xie-de-hao*
write-DEp-well
(写得好)
“can write well”
b. *xie-bu-hao*
write-Neg-well
(写不好)
“cannot write well”

There have been long debates over the syntactical/morphological status of DVCs and RVCs. Apart from their theoretical classifications, it is safe to say that the components of RVCs are morphologically more bounded than those in DVCs.

In comparison with Japanese V-V compounds, however, even RVCs seem morphologically less bounded, since no Japanese V-V compounds allow the insertion of such external elements under any conditions.

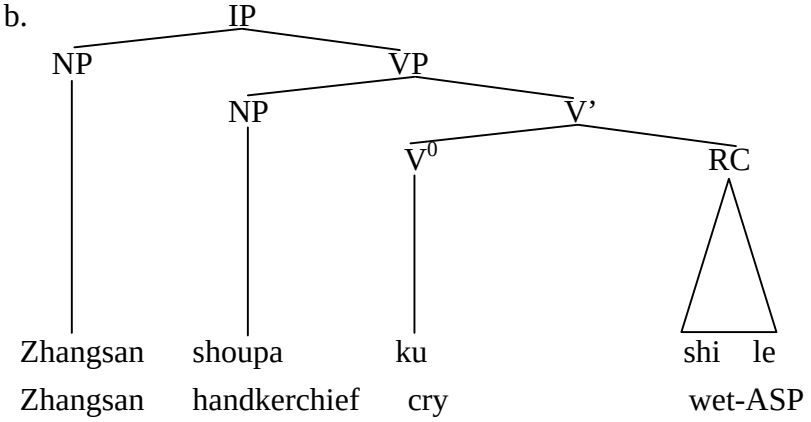
4.2 Literature of Early Studies

4.2.1 Syntactic Accounts

The early syntactic studies on Mandarin RVC include the work by C.-T. Huang (1988, 1992), Tang (1990, 1991), Gu (1992), Sybesma (1999), etc. Much of their work begins with an attempt to account for the formation of RVCs in the framework of GB grammar. C.-T. Huang (1992) proposes a control analysis on the syntactic structure of the *de*-construction, and he points out a parallelism between the *de*-construction and the RVC in syntactic structures. Also he explains that the verb in (4a) is derived by a process of $V' \rightarrow V^0$ reanalysis from the structure shown in (7b).

(7) Structural Parallelism between *De*-Construction and RVC
a. Zhangsan ku-shi-le shoupa.
Zhangsan cry-wet-ASP handkerchief.
Lit.: ‘Zhangsan cried-wet the handkerchief.’

b.



(Huang 1992: 125 (45), (46))

According to his account, the sequence dominated by V' is short enough, and thus it reanalyzed into V^0. Then this enables the new V^0 to raise to the left of "handkerchief," case-marking the object.

Tang (1992a) analyzes the formation of V-V compounds as a process of syntactic incorporation of the two component verbs into a complex predicate. In this process, when V1 and V2 are composed into the matrix predicate, the V2 undergoes ergativization and its ergative property is percolated to the matrix predicate. This incorporation is applied to causative/transitive compounds including: 1) transitive V1 + ergative V2, such as *tui-kai* (推開: push-open, "push open"), or 2) intransitive/adjective V1 + ergative V2, such as *lei-huai* (累坏: be.tired-ruin, "be dog-tired"). According to Tang (1992a, 1992b), the ergativization process of V2 is motivated by the lexical properties inherent to Mandarin adjectives, which used to have a causative use in archaic Chinese (For details, see Shi (2002)).

Gu (1992) focuses on the analysis on the causativity exhibited in RVCs. She rejects a view that the causativity of RVC is independently derived from the theta grid of the component verbs of RVCs, and also denies a view that the causativity is solely guaranteed by the event structure of the compound or the semantic properties of the lexical component. In this discussion, she proposes a double-head analysis instead of the traditional left-headed account, which states that V1 and V2 are equally responsible for determining the argument structure of the compounds. (We will see the details in 4.6.1.4.)

Sybesma (1999) proposes a small clause analysis for the derivation of the RVC in syntax and as well as for the linguistic account of the distinctive parallelism between the RVC and the *de*-construction. He stipulates the underlying structures for RVCs and *de*-constructions respectively, as shown in (8).

(8) a. Transitive RVC: NP[$_{VP}$ V [$_{SC}$ NP XP]]
b. Intransitive RVC: *e* [$_{VP}$ V [$_{SC}$ NP XP]]
c. Causative RVC: NP CAUS [$_{VP}$ V [$_{SC}$ NP XP]]
d. Transitive *de*-construction: NP[$_{VP}$ V [$_{ExtP}$ Ext^0 [$_{SC}$ NP XP]]
e. Intransitive *de*-construction: *e* [$_{VP}$ V [$_{ExtP}$ Ext^0 [$_{SC}$ NP XP]]
f. Causative *de*-construction: NP CAUS [$_{VP}$ V [$_{ExtP}$ Ext^0 [$_{SC}$ NP XP]]

He also examines subject-oriented RVC sentences such as *Wo chi-bao-le tudou* (I eat-full-Asp potato, "I ate myself full of potatoes"). This type of sentence seems to violate the DOR (or Simpson's Law) because the V2 is predicated of the subject *wo*. In his analysis, however, he proposes that the V2 is a two-argument predicate, and thus the aforementioned example has the structure like: chi [wo bao tudou]. He concludes that subject-oriented RVCs abide by the DOR although the Mandarin grammar does not require that the DOR be satisfied as an obligatory grammatical principle.

4.2.2 Lexical Accounts－Li (1990,1993, 1995, 1998)

RVCs present various linking relations between the arguments of V1 and V2. Li (1990) specifies and examines 14 possible patterns of identification of the arguments licensed V1 and V2 of compounds, and he proposes 6 legitimate identification patterns of arguments. He begins his observations with a sentence (9).

(9) *Baoyu qi-lei-le ma*.
Baoyu ride-be.tired-Asp horse.
(宝玉骑累了马。)
a. "Baoyu rode the horse (and as a result he got) tired."[5]
b. "Baoyu rode the horse (and as a result the horse got) tired."
(Li 1990: 187, (18a))

The RVC in (9) *qi-lei* is composed of a transitive V1 *qi* ("ride") and an intransitive (or adjective) V2 *lei* (be.tired), which have a theta grid of <1, 2> and <1'>[6] respectively. The possible identification patterns of these theta-roles between V1 and V2 are: <1, 2-1'>, <1-1', 2>, <2-1', 1> and <2, 1-1'>. The first two patterns are legitimate in Mandarin, but the latter two patterns are illegitimate because the two theta-roles "1" and "2" of V1 are assigned in a reverse order.

[5] Tang (1991) and other researchers point out that this reading is less natural, and the reading (9b) is preferred for this example sentence.
[6] The number marked with a prime expresses that the argument is from V2.

His account is based on theta-identification (Higginbotham 1985), a hierarchical argument structure (Grimshaw 1989), head-feature percolation and Case Theory. He claims that V1 is the head of the compound because V1 is a verb and V2 functions as an adjective in the compound. Thus the head features of V1 are percolated to the compound and they determine the verbal properties of the compound. However, one of the problems with Li's explanation lies in his left-head account. Many RVCs show causative-unaccusative alternation although the alleged head V1 is an intransitive verb or an adjective and therefore it should not allow causative alternation. For example, the RVCs such as *ku-shi* (哭湿; cry-wet, "make wet with tears by crying"), *mang-huai* (忙坏; busy-break, "wreck one's health due to being too busy"), and *niao-shi* (尿湿; urine-wet, "make wet by peeing") have both a causative and an unaccusative use. Therefore, Li's left-head account cannot appropriately explain the causativization of RVCs with an intransitive/adjective/noun head in the V1 position because such an intransitive/adjective/noun head has no transitive or causative argument structure to be percolated to the compound.[7]

Because of this inadequacy, Li, in his subsequent series of work (1993, 1995, 1998), attempts to account for the causativity of RVCs in terms of event structure and prominence of the component verbs. He posits the event structure of the RVC construction as in (10). V cause[8] is the head of the compound and it temporally precedes the V result.

(10) Event Schema of RVC

Superevent

Cause (V caus) Result (V res)

Following Grimshaw's (1990) aspectuality account, Li (1995) states that the causative hierarchy and the thematic hierarchy function independently in nature. The thematic relations are assigned lexically, while causative relations are licensed by the compound. When the thematic hierarchy and the causative hierarchy conflict with each other, the thematic hierarchy is overridden by the causative hierarchy. When the referent of the underlying object argument (or patient argument) can be construed as responsible for the change of state of the subject argument, a causer role can be assigned to the patient argument and a causee role to the agent argument. This explains why the sentence (11)

[7] Tang (1991) explains this phenomenon as the ergativization of V2, and proposes a right-head account of RVCs.
[8] V cause and V result are respectively represented as V caus and V res in Li (1993, 1995).
[9] Li (1995) uses the terms *cause role* and *affectee role* instead of the terms *causer role* and *causee role*.

has three different readings.

(11) *Taotao zhui-lei le Youyou le*.
Taotao chase-tired Asp Youyou LE
(淘淘追累了悠悠了。)
V caus: <Θ1<Θ2>>
V res: <a>[10]
a. "Taotao chased Youyou and as a result Youyou got tired."
b. "Taotao chased Youyou and as a result Taotao got tired."
c. "Youyou chased Taotao and as a result Youyou got tired." (Li 1993: 494 (24))

The agent-patient inverted reading of (11c) is based on the construal that Youyou made Taotao tired by letting *Taotao* catch *Youyou*. Thus the NP *Youyou* realizes as the causer in the subject position in spite of the fact that the same NP is also assigned a patient role in the thematic relation. How can this contradictory assignment of semantic roles be justified? RVCs with a "causer-patient" subject should not be simply derived from an inverted disposition of agent and patient. Consider (12).

(12) a. *Zhe zhang chuang shui-teng-le wo de yao*.
this Cl bed sleep-hurt-Asp I Gen back
(这张床睡疼了我的腰。)
"Sleeping on this bed made my back hurt."
b. **Wo de yao shui-teng-le zhe zhang chuang*.
I Gen back sleep-hurt-Asp this Cl bed
(*我的腰睡疼了这张床。)
As a sentence meaning "My lower back hurt by sleeping on this bed."

In (10a), the locus NP *zhe-zhang chuang* ("this bed") is licensed as a causer, but it is not the argument of V2. It can be interpreted as the patient argument although it is not a typical patient because it effects no change of state[11]. The causee/patient *wo de yao* ("my lower back") can appear in the subject position of (12b). But the locus NP *zhe-zhang chuang* ("this bed") cannot be put in the object position of (12b) because,

[10] Li specifies that the theta-role of the single-argument Vres is represented as "Θa." The role is marked with "a" because the role can be identified with the external argument Θ1 and the internal argument Θ2 of the head component.
[11] Mandarin often allows a locatum noun in the object position without the interposition of a locative preposition like *zuo yizi/diban/caodi* ("sit a chair/floor/grassland").

interestingly, neither V1 nor V2 licenses it in the object position of the compound. This suggests that the grammatical principles of a compound is not a simple sum of the grammatical principles of its individual component verbs.

4.2.3 Event Structure Accounts－Cheng & Huang (1994)

Cheng & Huang (1994) attempt to explicate the realization of the arguments of RVCs by means of event structures. They propose that RVCs are headed by V1 and the verb type of V1 determines the overall type of the RVC as unergative, transitive, unaccusative or causative, as well as the syntactic realization of the arguments. They claim that the argument structure of an RVC is not provided by the component verbs, but by compositional operation of the event structures. Cheng & Huang (1994) stipulate the formation patterns of four types of RVCs as in (13).

(13) 1. Active V1: $[_{RV}\ V1_{\ Active}\ [V2_{\ State/Change\ of\ State}]]$

a. <Agent> (Unergative RVC)
xiao-lei 笑累 "laugh-tired," *ku-lei* 哭累 "cry-tired," *pao-kai* 跑开 "run-away"

b. <Agent, Theme> (Transitive RVC)
ti-po 踢破 "kick-broken," *tui-kai* 推开 "push-open," *la-ping* 拉平 "pull-even"

c. <Agent, (Theme)> (Mixed RVC)
he-zui 喝醉 "drink-drunk," *chi-bao* 吃饱 "eat-full," *ku-xing* 哭醒 "cry-awaken"

2. Non-active V1: $[_{RV}\ V1_{\ Non\text{-}active}\ [V2_{\ State/Change\ of\ State}]]$

a. <Theme/Experiencer> (Ergative)
lei-si 累死 "tired-dead," *mang-lei* 忙累 "busy-tired," *zui-dao* 醉倒 "drunk-fall"

b. <Causer, Theme/Experiencer/Causee> (Causative)
(The RVCs in (13-2a) all have a causative use. For an example see the footnote.[12])

RVCs are classified into an active type and a non-active type, with each type having subtypes. Note that RVCs in (13-2a) all have a causative use.

Despite the analysis summarized above, as Cheng & Huang admit, some RVCs with

[12] A causative example is: *Zhe ji tian ke ba wo lei-si le* (这几天可把我累死了; this a few day really BA I tired-dead Prt, "These last few days have really tired me out.").

an active V1 as in (14a) show causative alternation like RVCs with a non-active V1 as in (14b).

(14)a. *Nei bu dianying kan-hua-le ta de yanjing*.
that Cl movie look-blurred-Asp he Gen eye
(那部电影看花了他的眼睛。)
"That movie made his eyes blurred (from seeing it)."
(Cheng & Huang 1994: 190, (3b))

b. *Zhe jian shi zhen qi-si zhangsan le*.
this Cl matter really anger-dead Zhangsan Asp
(这件事真气死了张三了。)
"This matter really angered Zhangsan to death." (ibid: 188, (2b))

In fact, the causative alternation of active RVCs is very common. This suggests that the addition of an external cause is determined independently of the grammatical nature of V1, and that there is a different grammatical principle involved in the causative alternation of RVCs.

Another distinctiveness of Mandarin RVCs is that they can add an external causer to the event structure rather freely, even if the causer is the patient argument of V1. Many researchers have claimed that Mandarin RVCs, like English resultatives, are syntactically headed by the first predicate (V1). (See discussions in 4.6.) Besides, RVCs share the same lexical feature with Japanese V-V compounds in that these compounds are made up of two verbal components, but the compounds function as a simplex verb. Despite such similarities with English resultatives and Japanese V-V compounds, the addition of such an extra-thematic argument to the event structure is justified exclusively with Mandarin RVCs. As shown in (15), English resultatives and Japanese V-V compounds do not license extra-thematic arguments.

(15) a. {The professor/*The professor's speech} talked us into a stupor.

b. **Sono hon wa {watashi/watashi no me} wo yomi-tsukare-ta*.[13]
that book Top {I/I Gen eye} Acc read-become.tired-Past.
"That book made me/my eyes tired from reading it."

Given these questions, Cheng & Huang's event structure account does not effectively

[13] This sentence may sound somewhat less ungrammatical if the causative morpheme *-sase-* is added to the end of the compound. But it still sounds unnatural because the V1 *yomi-* requires an animate agent.

account for the underlying linguistic principles that determine the argument realization of the event structure of RVCs.

4.2.4 Other Approaches－Tai (1985, 2003) and J. Shen (2003)

Tai (1985, 2003) proposes a very important grammatical condition, which he calls the *principle of temporal sequence* (PTS), which states that "the relative word order between two syntactic units is determined by the temporal order of the state which they represent in the conceptual world (Tai 1985: 50)." This notion is useful in explaining why the components of RVCs are compounded in the order of action-result sequence, as in (16).

(16) a. *ta* ***nian-wan le*** *zhe ben shu*.
1 2 3
he read-finish-Asp this Cl book
b. He **has finished reading** this book. (Tai 1985: 53, (14))
3 2 1

In the above examples, Mandarin and English verbal predicates syntactically realize in the reverse order. The order of *nian* ("read")-*wan* ("finish")-*le* in (16a) follows the natural temporal sequence of action-result, while the English counterpart (16b) does not. He claims that the center of the predication of RVCs lies in V2, and thus V2 is the head of the compound. Tai (2003) develops his semantic analysis of RVCs based on Talmy's (2000) typological macro-event model, which consists of Figure, Ground, Motion and Path. Tai observes that in Mandarin action-result verb compounds, V1 conflates Motion and Co-event, while V2 conflates Motion and Path. In conclusion, he claims that "it makes more sense to view Chinese as primarily a verb-framed language and only secondarily a satellite-framed language." He observes that such a typological relativism reflects the ontological relativism between English and Mandarin: English is an agent oriented-language, and it attends more to the process of an event, whereas Mandarin is a patient-oriented language and it relatively attends more to the result.

J. Shen (1994) compares and reviews various tests conducted by other researchers on Mandarin V-V compounds to examine whether Mandarin is typologically classified as a satellite-framed language or verb-framed language. Contrary to the claim by Talmy (2000b), he concludes that Mandarin is not a typical satellite-framed language because there is no distinct categorical difference between the core schema (or framing event) and the satellite in Mandarin RVCs and DVCs.

Tai (1985, 2004) and J. Shen's (1994) work have contributed a new vantage point in studies on the semantics of RVCs. However, further exploration needs to be made to answer the questions concerning the linguistic principles that underlie the semantic-syntactic mismatches associated with RVCs. In particular, they are related to the issues such as: 1) what grammatical principles justify RVCs with a causer-patient like (11c); 2) how this "non-canonical" causative event linguistically differs from a normal causative event.

4.3 Agentivity/Causativity of Mandarin RVC

In this section, I will closely examine the linguistic behavior of the agent/causer argument as well as the causative alternation of Mandarin RVCs in an attempt to explore the underlying linguistic principles that characterize the agentivity/causativity of Mandarin RVCs.

4.3.1 Argument Types and Causer Status

RVCs can license an agent, instrument and natural force as the subject. This is common with the agentive/causative subject NP of English AP resultatives which we observed in Chapter 2.

(17) a. *Na liang qiche ya-si-le san ge ren.* –Agent/Instrument
that Cl car crush-die-Asp three Cl people
(那辆汽车压死了三个人。)
"The car crushed three people dead."

b. *Na ba dao qie-kai-le ta de shou.* –Instrument
that Cl knife cut-open-Asp he Gen hand
(那把刀切开了他的手。)
"That knife cut his hand open."

c. *Na kuai shitou peng-sui-le chuanghu.* –Instrument
that Cl stone hit-smash-Asp window
(那块石头碰碎了窗户。)
"That stone smashed the window by hitting into it."

d. *Zhege shouqiang she-si-le shizhang.* –Instrument
this pistol shoot-die-Asp mayor
(这个手枪射死了市长。)
"This pistol shot the mayor dead."

e. *Na chang baofengyu chui-dao-le fangzi.* –Natural force

that Cl storm blow-collapse-Asp house
(那场暴风雨吹倒了房子。)
"That storm blew the house down."

f. *Qunian de hanzai e-si-le hen duo ren.* –Natural force
last year Gen drought starve-die very many people.
(去年的旱灾饿死了很多人。)
"Last year's drought starved many people dead."

g. *Qianglie de yangguang shai-gan-le dimian.* –Natural force
strong Gen sunlight shine-dry-Asp ground
(强烈的阳光晒干了地面。)
"The strong sunlight dried the ground by shining on it."

As I claimed in Chapter 2, English resultatives are constrained by the two semantic factors: verbal causativity and boundary of the result. English AP resultatives are conceptualized as events with a punctual boundary. This punctual reading is correlated with the interpretation that the subject NP, as an agent or causer, has enough ability to directly exert force upon the object.

Another question naturally arises from this observation: are Mandarin RVCs also principled by the same semantic parameters as those of English AP adjectives? In sections to follow, I will examine the semantics of the causer argument of Mandarin RVCs and will claim that the causativity constraints of Mandarin RVCs are greatly different from those of English resultatives.

4.3.2 Semantics of Causer Subject of RVCs

Firstly, it seems that the notion of direct exertion of force is important to events denoted by Mandarin RVCs. The sentences in (18) show such evidence.

(18) a. *Zhe zhang zhuozi peng-po-le ta de jiao.*
this Cl table hit-hurt-Asp he Gen foot
(这张桌子碰破了他的脚。)
"His bumping into this table hurt his leg."

b. *Ta ba yifu dou wan-zang le.*
he BA clothes entirely play-dirty Prt.
(他把衣服都玩脏了。)
"He made his clothes dirty by playing."

In (18a), the causer *zhuozi* ("table") clearly has no ability to exert force, but the possessor of the object *jiao* ("foot") is the source of the energy flow. In Langacker's (1991) action chain model, the source of this energy flow is profiled as the head of the action chain and the goal of the energy is profiled as the tail of the chain. In the action chain, the head of the energy flow is a human agent and the tail is an object. In this respect, the example (18a) derives from an unmarked conceptualization pattern, because in (18a) the patient appears in the causer argument position and the instrument appears in the causee argument position.

This holds true of (18b) because the agent's ("he") playing activity does not necessarily imply that the physical force transmitted to the agent's clothes caused his clothes to become dirty. Instead, the example (18b) seems to simply depict two serially occurring events. These two events, agent's playing and theme's becoming dirty, are temporally related, but not related in terms of physical causation.

Such non-physical causative relation is widely found with Mandarin RVCs, especially with RVCs with a situational causer. This suggests that Mandarin RVCs may not be conceptualized based on the agent-patient relation typically involving energy transmission from the agent to the patient. Situational causer subjects include target of activity,[14] activity, event (associated with V1), situation, incident, phenomenon and circumstantial factor. The sentences in (19) are examples of RVCs with a situational causer.

(19) a. Target of Activity

Na jian dayi xi-guang-le san kuai xiangzao.

that Cl overcoat wash-use.up-Asp three piece soap.

(那件大衣洗光了三块香皂。)

"Washing that overcoat used up three bars of soap."

b. Activity

Shanghai de chefei hen gui,

Shanghai Gen vehicle fare very expensive,

meitian zuo che dou ba wo zuo-qiong le.

everyday sit vehicle entirely BA I sit-poor Prt

(上海的车费很贵、每天坐车都把我坐穷了。)

"Public transportation fares are very expensive in Shanghai, and my taking public transportation every day made me completely poor."

[14] J.-H. Chang (2003) uses this term to represent one of the event roles. It is assigned to an entity that undergoes an action. See J.-H. Chang (2003: 330, (37)). I simply use this term to refer to an argument that is an underlying object of V1.

c. Event associated with V1

Zuotian de malasong bisai ke ba wo de tui pao-suan le.

yesterday Gen marathon race really BA I Gen leg run-tired Prt

(昨天的马拉松比赛可把我的腿跑酸了。)

"Running in yesterday's marathon race made my legs really tired."

d. Situation

Duonian de xinku lei-dao-le mama.

many year Gen hardship tired-collapse-Asp mother

(多年的辛苦累倒了妈妈。)

"My mother collapsed from fatigue after many years of hardship"

e. Incident

Na-nian de hanzai e-si-le hen duo ren.

that-year Gen drought starve-die-Asp very many people

(那年的旱灾饿死了很多人。)

"That year's drought starved many people to death."

f. Environmental factor

Dongtian de lengyu ba wo de shou dong-jiang le.

winter Gen cold rain BA I Gen hand freeze-stiff Prt

(冬天的冷雨把我的手冻僵了。)

"The cold rain of the winter froze my hands stiff."

The situational causers in the above examples are not the source of the energy flow because they are not physical entities or personified pseudo-agents. For example, the subject *dayi* "coat" in (19a) lexically refers to a physical entity; what causes the event is the activity of washing. This takes us back to the reverse reading of the subject of the RVC with a causer/patient in (11c), which can be accounted for as involving a construal of the patient (*Taotao*) as being responsible for, and therefore causing, what happens to be the factual actor *Youyou*. The sentence (11c) is repeated in (20).

The English translation below is separately provided by the author.

(20) *Taotao zhui-lei le Youyou le.*

Taotao chase-tired Asp Youyou LE

(淘淘追累了悠悠了)

"(Youyou's) chasing Taotao made Youyou tired." (Y.-F. Li 1993: 494 (24))

If V1 is an activity verb like (19a, b, c), NPs that depict the target of an activity, an

activity or an event are licensed as the situational causer of RVCs. The locus NP in (12a) comes under this case. It is repeated in (21) below.

(21) *Zhe zhang chuang shui-teng-le wo de yao.*
this Cl bed sleep-hurt-Asp I Gen back
(这张床睡疼了我的腰。)
"Sleeping on this bed made my back hurt."

In the surface syntax, the locus NP *zhe-zhang chuang* ("this bed") appears in the causer subject position. However it should be understood as representing the activity of "sleeping on this bed." In 4.3.4, I will further discuss the semantic status of locus subjects in causative RVCs.

In contrast, if V1 is a non-activity verb as in (19d), (19e) and (19f), NPs that depict a situation, incident, phenomenon or circumstantial factor are licensed as the situational causer of RVCs.

All the situational causers in (19) cannot be interpreted as entities that directly exert physical force upon the causee. Rather they should be interpreted as background factors that incur another event. I will further examine the nature of the causativity of RVCs in 4.3.3.

However, before moving to 4.3.3., let us take a brief look at the semantic relation between causativity of RVCs and the accusative marker *ba* (把). The examples (18b), (19b), (19c) and (19f) use the marker *ba*. It is known that the marker *ba*, together with a post-verbal result predicate or a degree/manner complement headed by a post-verbal complementizer *de* (得), forms a causative construction named "*ba* construction." Ye (2004) claims that the fundamental semantic feature of the *ba* construction is to denote a causative relation between two events. This notion agrees with the observation by Zhang (1998), who examined the prototypical meaning of the *ba* construction based on the analysis of the data grained from his corpora. He claims that the *ba* construction prototypically depicts an event where an agent volitionally acts on a patient and eventually causes a change of location or state to the patient. Kimura (2000), based on Zhang's observation, defines the *ba* construction as "executive causative sentence[15]." Yang (2008) proposes a cognitive account that the *ba* construction provides the interpretation of affectedness[16] to the NP marked by *ba* and profiles the asymmetric

[15] This is translated from the Japanese term *shikkou shieki bun* (執行使役文).

[16] Tsuboi (2002) observes that Japanese *ni*-passive sentences require the subject NP to be construed as being affected by a highly transitive activity by the agent. It is interesting since the Japanese *ni*-passive and the Mandarin *ba* construction seem to present mirror images in terms of the semantic relation

relation between the causer and the causee. The aforementioned four causative RVCs all have a non-agentive subject, and they sound more natural in the *ba* construction. If we apply Yang's account to this fact, we can explain that the NP marked by *ba* is interpreted as the affected causee in the *ba* construction, and consequently the non-agentive subject is construed as the causer with a special force.

4.3.3 Causativity and Temporal Relation of Cause Event and Result Event

In the previous sections I came up with an assumption that Mandarin RVCs seem to be conceptualized independently of the energy flow schema. As Goldberg (1995) and Goldberg & Jackendoff (2004) point out, English resultatives conceptualize direct force transmission from the agent to the patient, and thus basically they do not allow an intervening period between the cause event and the result event[17]. Likewise, some data related to the aspectual properties of RVCs also show that causation encoded in RVCs does not rely on the energy flow schema. For example, Mandarin RVCs normally allow an intervening period between the cause event and the result event[18].

(22) a. *Ta chi-guo duo shuiguo chi-huai-le duzi*.
he eat-Asp excessively fruit eat-break-Asp stomach
(他吃过多水果吃坏了肚子。)
"He upset his stomach by eating too much fruit."
b. *Wo didi meitian wan youxi wan-sha le*.
I young brother everyday play game play-stupid Prt
(我弟弟每天玩游戏玩傻了。)
"My young brother became stupid by playing a game everyday."

(22a) can be interpreted as a situation where someone overeats one day and he finds his stomach upset on the following morning. (22b) describes a situation where someone's younger brother became stupid, but it is quite unlikely that he became stupid in a moment. Rather it should be understood as that he gradually became stupid over a long period of time while playing a game everyday.

In the type of causation encoded in English AP resultatives, the result is the expected final phase of a naturally unfolding, coherent activity-result sequence. However,

between the voice and a construal of affectedness.

[17] L&RH point out reflexive resultatives may not be temporally dependent by raising the example: Robin danced energetically during the party Sunday night. When she woke up stiff on Monday, she said: "I guess I've danced myself stiff." (L&RH 1999:10, (21))

[18] Japanese "background" V-V compounds also allow an intervening period. (See the discussions in 3.4.2.2.)

Mandarin RVCs often deviate from this naturally expected tight unity of the cause and the result. Consider (23).

(23) a. *Ta xi yifu xi-zang le.*
he wash clothes wash-dirty Prt
(他洗衣服洗脏了。)
"He made the clothes dirty by washing them."

b. *Wo haizi zhang-ai le.*
I child grow-short Prt
(我孩子长矮了。)
"My child grew up to be shorter (than others)"

c. *Wo papa bei neige yisheng zhi-huai le.*
I father BEI that-Cl doctor cure-bad.health Prt
(我爸爸被那个医生治坏了。)
"My father's health became worse because of the treatment by that doctor."

These examples[19] are not exceptional, but they are quite commonly found in Mandarin RVCs. In the above events, the cause and the result are not the kind of cause-result sequence expected for a naturally occurring event, but they are conceptualized as a single sequence made up of the anteceding event and the subsequent event. As for (23a), for example, washing is usually considered as a cleaning process. But the result depicted by V2 ("dirty") is opposite to the expected endpoint of washing. The result predicates in (23b, c) also depict a situation opposite to the result naturally inferred from the respective V1.

As the summary of the above observations, the causer subject of Mandarin RVCs is different in causativity from that of English AP resultatives in that the former allows a situational causer, without being constrained by the requirement of natural unity of the cause and the result.

In Sections 4.3.4, 4.4.4.4 and 4.4.5, we will discuss the nature of the temporal relation of Mandarin RVCs more closely, and will attempt to clarify how the temporal relation encoded can be reinterpreted as a causative relation.

[19] Lu (2001) distinguishes these types of RVCs from other types based on the semantic and morphosyntactic distinctiveness. (21a, c) are classified as a V-A construction of "realization of an undesirable result." (21b) is classified as a V-A construction of "deviation of the result." Semantically, these RVCs represent a negative emotional tone, and syntactically they generally reject the interposition of the potential marker *de*.

4.3.4 Causer Subject and Locus Subject

Interestingly, locus subjects in Mandarin RVCs are not mere locations. Some examples may look like they have a locus subject, but they are a personified agent, a target of an activity, or an underlying object of the predicate. Consider the following examples.

(24) a. *Xiamenshi xiu-zhi-le haibian malu*.
Amoy City repair-straight-Asp seaside street
(厦门市修直了海边马路。)
"Amoy City (government) made the seaside street straight by doing construction work."

b. *Na zhang po-chuang ba wo de yifu shui-zhou le*.
that Cl broken-bed BA I Gen clothes sleep-wrinkled Prt
(那张破床把我的衣服睡皱了。)
"Sleeping on that worn-out bed caused my clothes to wrinkle."

c. *Shoudu jichang fan-xin le*.
capital airport change-new Prt
(首都机场翻新了。)
"The capital airport was newly remodeled."

In (24a), *Xiamenshi* ("Amoy City") is interpreted as an agent through personification ("a local government"), not simply as an administrative district of a particular area. The noun *pochuang* ("worn-out bed") in (24b), by itself, is a physical object or location for sleeping. But the noun is the target of the activity, and it denotes the experiencer's activity of sleeping on a worn-out bed. The RVC in (24c) is unaccusative, and the subject *shoudu jichang* ("capital airport") is an object that undergoes a change of state.

Now there is an interesting comparison between an RVC and a presentative construction. The examples in (25) seem to share the same syntactic configuration, and they have the same locative NP as the subject. But these same NPs are differently interpreted in these sentences. Compare the examples in (25).

(25) a. *Nage xuexiao jiao-sha-le hen duo xuesheng*.
that school teach-stupid-Asp very many student
(那个学校教傻了很多学生。)
"That school made many students stupid by teaching them."

b. *Nage xuexiao xue-sha-le hen duo xuesheng*.
that school study-stupid-Asp very many student

(那个学校学傻了很多学生。)

"Many students became stupid by studying at that school."

(25a) is an RVC and (25b) is a presentative construction. The only difference between the two is that they have a different V1. The V1 *jiao* ("teach") in (25a) licenses the subject as an agent/causer. On the other hand, the subject NP ("school") is not the agent/causer argument of the V1 *xue* ("study"), and it is simply interpreted as a location for students to study. In theory, locus NPs can be reinterpreted as the target of the V1 activity like (25b), but the indefiniteness of the object ("many students") seems to reduce the possible causativity reading of the V1 *xue* ("study").

Thus, RVCs and presentative constructions are motivated by different ways of determining the prominence relation between the two arguments in the subject position and the object position. In RVCs, the anteceding causer is interpreted as a prominent argument and the causee noun in the result event as a non-prominent argument. On the contrary, in the presentative construction, the locative subject is interpreted as a non-prominent argument and the object NP as a prominent argument.

J. Shen (2006) claims that the argument realization of a verb is principled by the ICM of the verb's semantics, and that the prominent argument precedes a non-prominent argument in argument realization. According to his account, one can explain that RVCs and presentative constructions are motivated by different ways of determining the prominence relation between the two arguments in the subject position and the object position. In RVCs, the anteceding causer is interpreted as a prominent argument and the causee noun in the result event as a non-prominent argument. In contrast, in the presentative construction, the locative subject is interpreted as a non-prominent argument and the object NP as a prominent argument.[20]

This can be confirmed by the comparison of the following sentences. (26a) is an RVC, and (26b) is a presentative sentence.

(26) a. RVC (Repeated from (17e))

Qunian de hanzai e-si-le hen duo ren.

last year Gen drought starve-die-Asp very many people

(去年的旱灾饿死了很多人。)

"Last year's drought starved many people to death."

[20] Typical presentative constructions have the verb *you* (有, "have" or "exist") or a motion verb such as *lai* (来, "come"). In the latter case, such a motion verb can be compounded with an optional manner V1 as in *Wo jia fei-lai-le yi-zhi niao* (我家飞来了一只鸟: I house fly-come-Asp one-Cl bird, "A bird came into my house flying").

b. Presentative construction

(*Nage nongcun* (*e*-))*si-le* *hen* *duo* *ren*.

that farm village (starve-)die-Asp very many people

((那个农村(饿))死了很多人。)

"Many people died (from starvation) in that farm village."

In (26a), the subject argument ("drought") is higher in prominence as the causer than the object argument ("many people"). The causer reading of the subject argument is licensed by the VR construction of the predicate, and thus V1 is not omissible. But in the case of the sentence (26b), the subject is interpreted merely as a locative NP, and it is demoted to an adjunct. For this reason, the locative NP is omissible and V1 ("starve") are both omissible.

4.3.5 Comparisons with Other Dialects

This section compares agentivity/causativity of Mandarin RVCs with the counterpart constructions in South-Min and Cantonese. The comparison is made by different types of agent/causer subject: a) volitional agent (with or without exerting physical force), b) natural force, c) instrument, d) experiencer, e) body-part possessor, f) situational causer (target of activity, activity, event, situation, incident, phenomenon and circumstantial factor). The symbols M, C and S respectively represent Mandarin, Cantonese and South-Min. However intransitive RVCs are not covered in (27). There are two corresponding expressions in South-Min of (27a-1).

(27) Comparisons with Mandarin, Cantonese and South-Min

a-1) Volitional Agent Exerting Physical Force

M: *Ta la-duan-le* *shengzi*.

he pull-break-Asp rope.

(他拉断了绳子。)

"He tore the rope by pulling it."

C: *Keuih laai-dyun-jo* *tiuh sihng*.

he pull-break-Asp Cl rope

(佢拉斷咗條繩。)

"He tore the rope by pulling it."

S: 1) *I* *khiu-ting* *soaN ah*.

he pull-break rope Prt

(伊扭斷線啊。)

"He tore the rope by pulling it."

2) *I ka*[21] *soaN khiu-tng*.

he Acc rope pull-break

(伊共線扭斷。)

"He tore the rope by pulling it."

a-2) Volitional Agent without Exerting Physical Force

M: *Ta xiao-xing-le haizi*.

he laugh-awaken-Asp child

(他笑醒了孩子。)

"He woke up the child by laughing."

C: 1) *Keuih siu-seng-jo go sailou*.

he laugh-awake-Asp Cl child

(佢笑醒咗個細路。)

"He woke up the child by laughing."

2) *Keuih siu dou go sailou seng-jo*.

he laugh until Cl child wake-Asp

(佢笑到個細路醒咗。)

"He laughed to the degree that the child woke up."

S: *I chhio kah*[22] *gin-a long chhiN-khi-lai*.

he laugh until child even wake-up-Deic

(伊笑到囡仔攏醒起來。)

"He laughed to the degree that the child woke up."

b) Natural Force

M: *Na ye de dahuo shao-huai-le liang zuo qiao*.

that night Gen big-fire burn-ruin-Asp two Cl bridge

(那夜的大火烧坏了两座桥。)

"The big fire on that night burned down two bridges."

C: *Go maan daai-fo siu-laan-jo leung tiu kiu*.

that night big-fire burn-ruin-Asp two Cl bridge

(嗰晚大火燒爛咗兩條橋。)

"The big fire on that night burned down two bridges."

---

[21] The particle *ka* (共) marks the patient in the agentive RVC construction of South-Min. The construction is often compared with the BA construction of Mandarin.

[22] The postverbal morpheme "到" is widely used in South-Min (*kah*) and Cantonese (*dou*) to head the CP. It functions as the complement marker meaning "to the degree that."

S: *Hit-mi e toa-he chiong nng cho kio sio-tng-khi ah.*
that night Gen big-fire Acc two Cl bridge burn-break-Deic Prt
(彼暝的大火將兩座橋燒斷去啊。)
"The big fire on that night burned down two bridges."

c) Instrument

M: *Zhe ba shouqiang she-si-le shizhang.*
this Cl pistol shoot-die-Asp mayor
(这把手枪射死了市长。)
"This pistol shot the mayor dead."

C: *Ni ji saucheung seh-sei-jo sihjeung*
this Cl pistol shoot-die-Asp mayor
(呢枝手槍射死咗市長。)
"This pistol shot the mayor dead."

S: ?/??/**Chit-e chheng pha-si chhitiuN ah.*
this-Cl pistol shoot-die mayor Prt
(?/??/*這個槍打死市長啊。)
"This pistol shot the mayor dead."

d) Experiencer in Unintentional Causation

M: *Ta ti-diu-le yi zhi xie.*
he kick-lose-Asp one Cl shoe
(他踢丢了一只鞋。)
"He lost a shoe by kicking."

C: *Keuih tek-lat-jo jek haai.*
he kick-loose-Asp Cl shoe
(佢踢甩咗隻鞋。)
"He lost a shoe by kicking."

S: *I that kah phang-kiN chit kha oe.*
he kick until lost one Cl shoe
(伊踢到phang[23]見一腳鞋。)
"He kicked to the degree that he lost a shoe."

e) Body-Part Possessor

M: *Ta chang-ya-le sangzi.*

[23] There is no Chinese character for this word.

he sing-hoarse-Asp throat
(他唱哑了嗓子。)
“He sang himself hoarse.”

C: 1) *Keuih cheung-nga-jo ba seng.*
he sing-hoarse-Asp Cl voice;
(佢唱啞咗把聲。)
“He made his voice hoarse by singing.”

2) *Keuih cheung-dou cheut-m-dou seng.*
he sing-until put.forth-Neg-achieve voice
(佢唱到出唔到聲。)
“He sang to the degree that he became voiceless.”

S: *I chhiuN kah na-au bo siaN.*
he sing until throat no voice
(伊唱到嚨喉無聲。)
“He sang to the degree that he became voiceless.”

f) Causer

M: *Zhege xiaoxi le-feng-le ta.*
this news happy-crazy-Asp he
(这个消息乐疯了他。)
“This news made him extremely happy.”

C: *Ni go siusik hoisam-sei keuih.*
this Cl news happy-die he
(呢個消息開心死佢。)
“This news made him extremely happy.”

S: *Chit-e siau-sit ho. i hoaN-hi kah beh si.*
this-Cl news made he happy until will die
(這個消息給伊歡喜到要死。)
“This news made him extremely happy.”

g-1) Situational causer: Activity

M: *Na dun fan chi-huai-le wo de duzi.*
that Cl meal eat-ruin-Asp I Gen stomach
(那顿饭吃坏了我的肚子。)
“Having that meal upset my stomach.”

C: *Go chaan faan sik-waaih ngo go touh.*

that Cl meal eat-ruin I Cl stomach,
(咽餐飯食壞我個肚。)
“Having that meal upset my stomach.”

S: *Goa khi chiah hit tng png, kiat-ko chiah-phai pak-to.*
I Deic eat that Cl meal, result eat-ruin stomach
(我去食彼頓飯，結果食歹腹肚。)
“I ate that meal and it upset my stomach.”

g-2) Situational causer: Circumstantial factor

M: *Meitian gan name duo huo ba ta lei-bing le.*
everyday do that much work BA she tired-ill Prt
(每天干那么多活把她累病了。)
“Doing that much work made her ill from exhaustion.”

C: 1) *Mui-yat jou gam do ye, jou-beng-jo keui.*
everyday do that much work, do-ill-Asp she.
(每日做咁多嘢，做病咗佢。)
“Doing that much work everyday, she worked herself sick.”

2) *Mui-yat jou gam do ye, jou dou keui beng-jo}*
everyday do that much work, do until she ill-Asp}
(每日做咁多嘢，做到佢病咗。)
“Doing that much work everyday, she worked to the degree that she became ill.”

S: *I tak-jit choe hiah-nih choe khang-khe, choe kah long phoa-piN ah.*
she everyday do that much work, do until even become.ill Prt
(伊逐日做彼裡多工課,做到攏破病啊。)
“She did that much work everyday and (she) worked until she became ill.”

The predicate patterns in the examples (27) are listed in Table (28). The leftmost column lists the types of agent/causer. The columns *Mandarin*, *Cantonese* and *South-Min* show whether the type of agent/causer presented in the leftmost column can be allowed in the V-R construction, by “Yes” or “No” in each corresponding column. When no V-R construction is allowed, an alternative syntactic pattern(s) is presented in the highlighted cell.

(28) Predicate Patterns of Mandarin, Cantonese and South-Min

	Mandarin	Cantonese	South-Min
a-1) Volitional agent exerting physical force	Yes: V-R	Yes: V-R	Yes: V-R or 共+Patient +V-R
a-2) Volitional agent without exerting physical force	Yes: V-R	Yes: V-R or Agent+V-到+CP	No: Agent+V-到+CP
b) Natural force	Yes: V-R	Yes: V-R	Yes: V-R
c) Instrument	Yes: V-R	Yes: V-R	{?/??}Yes/No: V-R, or chiu-si+Instrument+V-R+Patient+e. or Patient+ho.+Instrument+V-R+e
d) Experiencer in unintentional causation	Yes: V-R	Yes: V-R	No: Agent+V-到+CP
e) Body-part possessor	Yes: V-R	Yes: V-R or Agent+V-到+CP	No: Agent+V-到+CP
f) Causer	Yes: V-R	Yes: V-R (Some RVCs do not allow the past tense)	Yes/No: Causer+給+Causee+V-到+CP or Causer+V-R+Indefinite+ Indefinite/non-referential Causee
g-1) Situational causer (Activity)	Yes: V-R	Yes: V-R (Some RVCs do not allow the past tense), or Agent+V-到+CP[24]	No: Agent+V+Patient 1+ V-R+Patient 2
g-2) Situational causer (Circumstantial factor)	Yes: V-R	No: Agent+V-到+CP	No: Agent+V+Patient, Agent+V-到+CP

Mandarin RVCs show high flexibility in the selection of an agent/causer. They can license various types of NPs regardless of the distinction of animate/inanimate, tangible/intangible, or physical entity/event.

Cantonese can also allow various types of agent/causer including an instrument causer. It also allows a situational causer in the subject position. However some

[24] *Go chaan faan sik-dou ngo tou tung* (嗰餐飯食到我肚痛: that Cl meal eat-until I stomach hurt, "Having that meal upset my stomach").

Cantonese RVCs with a situational causer only allow the middle interpretation, refusing the perfect aspect (marked by *jo* (咗)), although a definite or indefinite noun is licensed as a causee. Consider the example (29).

(29) *Go chaan faan sik-waaih* (**jo*) {*yahn /ngo/ngo go touh*}.
that Cl meal eat-ruin (Asp) {people /I /I Cl stomach}.
(嗰餐飯食壞(*咗){人/我/我個肚})
"Having that meal upsets {one's stomach/me[25]/my stomach}."

Like the above example, Cantonese RVCs with a situational causer can be taken to describe the property of the causer subject. In this case, the causee is usually non-referential as in (30).

(30) a. *Ni tiuh louh haahng-sei yahn*.
this Cl road walk-die people
(呢條路行死人。)
"Walking on that road tires people to death."
b. *Go di tohng muhn-sei yahn*.
that Cl class bore-die people
(嗰啲堂悶死人。)
"That class bores people to death."

In South-Min, the constraints on causative RVCs are even stricter. The two syntactic patterns "Agent+V+kau+CP" and "Causer+V-R+Causee" are used in parallel. In the latter pattern, however, the causee must be indefinite or non-referential as pointed out by Cheng, Huang, Li & Tang (1997: (16)).

(31) *Chit hang taichi e chio-si* {**i /lang*}.[26]
this Cl matter will laugh-die {he/person}
(這項事誌會笑死{*伊/人})
"This matter will cause {*him/people} to laugh {*himself/themselves} dead."

South-Min seems the most conservative in terms of licensing an inanimate causer in

[25] This also means "my stomach."
[26] The example (31) is based on the originals provided in Cheng, Huang, Li & Tang (1997). The sentence has been partially changed for convenience of simplicity. Also, the sentence has been re-transcribed in the Church Romanization.

RVCs. Like English, both Mandarin and Cantonese license an instrument as a causer, whereas South-Min typically licenses only a volitional agent and natural force in the subject position of the V-R construction. For example, the sentence in (27-c-S) has an instrument NP in the subject position. However my informants all agreed that it sounds strange or it is unacceptable when it is uttered out of context, although it may make sense if an appropriate context is given. They pointed out that the sentences in (32) are perfectly acceptable because they are used in the *si-e* ("是-的") cleft construction (32a), or in a passive construction (32b).

(32) a. *Chiu-si chit ki chheng pha-si chhitiuN e.*
CHIU-Cpl this Cl pistol shoot-die mayor Gen
(就是這枝槍打死市長的)
"It is this pistol that killed the mayor."
b. *ChhitiuN ho. chit ki chheng pha-si e.*
mayor Pas this Cl pistol hit-die Gen
(市長給這枝槍打死的)
"It was by means of this pistol that the mayor was killed."

Observing the distribution of V-R constructions of South-Min, the dialect seems to rely more heavily on the agent-patient opposition and to be more faithful to the lexical semantic structure of component verbs than Mandarin. Firstly, the subject of a causative South-Min RVC is typically a volitional agent which exerts force directly upon a patient, and South-Min RVCs with a non-agentive causer, when available, are not freely allowed unlike Mandarin RVCs or English resultatives. For example, an instrument argument is not allowed as a causer in South-Min. Conversely, the type of causation encoded in Mandarin RVCs does not necessarily rely on the agent-patient relation which is based on the energy flow schema in the action chain, and therefore it is reasonable to think that Mandarin RVCs are governed by different principles.

In the next section, I will discuss semantic constraints on the causer subject in causativized Mandarin RVCs.

4.3.6 Constraints on Selection of Causer NPs

In Mandarin, agentive RVCs and unaccusative RVCs both undergo causative alternation considerably freely by taking an extra-thematic argument of the predicate as the causer subject, often by introducing *ba* (把)[27] to mark the causee, as shown in (33). Then the

[27] *Ba* is often used in RVCs, but its use is not limited to them. It has more usages than as a simple causee

experiencer argument of V2 is licensed as a causee. A causer role can be licensed either to the external argument of V1 as in (33a') or to an externally introduced argument as in (33b'). In the following examples, extra-thematic causers are represented in bold.

(33) a. Agentive RVC:
Haizi ku-xing le.
child cry-wake.up Prt
(孩子哭醒了。)
"The child woke up by crying."

a'. Causativized Agentive RVC:
Haizi *ba mama ku-xing le.*
child BA mother cry-wake.up Prt.
(孩子把妈妈哭醒了。)
"The child woke up his mother by crying."

b. Unaccusative RVC:
Haizi jing-xing le.
child get.surprised-wake.up Prt
(孩子惊醒了。)
"The child woke up by getting surprised."

b'. Causativized Unaccusative RVC:
Guanmen de dashengyin *ba haizi jing-xing le.*
close-door Gen big-noise BA child get.surprised-wake.up Prt
(关门的大声音把孩子惊醒了。)
"The big noise of closing the door woke up the baby by surprising him."

Agentive RVCs license as a causer, the object of V1, the instrument used in the activity of V1, and the preceding activity/event, whereas unaccusative RVCs can take as a causer, a noun that represents the preceding natural phenomenon, a particular time, the preceding event/incident, and a particular state/situation/phenomenon/circumstantial factor.

On the other hand, no locus NP can be licensed as a causer unless it can be interpreted as an activity or situation. Ye (2004) claims that NPs referring to an area[28] can be a causer, by showing examples such as (34).

---

marker. For example, it is closely associated with the voice of Mandarin, and it is discussed in comparison with other causative markers *jiao*, *rang*, *gei*, *shi*, and the passive marker *bei*. However, I will not discuss this issue because it goes beyond the scope of this paper.

[28] He uses the term *fanwei* (范围), meaning area, scope or range.

(34) *Wu li shanlu jiu ba ta zou-lei le.*
five Cl mountain path JIU BA he walk-tired Prt
(五里山路就把他走累了。)
"Walking down the five-(Chinese)-mile mountain path made him tired."
(Ye 2004: 35, (57c))

However his observation is not quite correct because a locus NP is licensed as a causer only when it is interpreted as an activity or situation that takes place at the location referred to by that locus NP. When it is interpreted as a pure locus NP, it cannot appear in the subject position of causative RVCs. Consider (35).

(35) a. {**Xianggang*/*Na jia caiguan* /*Meitian chi na jia caiguan*}
{Hong Kong/that Cl restaurant/everyday eat that Cl restaurant}
ba wo chi-pang le.
BA I eat-fat Prt
{*香港/那家菜馆/每天吃那家菜馆}把我吃胖了。
"Hong Kong/That restaurant/Eating at that restaurant everyday made me fat by eating there"
b. {**Niuyue* /**Dadushi*/*Dadushi de shenghuo*}
{New York/large city /large city Gen life}
ba ta mang-lei le.
BA she busy-get.tired Prt
{*纽约/*大都市/大都市的生活}把她忙累了。
"New York/The large city/Living in the large city made busy and tired."

"Hong Kong" in (35a) is a pure locus NP, and it cannot be interpreted as an activity like the other two NPs. In (35b), "New York" and the "large city" cannot be licensed as a causer for the same reason. But "living in the large city" in (35b) is a situation and it is licensed as a causer. Interestingly there is a striking different between inanimate NPs and locus NPs. Inanimate NPs can be licensed as causers if they can be taken to have a particu lar potential to cause something. Compare (36a) and (36b). (36a) is a causative RVC with an inanimate causer, whereas (36b) is interpreted as a presentative sentence with a locus subject.

(36) a. *10,000 meiyuan de jiezhi jiu ba ta le-feng le.*
10,000 US dollar Gen ring JIU BA she happy-crazy Prt

(10,000 美元的戒指就把她乐疯了。)

"The ring worth US$10,000 made her extremely happy."

b. *Zigu yilai Baimuda sanjiao didai fan-chen-le wushu de chuan.*

from-old-time since Bermuda triangle area capsize-sink-Asp countless Gen ship

(自古以来百慕大三角地带翻沉了无数的船。)

"Since ancient times, a countless number of ships have sunk by getting capsized in the Bermuda Triangle."

The inanimate subject NP (US$10,000-worth ring) in (36a) can be considered to have power to attract people. Likewise, the locus NP ("Bermuda triangle area") in (36b) is commonly known as the mysterious area that has power to causes shipwrecks. But the latter NP cannot be a causer because it is a locus NP.

When an inanimate NP is licensed as a causer of agentive RVCs, such an NP must have a strong implication of causing a certain result to the causee, by forcing him to undergo difficulties during the activity, as in (37a) and (37b). Otherwise, the subject NP must be taken to clearly have the ability sufficient to cause the result denoted by V2 through the activity denoted by V1, as in (37c) and (37d). Note that legitimate causer subjects in (37) represent their specific properties by use of an adjective, demonstrative pronoun, quantifier or time pronoun, whereas illegitimate causers provide no such information.

(37) a. {**Ta de yifu /Na da dui yifu*} *ba ta xi-fan le.*

{ he Gen clothes/that large pile clothes} BA she wash-annoy Prt

({*他的衣服/那大堆衣服}把她洗烦了。)

"His clothes/That huge pile of clothes made her tired of washing."

b. {**Naxie zaofan /Meitian zhunbei san ge haizi de zaofan*}

{ those breakfast/everyday prepare three Cl child Gen breakfast}

ba mama zuo-fan le.

BA mother make-annoy Prt

({*那些早饭/每天准备三个孩子的早饭}把妈妈做烦了。)

"That breakfast/Preparing breakfast for three children everyday made their mother tired of doing so."

c. {??*Nage qiu/Ta de chaosuqiu*} *ba wo de shou da-shang le.*

{ that-Cl ball/he Gen super-fast-ball} BA I Gen hand hit-hurt Prt

({??那个球/他的超速球}把我的手打伤了。)

"That ball/His super-fast ball made his hand hurt when he hit the ball."

d. {??*Tamen lia*/*Bawang Bie Ji*[29] *de zuihou jingtou*} *kan-ku-le wo le*.
{ they two /Bawang Bie Ji Gen final climax} see-cry-Asp I Prt
({??他们俩/霸王别姬的最后镜头}看哭了我了。)
"They two/*Bawang Bie Ji* made me cry when I saw them/it."

The causers "that huge pile of clothes" and "preparing breakfast for children everyday" in (37a, b) meet the aforementioned semantic conditions. They are not merely nouns, but they represent a heavy workload being required for the event.

However, these semantic conditions do not seem to apply to situational causers of unaccusative RVCs because no agentive activities are involved in the event denoted by unaccusative RVCs. Instead, a situational causer must be an event, situation, phenomenon or circumstantial factor with a special effect enough to cause the result denoted by V2. Consider (38).

(38) a. *Dongtian de lengyu ba wo de shou dong-jiang le*. (Repeated from (19f))
winter Gen cold-rain BA I Gen hand freeze-stiff Prt
(冬天的冷雨把我的手冻僵了。)
"The cold rain of the winter froze my hands stiff."
b. *Changqi de di gongzi ba wo qiong-pa le*.
long-term Gen low wage BA I poor-scare Prt
(长期的低工资把我穷怕了。)
"The low wage over a long period made him scared of poverty."
c. *Zhe ci shigu ba ta xia-pa le*.
this time accident BA he frighten-scare Prt
(这次事故把他吓怕了。)
"This accident frightened and scared him."

The causers of (38a, b, c) are a natural phenomenon, a situation and an accident respectively. In sum, the thematic relation of arguments or the force transmission along the action chain is not essential to the semantics of causative RVCs. Or rather, causative RVCs are more concerned with the salience of the anteceding event in relation to its subsequent event. This explains why causative RVCs can license an extra-thematic argument as a causer subject if it has a reading of having an intrinsic causal potential or

[29] *Bawang Bie Ji*, titled as *Farewell My Concubine* in English, is a movie about the lives of two actors of Chinese classical operas.

the ability to measure out the event denoted by V1.[30]

In the next section, I will discuss the aspectual structure of Mandarin RVCs.

4.4 Aspectual Structure of RVCs

4.4.1 Smith (1994, 1997)

Smith (1994, 1997) proposes a classification of situation aspects based on the combination of three different parameters: static [±], durative [±] and telic [±]. Based on these features, she makes a close examination of the viewpoint aspects and the situation aspects of Mandarin verbs. She observes that completive RVCs complemented by *wan* (完, "finish"), *hao* (好, "done well"), *zhao* (着, "achieve"), and *cheng* (成, "become"), have accomplishment aspect. She characterizes the aspect of the completive RVCs which is represented by the schema below:

(39) Temporal Schema for Completive RVCs

I F_{Nat}

////////////////

The upper case letters "I" and "F" represent the initial boundary and the final endpoint respectively, and the annotation "Nat" represents that the event reaches its endpoint naturally in due course, in contrast to an arbitrary endpoint. It is usually observed with activity events because the agent can continue activities as long as it wishes, and there is no natural endpoint. The slashes indicate the duration of the event.

4.4.2 Chen (1988)

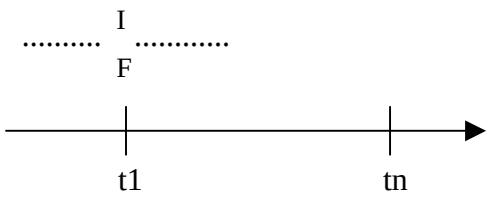
Chen (1988) basically follows Smith's parametric approach to the analysis of the situation aspects of Mandarin. He proposes two types of situation aspects of Mandarin: simple change (单变) and complex change (复变).

Simple change can be defined by the three parametric properties proposed by Smith: static [-], durative [-] and telic [-].[31] The event is punctual, and the initial endpoint and the final endpoint of the event take place simultaneously, as schematized below.

[30] As mentioned in 4.3.4, J. Shen (2006) attempts to explain the argument realization of a sentence by using the ICM. In this spirit, we may be able to say that the construal of the causer subject, as well as the *ba* construction, contributes to the justification of a non-typical causative sentence as an idealized causative sentence.

[31] He uses the term *telicity* as having a clear endpoint at which an event is accomplished. He explains that an event of simple change represents not an accomplishment but a punctual change of state.

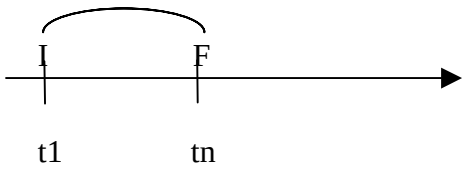
(40) Temporal Schema for Simple Change



The simple change type includes RVCs such as: *da-po* (打破, hit-break, “break by hitting”), *tui-dao* (推倒, push-fall.down, “topple by pushing”), *xian-fan* (掀翻: take.up-turn.over, “capsize”), *xue-hui* (学会: learn-able, “become able to do by learning”), *chi-wan* (吃完: eat-finish, “finish eating”), and *kan-jian* (看见: watch-see, “see”).

In contrast, complex change is characterized by static [-], durative [-], and telic [+]. This type includes simplex verbs such as: *bian-wei* (变为: change-become,“become”), *gai-liang* (改良: improve-good, “improve”), *jian-shao* (减少: decrease-small.in.amount, “decrease”), DVCs like *pao-lai* (跑来: run-come, “come running”), *pa-shang* (爬上, climb-up, “climb up”) and *na-chu* (拿出: take-out, “take out”), and RVCs like *zhang-da* (grow-large, “长大”), *la-chang* (pull-long, “拉长”) and *suo-duan* (缩短: shrink-short, “make short”). Complex change can be schematized as in (41).

(41) Temporal Schema for Complex Change



According to Chen, complex change is similar to accomplishment, and this type of situation aspect is characterized by the parameters: static [-], durative [-] and telic [+]. He explains that complex change events are different from simple change events in that the change of state in the event of complex change is a gradual process and it can be represented by the progressive form. Also, events of complex change can represent the duration of the result by adding a time amount phrase as in (42).

(42) a. Progressive

Nongkeyuan *zhengzai gailiang* *daozhong*.

agriculture science academy Prg improve rice species

(农科院正在改良稻种。)

"The Academy of Agricultural Sciences is now improving the rice species."

b. Time amount phrase

Daozhong gailiang-le san nian duo le.

rice species improve-Asp three year more Prt

(稻种改良了三年多了。)

"It has been over three years since the rice species was improved."

4.4.3 Yong (1997)

Yong (1997) points out that Mandarin RVCs do not fully satisfy the typical aspectual features of achievement or accomplishment, and he supports the classification of RVCs by means of simplex change and complex change proposed by Chen (1988).

Mandarin RVCs can express not only an instant change of state like achievement, but also a gradual change of state. The former includes *da-sui* (打碎: hit-smash, "break by hitting") and the latter includes *la-chang* (拉长: pull-long, "make long by pulling").

Accomplishment is a telic event, and it includes a steady and durative period of an activity like *running a mile* or *drawing a circle* (Vendler 1967). However, Yong (1997) claims that when an accomplishment event has an internal phase of incremental change of state as in "grow large," Mandarin RVCs can express a gradual development or change of state toward a predetermined endpoint. Therefore, RVCs and DVCs of the complex change type, he points out, may allow the progressive form *zai*.

(43)[32] a. RVC[33]

Kedou zai-bian-cheng qingwa.

tadpole DUR-change-form frog

(蝌蚪在变成青蛙。)

"Tadpoles are changing into frogs."

b. DVC

Ta zai-pao-guolai.

he DUR-run-over

(他在跑过来。)

"He is coming over running." (Yong 1997: 19-20; (27c, d))

Contrary to Yong's claim, however, Mandarin RVCs generally do not allow the

[32] My native informants pointed out that the examples (43a, b) are either funny or unacceptable.

[33] Strictly speaking, this example is not an RVC but a phase verb complement.

progressive form. Causative DVCs hardly appear in the progressive form, and only limited types of intransitive DVCs can allow the progressive form. I will continue this discussion in the next section.

4.4.4.1 RVCs/DVCs and Progressive Aspect

In English, both AP resultatives and PP resultative basically allow the progressive aspect as shown in (44).

(44) a. AP Resultative: She is wiping the table clean.
b. PP Resultative: Someone is walking into the room.

On the other hand, RVCs and most DVCs of Mandarin do not allow the progressive form using the progressive adverb *zhengzai*.

(45) a. RVC
**Ta zhengzai ba zhuozi ca-gangjing*.
he Prg BA table wipe-clean
(*她正在把桌子擦干净。)
"She is cleaning the table now."
b. DVC
**You yi ge ren zhengzai zou-jin fangjian*.
have one Cl person Prg walk-into room
(*有一个人正在走进房间。)
"Somebody is walking into the room now."

Yong (1997) claims that RVCs/DVCs of the complex change type allow the progressive aspect. Despite his claim, RVCs, whether they are of the complex type or not, hardly accept the progressive form although a very few intransitive RVCs or some DVCs allow the progressive form depending on the context as shown in (46).

(46) a. *Huaban zhengzai yidian yidian-di zhan-kai*.
flower petal Prg little little-DI unfold-open
(花瓣正在一点一点地展开。)
"The flower petal is unfolding slowly."
b. *Ta zhengzai wang zhebian zou-guo-lai*.
he Prg toward this-side walk-over-come

(他正在往这边走过来。)

"He is walking over to this side."

c. *You yi ge pingzi zhengzai cong dong-li piao-chulai*.

have one Cl bottle Prg from cave-inside float-out-come

(有一个瓶子正在从洞里漂出来。)

"A bottle is floating out of the cave."

Some DVCs are compatible with the progressive aspect. Such DVCs are usually intransitive. The most likely explanation for this is that the internal aspectual structure of V1 of a transitive DVC is invisible to the semantics of the entire compound because the transitive V1 stays in the background and sets the initial point of the result state in the foreground. (See discussions about the initial boundary of RVCs in 4.4.4.2.)

This is supported by the fact that DVCs takes the negation adverb *mei* before the V1. V1 of intransitive DVCs may function as a manner component and it is cotemporally linked to the foregrounded change of location event denoted by the directional complement. Therefore, intransitive DVCs can be understood as a durative event when an appropriate context is given.

Apart from the above characteristics of DVCs, what distinguishes DVCs from RVCs most definitely is that DVCs allow the interposition of other lexical items such as the aspect marker *le* and an object NP, after V1 (co-event verb), V2 (non-deictic directional) or V3 (deictic directional *lai* or *qu*). Jin (2002) claims that DVCs specify their aspectual status depending on which of these three slots is occupied by an object/location NP.

(47) a. Activity (irrealis) +Motion result (irrealis)+Deictic motion (irrealis)

na <u>*yi ben shu*</u> *chu-lai*

take one Cl book out-come

(拿<u>一本书</u>出来)

"be about to take a book out"

b. Activity (realis) +Motion result (realis)+Deictic motion (irrealis)

na-chu <u>*yi ben shu*</u> *lai*

take-out one Cl book come

(拿出<u>一本书</u>来)

"be still in the process of taking a book out"

c. Activity (realis) +Motion result (realis)+Deictic motion (realis)

na-chu-lai <u>*yi ben shu*</u>

take-out-come one Cl book
(拿出来一本书)
"have (already) taken a book out"

The examples in (47) show that the aspectual interpretation of each component verbs is affected by the object position. In other words, the internal aspectual structure of the components of a DVC is visible to the semantics of the entire DVC. The relative independence of the component verbs of DVCs vis-à-vis RVCs is iconically reflected in the fact that they allow interposition of *le* and an object NP, which is impossible in RVCs.

When it comes to RVCs, the activity process denoted by V1 cannot be directly referred to in the aspectual structure of the whole DVCs. In fact, Yong (1997) observes the aspect structure of the compound *xue-hui* (学会: learn-able, "become able to do by learning"), and mentions that "although there is possibly a preliminary process of studying, the V-V compound signifies only that instant alternation."

4.4.4.2 Foreground-Background Relation of Aspectual Structure of RVCs

V1 morphologically constitutes part of an RVC, but the aspectual segment of V1 is invisible to the semantic structure of the compound. One way to account for this question is to say that the V1-V2 alignment of the RVC encodes the foreground-background relation that highlights the foregrounded result state. V1 sets the preliminary activity in the background, and V2 sets the result state in the foreground. The predicate V2 used in an RVC is interpreted as an adjective, which is atelic with no initial or final aspectual boundary by nature. Therefore, the background state is necessary to mark the initial boundary[34] of the result state. The following data support this supposition.

(48) a. *Wanfan chi-le yi ge xiaoshi le*.
dinner eat-Asp one Cl hour Prt
(晚饭吃了一个小时了。)
"(I) have been having dinner for an hour" or
"It's been an hour since I had dinner."
b. *Wanfan chi-wan-le yi ge xiaoshi le*.
dinner eat-Prf-Asp one Cl hour Prt
(晚饭吃完了一个小时了。)

[34] For further discussions about initial boundary, see Fillip (1994).

"It's been an hour since I had dinner."

According to Ma (1981), when a durative verb ("eat"), as in (48a), is complemented by the aspect marker *le*, it has dual readings of a durative event and a perfective event. In contrast, when the verb predicate is complemented by the resultative V2 *wan*, the predicate can only represent a perfective event. Since (48a) and (48b) share all sentential components except for the V2 (*wan*) in (48b), this shows that the aspectual structure of RVCs is determined by V2.

The following sentence (49) is another example that shows that the aspect of the RVC is determined by V2.

(49) *Jiroumian kuaiyao zhu-hao le.*
chicken noodle soon cook-well Prt
(鸡肉面快要煮好了。)
"The chicken noodles will be well cooked soon."
＝The cooking process of the chicken noodles will be completed soon.
≠The cooking process of the chicken noodles will be started soon.

In (49), the adverb *kuaiyao* clearly refers to the result state V2 (*hao*), not to the activity V1 (*zhu*). This means that the time adverb that modifies the compound can only see CCthe aspect of the V2 event, not the aspect of the V1 event. In addition, J. Shen (2003) comes up with a pair of tests that support the view that V2 is the aspectual head. He observes that RVCs pass the test of "V1 *ye mei* V1+V2," but not the test of "V1+V2 *ye mei* V1."

(50) "V1 *ye mei* V1+V2" Test vs. "V1+V2 *ye mei* V1" Test
a. *Zhuozi ca-ganjing le.*
table wipe-clean Prt
(桌子擦干净了。)
"The table has been wiped clean."
b. *Zhuozi ca ye mei ca-ganjing.*
table wipe but not wipe-clean
(桌子擦也没擦干净。)
"The table was wiped but has not been wiped clean yet."
c. **Zhuozi ca-ganjing ye mei ca.*
table wipe-clean but not wipe

(*桌子擦干净也没擦。)

"The table was wiped clean but has not been wiped yet."

RVCs take the adverb *mei* (没) for negation. The examples in (50b, c) show that the completion of V1 does not imply the completion of the event denoted by the RVC, but negating the completion of the RVC implies the negation of V1. This means that the V1 event is out of the scope of the negation adverb *mei*.

Then one may ask why V1 is necessary in the V-R construction. Our proposed account for this is that for V2 to be foregrounded as the center of predication, V1 needs to stay in the background. In other words, for V2 to be interpreted as the result state, there must be the anteceding predicate that aspectually marks the initiation of the subsequent result event. Without V1, V2 cannot encode an inchoative result event, only to be interpreted as a simple state or activity verb.

4.4.4.3 Simple Change vs. Complex Change－What Makes them Different?

In Sections 4.4.2 and 4.4.3, I mentioned the concepts of simple change and complex change proposed by Chen (1988). Chen (1988) and Yong (1997) believe that these two types of situation aspects are determined by the following three aspectual parameters: static, durative and telic. Simple change is defined by the parametric combination of static [-], durative [-] and telic[-], whereas complex change is defined by the combination of static [-], durative [-] and telic [+]. The only difference in the parametric setting between the two situation types is that simple change is atelic and complex change is telic.

Chen (1988) explains typical Mandarin RVCs are either of simple change or complex change. He classifies simple change as an atelic event characterized by the parameter telic [-][35] because, unlike a complex change event, it lacks an unfolding preparatory process of event which results in the change of state. Therefore, the greatest difference between the two types of situation aspect can be reduced to the (un)availability of the unfolding preparatory process of event.

Contrary to Yong's (1997) claim, we have seen in 4.4.4.1 that RVCs hardly accept the progressive form, and in 4.4.4.2 that V1 is invisible to the aspectual structure of the

[35] According to his definition, simple change is characterized by telic [-], and at the same time it roughly corresponds to the achievement aspect of English in that the change of state takes place instantaneously as a punctual event. However, in Vendler's situation aspects, English achievement, as well as English accomplishment, are classified as telic events. From this, one can see that Chen treats the parameter telic [±] in a somewhat different way from its widely accepted definition. According to Croft (2000), Chen's simple change seems to correspond to what Croft calls directed achievement, and complex change to directed activity (or directed accomplishment). For details, see Croft (2000).

entire compound. If so, this logically leads to the assumption that it is something other than V1 that determines the availability of the interpretation of the unfolding preparatory process in the semantic structure of RVCs. However, the data in (51) negate this assumption.

(51) a. *Ta* {*manman-de*/**yixiazi*} *e-si* *le*.
he {slowly /instantly} starve-die Prt
(他{慢慢地/*一下子}饿死了。)
"He starved to death {slowly/*instantly}"
b. *Ta* {**manman-di*/*yixiazi*} *zhuang-si le*.
he { slow-DI /instantly} crash-die Prt
(他{*慢慢地/一下子}撞死了。)
"He died {*slowly/instantly} by crashing."
c. *Ta ba*[36] *xiaohutao* {*manman-de*/*yixiazi*} *yao-sui* *le*.
he BA carya nut {slowly /instantly} bite-break Prt
(他把小胡桃{慢慢地/一下子}咬碎了。)
"He crunched the carya nut {slowly/instantly}."

(51a) depicts a gradual change of state of the subject ("he") toward the endpoint denoted by V2 ("dead"). In contrast, (51b) depicts an instantaneous change of state although it shares the same V2 with (51a). Considering these two cases, V1 seems to be playing the main role in determining the availability of the interpretation of the unfolding preparatory process depicted by V1. This shows that V1 determines the availability of the preparatory process in the semantic structure in the event. As a matter of fact, the act of hitting can be interpreted as an instantaneous or iterative act. So one can predict that (51c) allows both a gradual and punctual accomplishment of the event. In fact, the compound can be modified by *manman-de* ("slowly") or *yixiazi* ("instantly").

I think it is reasonable to conclude that RVCs all share a uniform aspectual structure, which is characterized by the initial boundary marked by V1 and the achieved result state. However, the semantics of V1 also affects the aspectual reading of the compound, resulting in being construed as an event of simple change or complex change.

4.4.4.4 Temporal Relation of V1 and V2

Goldberg & Jackendoff (2004), as stated in (72), Chapter 3, point out three types of

[36] Note that in this sentence, the use of *ba* makes the sentence sound more natural, but it is not obligatory. In fact, the object can also be placed after the compound without using *ba*.

possible temporal relations between the activity event and the result event. They are repeated in (52).

(52) Three possible types of temporal relation:

a. Cause cotemporal with effect

Bill made the ball go up the hill by pushing it.

b. Cause overlaps with inception of effect

Bill made the vase fall on the floor by knocking against it.

c. Cause completely precedes effect

Bill made himself get sick on Tuesday by eating mushrooms on Monday.

Goldberg & Jackendoff (2004) state that English resultatives encode the temporal relations of (52a) and (52b), but not of (52c), although L&RH (1999) point out that (52c) is possible with reflexive resultatives that allow a hyperbole reading. (See (66c), Chapter 3.)

Mandarin RVCs also depict events of cotemporal or overlap[37] relations. The former type includes those that allow the reading of complex change such as *fang-song* (放松: release-loose, “let loose by releasing”), *la-chang* (拉长: pull-long, “pull long”) and *zhang-da* (长大: grow-large, “grow”). The latter type includes those that depict punctual events such as *si-kai* (撕开: tear-off, “tear off”), *ti-dao* (踢倒: kick-fall, “kick over”) and *qie-duan* (切断: cut-break, “cut off”).

However, as we saw in 4.3.3, Mandarin RVCs do not strictly impose a temporal dependence between the preceding cause event and the following result event. In fact, the majority of RVCs do not clearly specify the temporal boundary between the cause event and the result event. RVCs in (53) are such examples.

(53) a. *xi-ganjing* (洗干净: wash-clean, “wash clean”)

b. *zuo-zhou* (坐皱: sit-wrinkled, “make (clothes) wrinkled by sitting (on them)”)

c. *he-zui* (喝醉: drink-drunk, “get drunk by drinking”)

d. *zou-lei* (走累: walk-tired, “get tired by walking”)

e. *chi-ni* (吃腻: eat-be.fed.up, “become sick of something by eating too much of it”)

f. *xue-hui* (学会: learn-able, “become able by learning”)

[37] The term *overlap* follows the definition by Goldberg & Jackendoff (2004): the cause event is followed by the result event without mediating a temporal gap.

It is very difficult to specify a temporal boundary between the cause and result events in the above examples. The result events of these RVCs do not seem to take place at a particular point of time, but the result states gradually become obvious as the V1 event develops. They are not the type of events in which the result state is instantaneously achieved at a particular point.

Furthermore, some RVCs allow a reading of a temporal gap between the two events. The actual length of such a temporal gap may depend on the nature of events involved. Consider (54).

(54) a. *Nage cai fang-sou le.*
that-Cl dish leave-rotten Prt
(那个菜放馊了。)
"The food went bad by being left out."
b. *Ta chi-huai le duzi.*
he eat-break Asp stomach
(他吃坏了肚子。)
"He upset his stomach by eating."

In the case of (54a), someone puts out a dish of food and leaves it for several hours, only to find later it has gone bad. The example (54b) describes a situation where someone eats old food one night and he finds his stomach upset the next morning.

4.4.5 Temporal Relation and Thematic Relation

Comparing English resultatives, Mandarin RVCs and South-Min RVCs, one can discover an interesting correlation between the temporal relation and the thematic relation encoded in their event semantics. As discussed in Chapter 2, English (AP) resultatives basically express cause-result events based on the agent-patient thematic relation that encodes the direct transmission of physical force from the agent to the patient. This agent-patient schema is also applied to AP resultatives that take a non-agentive causer, such as an instrument or a natural force. Consequently, such AP resultatives are interpreted as denoting an event in which a force is being directly transmitted from the causer to the causee. Thus, the legitimate temporal relation between the two subevents of AP resultatives needs to be either a cotemporal or an overlapping one in which there is a direct interaction between the agent and the patient. In other words, the directness of force exertion by the agent to the patient correlates with the temporal immediacy of the cause event and the result event.

As far as the data of causer subjects provided in 4.3.5 are concerned, this correlation seems more straightforward in South-Min RVCs than in Mandarin RVCs. They usually express a resultatives-based event which involves the direct transmission of physical force from an agent to a patient. Such an agent is typically an animate instigator, and an instrument cannot be licensed as a causer. South-Min RVCs cannot be employed to describe non-physically-caused causative events or situational causation events.

In contrast, Mandarin RVCs can describe either physically or non-physically-caused causative events. The temporal immediacy of the subevents is not required of Mandarin RVCs, and the semantic constraint on the temporal relation is simply that the cause event precedes the result event. In this sense, it can be considered that the core semantics of Mandarin RVCs have widely been extended from the prototypical agent-patient relation to the causally interpreted temporal precedence-consequence relation. These semantic differences between the above three languages are briefly compared in (55).

(55) Comparison among South-Min, English and Mandarin

	Core semantics	Temporal relation	Force Transmission
South-Min RVCs	Animate Agent-Patient	Immediate	Obligatory
English AP Resultatives	(Non-)Animate Agent-Patient	Immediate	Obligatory
Mandarin RVCs	Agent-Patient/Causer-Causee	(Non-)Immediate	Non-obligatory

4.5 Semantic Distribution of V1 and V2

4.5.1 About Corpus and Database

My corpus (971,471 characters) has been built based on the text from the following novels:

1) *Fang Sheng* (放生) by Chen Jiangong (陈建功),
2) *Si Shi Tong Tang* (四世同堂) by Lao She (老舍),
3) *Kanshangqu Hen Mei* (看上去很美) by Wang Shuo (王朔)
4) *Jinsheng You Yue* (今生有约) by Zhang Xin (张欣)

I picked out RVCs and DVCs from this corpus. For convenience, I will refer to this corpus as the CNC (Chinese Novel Corpus) hereafter.

I have also built a database that contains all entries (4,123 entries[38]) from Wang et al.

[38] The actual number of the entries in CNC does not match the sequential number given to the final entry in Appendix C (4,128) because 5 entries are not considered to be qualified target RVCs.

(1987),[39] together with additional information such as compound types, semantic information of V1 and V2, and frequency data of V1 and V2 both in Wang et al. (1987) as well as the above corpus. I will refer to this database as the CRD (Chinese RVC Database).

In the CNC and the CRD, I have classified RVCs into the following three subclasses[40]: Type 1) "Genuine" resultative verb compounds. In this paper, the term RVC refers to this type unless otherwise mentioned; Type 2) Phase marker compounds and Type 3) Pivotal verb compounds. Phase marker compounds are RVCs with V2 that represent a form of achievement phase of the activity process denoted by V1. They include: *dao* (到: indicating achievement), *de* (得: indicating possibility), *diao* (掉: indicating termination or disappearance), *guo* (过: indicating completion), *guang* (光: indicating something being used up), *hao*[41] (好: indicating completion or something being done in a proper manner), *jin* (尽: indicating something being exhausted), *liao* (了: indicating perfect), *qi* (起: indicating appearance), *wan* (完: indicating completion), *xiao* (消: indicating disappearance), *zhao* (着: indicating accomplishment or result), *zhu* (住: indicating firmness or a halt), etc. Pivotal verb[42] compounds are complex predicates that take a complement phrase headed by *cheng* (成: indicating change or completion), *gei* (给: indicating a recipient) or *zai* (在: indicating time or a location)[43].

In the following sections, I will discuss the semantic distribution of V1 and V2 of "genuine" Mandarin RVCs mainly based on the data available from the aforementioned corpus and database.

4.5.2 Subject-Oriented vs. Object-Oriented

I counted how many of the 4,123 entries listed in the CRD can be found in the CNC by means of self-written computer programs, and it turned out that 154 unique V2s including directional verbs were found in the CNC. Table (56) shows the predicate classes of V2, together with their type counts. (For the complete data, see Appendix C1.)

[39] This dictionary also contains DVCs because their extended uses overlap the semantics of RVCs.
[40] Note that compound examples in the previous sections are mainly of Type 1.
[41] The predicate *hao* (好) is traditionally classified as a phase marker. However in my corpus data, it is classified as an evaluation predicate in the genuine RVCs.
[42] I follow the term by Tang (1992). However, he does not include *gei* (给) or *zai* (在) in this category.
[43] Pivotal verbs *wei* (为) and *zuo* (做) are not contained in Wang et al. (1987).

(56) Predicate Classes and Type Counts (Total: 155)

Predicate Classes of V2	Type Counts Types
a. Resultative	134
b. Resultative/Phase	4
c. Phrase	5
d. Directional	4
e. Directional/Phase	3
f. Pivotal	3
g. Phase/Pivotal	1
h. Resultative/Directional	1[44]

The slashes in (56b), (56e), (56g) and (56h) express that these predicates may have dual classifications. Interestingly, when we look at the most frequently used, twenty V2 predicates, there are only 6 resultative verbs found in the data. They are *jian* (见, "sense"), *kai* (开, "open"), *si* (死, "die"), *zou* (走, "away"), *duo* (多, "more than correct or requested"), *mingbai* (明白, "clear")). The remaining 14 predicates are directional verbs, phase verbs or pivotal verbs.

As I discussed in Chapter 2, the BNC data of English AP resultatives show that the top 50 verbs by token frequency are all transitive, showing a very strong inclination toward transitivity. In the case of Japanese V-V compounds (excluding syntactical compounds and lexical complement compounds), 61.5% (1,472 instances) of the total (2,397 entries) are transitive, and 37.5% (898 instances) are intransitive. In contrast, labile compounds only account for 0.8 % (19 instances). (For details, see Section 3.5.3.2 in Chapter 3.)

In comparison with English AP resultatives and Japanese V-V compounds, the corpus analysis of the CNC shows that V2s of Mandarin RVCs are rather neutral in the predication of subject arguments (and thus making the RVCs intransitive) and of object arguments (and thus making the RVCs intransitive). This tendency is shown in the data (57).

(57) Subject/Object Orientation of V2

Predication Patterns	Type Counts	Percentage
a. Subject-oriented V2	18	13%
b. Object-oriented V2	56	40.6%

[44] The V2 predicate *kai* (开) is classified into this type since it is very difficult to clearly distinguish between its resultative meanings and the directional meanings.

c. V2 neutral in subject/object orientation	50	36.2%
d. V2 predicated of body part of subject[45]	4	2.9%
e. V2 without predicate meaning[46]	10	7.2%

Based on the above data, one can say that many V2s of Mandarin RVCs can be freely predicated of the subject. When (57a) and (57c) are added together, over 49% can be predicated of the subject argument. More importantly, this suggests that the predication of the subject or object by V2 is not structurally, but semantically determined (See examples in (9) and (11)). In fact, V2s of Mandarin RVCs can be predicated of the subject without violating or "detouring" any syntactic constraints. For example, the interposition of a reflexive pronoun makes sentence (58a) illegitimate. This shows a striking contrast with English reflexive resultatives, which can only be indirectly predicated of the subject argument by way of the predication of the reflexive pronoun in the object position.

(58) a. *Ta* (**ba ziji*) *zou-lei* *le*.
he (BA oneself) walk-get.tired Prt
(他(*把自己)走累了。)
"He got tired by walking."
b. He$_i$ walked *(himself$_i$) tired.

The claim I made in 4.4.5 may provide a reasonable account for the above distinction: the construction of Mandarin RVCs encodes the causally interpreted precedence-consequence relation, not the agent-patient opposition that is conceptualized on the energy flow along the action chain. In this model, the notion of change of state can only be conceptualized through the patient positioned in a lower position than the agent in the action chain. Thus the DOR is obligatory with English resultatives while it is not with Mandarin RVCs.

4.5.3 Semantic Types of Licensed V2

In this section, we will examine what semantic types of predicates are licensed as V2 in "genuine" RVCs, excluding directional complements, phase markers, and pivotal verb complements from the scope of this examination. This is because DVCs are inherently

[45] They include *suan* ("酸"), *teng* ("疼"), *ya* ("哑") and *zhong* ("肿"). Grammatically, they are predicated of the object, but it is the object of a body part of the subject.

[46] They include *bian* ("遍"), *chi* ("迟"), *hao* ("好"), *jiu* ("久"), *tou* ("透"), *zao* ("早"), etc. They add a manner/degree reading.

different from RVCs in that there are only 11 types of directionals constituting a closed class, whereas various predicates can appear as V2 of RVCs quite productively. Secondly, phase markers and pivotal complements are more highly grammaticalized than other resultative complements. For the convenience of naming, I will use the term RVCs to refer to genuine RVCs, excluding directionals, phase makers[47] and pivotal complements.

In my research, a total of 518 genuine RVCs were found in the CNC data. Table (59) shows the classifications of genuine RVCs by the semantic type of V2.

(59) Semantic Types of V2 of Genuine RVCs (Total: 518 tokens)

Semantic type of V2	Tokens of RVCs	Percentage	Exhaustive List of V2
1. State	235	45%	*an* (暗, “dark”), *bie* (瘪, “shriveled”), *bing* (病, “sick”), *canfei* (残废, “disabled”), *chengshou* (成熟, “mature”), *chuan* (穿, “penetrated”), *daoshou* (到手, “in one’s possession”), *diao* (掉, “detached/missing”), *ding* (定, “fixed”), *diu* (丢, “lost”), *dong* (动, “move”), *duan* (断, “broken”), *fei* (飞, “fly away/flutter in the air”), *fu* (服, “obey”), *gan* (干, “dry”), *ganjing* (干净, “clean”), *gu* (鼓, “swollen”), *guan* (惯, “be used to”), *huai* (坏, “damaged”), *huo* (活, “vivid/alive”), *jiang* (僵, “deadlocked”), *jiao* (焦, “burnt”), *jin* (紧, “tight”), *jing* (净, “clean”), *kai* (开, “separate/open/boiled/having enough room”), *kong* (空, “empty”), *kua* (垮, “collapse”), *lan* (烂, “fester”), *lao* (老, “old/tough/overgrown”), *long* (聋, “deaf”), *luan* (乱, “in disorder”), *man* (慢, “slow”), *mie* (灭, “(of light, etc.) go out”), *pao* (跑, “run away”), *po* (破, “broken”), *qi* (齐, “neat/all ready”), *qing* (清, “distinct”), *qingchu* (清楚, “clear”), *shang* (伤, “injured”), *she* (折, “broken/snapped”), *shi* (湿, “wet”), *shu* (输, “defeated”), *shu* (熟, “cooked”), *si* (死, “dead/fixed/closed”), *sui* (碎, “smashed”), *tong* (通, “open/through”), *tou* (透, “penetrating”), *wen* (稳, “steady”), *xia* (瞎, “blind/tangled”), *xiang* (响, “sound”), *ya* (哑, “hoarse”), *yan* (严, “tight/strict”), *ying* (赢, “win”), *zang* (脏, “dirty”), *zhengqi* (整齐, “clean and tidy”), *zhong* (肿, “swollen”), *zou* (走, “go

[47] They are: *dao* (到), *de* (得), *diao* (掉), *guo* (过), *guang* (光), *jin* (尽), *liao* (了), *qi* (起), *wan* (完), *xiao* (消), *zhao* (着), *zhu* (住). However the predicate *hao* (好) is separately classified as an evaluation predicate, which is included in genuine RVCs.

			away”)
2. Evaluation	66	12.7%	*cuo* (错, “wrong”), *daojia* (到家, “perfect”), *dui* (对, “right”), *hao* (好, “well/perfect”), *za* (砸, “fail to do”)
3. Sensation	29	5.6%	*bao* (饱, “full”), *chaqi* (岔气, “feel a pain in the chest”), *chou* (臭, “stinking”), *dai* (呆, “blank”), *huayan* (花眼, “dazzled”), *hun* (昏, “faint”), *hutu* (糊涂, “muddled”), *jiang* (僵, “numb”), *jian* (见, “see”), *ke* (渴, “thirsty”), *ku* (苦, “suffering”), *kun* (困, “sleepy”), *lei* (累, “tired”), *ma* (麻, “tingle”), *meng* (蒙, “unconscious”), *mu* (木, “numb”), *qingxing* (清醒, “clear-headed”), *shufu* (舒服, “comfortable”), *suan* (酸, “tingle/ache”), *teng* (疼, “ache”), *xing* (醒, “awake”), *xian* (咸, “salty”), *yun* (晕, “dizzy”), *zui* (醉, “drunk”)
4. Orientation	26	5.0%	*dao* (倒, “toppled”), *fan* (翻, “turned over”)
5. Space/Distance	22	4.2%	*ai* (矮, “short”), *chang* (长, “long”), *da* (大, “large”), *di* (低, “low”), *duan* (短, “short”), *gao* (高, “high”), *jin* (近, “near”), *kuan* (宽, “wide”), *xiao* (小, “small”), *yuan* (远, “far”)
6. Quantity	21	4.1%	*duo* (多, “many/much”), *gou* (够, “enough”), *shao* (少, “few/little”), *shengxia* (剩下, “remain”), *zu* (足, “sufficient”)
7. Degree	16	3.1%	*daodi* (到底, “to the end”), *ganjing* (干净, “completely”), *huai* (坏, “badly”), *jing* (净, “completely”), *man* (满, “reach the limit”), *qing* (清, “completely”), *tou* (透, “fully”)
8. Psychological	16	3.1%	*huang* (慌, “confused”), *ji* (急, “irritated”), *nao* (恼, “angry”), *ni* (腻, “bored”), *pa* (怕, “fear”), *zha* (炸, “fly into a rage”)
9. Color	16	3.1%	*bai* (白, “white”), *hei* (黑, “black”), *hong* (红, “red”), *huang* (黄, “yellow”), *lü* (绿, “green”), *zi* (紫, “purple”)
10. Property	13	2.5%	*huai* (坏, “spoiled”), *jiu* (旧, “old”), *ming* (明, “clear”), *shu* (熟, “skilled”), *yin* (硬, “hard”), *zhun* (准, “clear”)
11. Manner	12	2.3%	*chong* (重, “repeatedly”), *taiping* (太平, “peacefully”), *zheng* (正, “straight”), *zhong* (中, “fit exactly”), *zhun* (准, “accurately”), *zixi* (仔细, “carefully”)
12. Shape	11	2.1%	*bian* (扁, “flat”), *jian* (尖, “pointed”), *ping* (平, “even”), *shou* (瘦, “thin”), *yuan* (园, “round”), *zhi* (直, “straight”)
13. Time	10	1.9%	*chi* (迟, “late”), *jiu* (久, “long”), *kuai* (快, “fast”), *man* (慢, “slow”), *wan* (晚, “late”),*zao* (早, “early”)
14. Mental activity	9	1.7%	*digu* (嘀咕, “have something on one’s mind”), *dong* (懂, “understand”), *mingbai* (明白, “(of understanding) clear”), *tong* (通, “understand”)

15. Existence	7	1.4%	*bian* (遍, “everywhere”), *san* (散, “disperse”)
16. Activity	4	0.8%	*ku* (哭, “cry”), *xiao* (笑, “laugh”)
17. Personal character	3	0.6%	*feng* (疯, “insane”), *hua* (猾, “cunning”)
18. Temperature	2	0.4%	*liang* (凉, “cool”), *re* (热, “hot”)
19. Property	0	0%	None
20. State/Quantity	0	0%	None
21. State/Evaluation	0	0%	None[48]

First of all, the above distribution shows that the State class constitutes the overwhelmingly largest semantic class of all, accounting for 45% of the total. Thus one can say Mandarin RVCs typically take State V2s.

The table above also shows that Mandarin RVCs allow a far wider variety of semantic classes as result predicates than English resultatives do. For example, English resultatives do not allow a result predicate of quantity, degree, manner, time, mental process, existence, activity or personal character although predicates of such semantic classes often appear as the main verb of English resultatives.

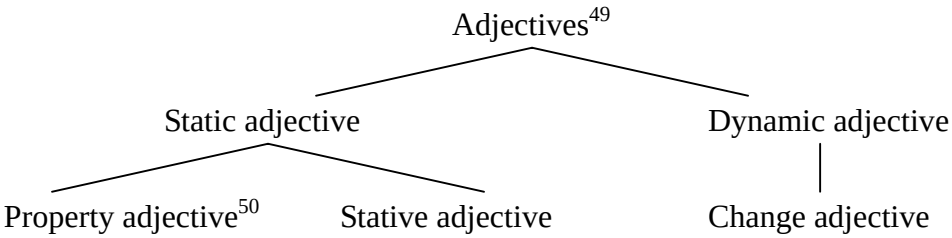
So how can one explain this apparently contradictory distribution pattern of semantic class of V2: RVCs show a very strong inclination for State-class V2 over other semantic classes, and at the same time they are very “generous” to a variety of semantic classes? To discuss this question, I will examine the nature of the State class V2 predicates of RVCs in the next section.

4.5.4 Semantics of State-Class V2

Zhang (1995, 2005) proposes a classification of adjectives as shown in (60). There are two types of adjectives in Mandarin: static adjectives and dynamic adjectives. The former class of adjectives depicts the state of an entity, and the latter class can be used as a predicate or complement that depicts a change of state.

(60) Zhang’s Classification of Mandarin Adjectives

[48] No examples are found for the semantic classes No.19, 20 and 21, but the CRD contains some examples of these classes, such as: *mai-pianyi* (买便宜; buy-cheap, “buy cheap”) in No. 19, *xiaohao-mei* (消耗没; consume-not.have, “use up”) in No. 20, and *mai-qiquan* (买齐全; buy-complete, “buying everything necessary”) in No. 21.



According to Zhang (2005), dynamic adjectives depict a change event , and they encode the natural initial point and the end point of the change process. In contrast, static adjectives do not encode the natural initial point and the end point of the change process, and cannot depict a change process. Syntactically, static adjectives cannot be marked by *le* (了) or *zhe* (着).[51] Zhang (1995) proposes the *yijing* (已经, "already") ~ *le* (了, Prt) test (hereafter to be referred to as "*yijing* test") and the *mei* (没, Neg) test to identify the class. If an adjective can co-occur with both phrases, it is a dynamic adjective. If the adjective passes neither test, it is a static adjective. If the adjective only passes the *yijing* test, it is a semi-dynamic adjective.

There are 1,007 genuine RVCs in the CRD. From among them, I collected 118 RVCs by choosing an example for each semantically unique result state V2. Then, based on Zhang's proposal, I examined the properties of the state V2 predicates of these 118 RVCs by means of the above two tests. The results are as shown in (61). For the complete test data, see Appendix C2.

(61) *Yijing* Test and *Mei* Test for Result State V2 of 118 Genuine RVCs

Adjective Type	*Yijing* Test	*Mei* Test	Tokens	Percentage
a. Dynamic Adjective	YES	YES	55	46.6%
			Deverbal: 21	
			?Deverbal: 13	
b. Semi-Dynamic Adjective	YES	NO	14	11.9%
			Deverbal: 2	
			?Deverbal: 1	
c. Non-Dynamic Adjective (1)	NO	YES	0	0%
d. Non-Dynamic Adjective (2)	NO	NO	11	9.3%

[49] Original Chinese terms are as follow: static adjective (静态形容词), dynamic adjective (动态形容词), property adjective (性质形容词), stative adjective (状态形容词), and change adjective (变化形容词).

[50] Zhang (2006) cites Ma's (1995) classification of property adjectives, which include: *da* (大, "large"), *xin* (新, "new"), *suan* (酸, "sour"), *chang* (长, "long"), *hei* (黑, "black"), *fang* (方, "square"), etc.

[51] It is suffixed to a verb to indicate that the state resulting from the action is maintained, as in a sentence: *Jiaoshi de men kai-zhe* (教室的门开着, "The classroom door is open").

The majority (over 58%) of the adjectives can be considered as (semi-)dynamic adjectives (60a, b) since they pass at least one of these tests. However, predicates of (60d) pass neither test. These predicates include adjectives such as *huo* (活, “moving”), *jing* (净, “clean”), *qing* (清, “distinct”), *shu* (熟, “well/enough”), *si* (死, “fixed/rigid, closed/impassable”) and *yan* (严, “tight”). The adjective *jing* (“clean”) does not pass the *yijing* test or the *mei* test simply because it is usually used only as a noun modifier or used in a compound. The other five predicates can be considered what Zhang (2005) calls static adjectives. Consider the following examples.

(62) Dynamic Adjectives vs. Static Adjectives

Predicate	*Yijing* test	*Mei* test
a. *huo* (活, “alive”)	*yijing huo le*	*mei huo*
b. *huo* (活, “moved/touched”)	**yijing huo le*	**mei huo*
c. *qing* (清, “clean”)	*yijing qing le*	*mei qing*
d. *qing* (清, “distinct”)	**yijing qing le*	**mei qing*
e. *shu* (熟, “cooked”)	*yijing shu le*	*mei shu*
f. *shu* (熟, “well/enough”)	**yijing shu le*	**mei shu*
g. *si* (死, “dead”)	*yijing si le*	*mei si*
h. *si* (死, “fixed/rigid”)	**yijing si le*	**mei si*
i. *zao* (糟, “messy”)	*yijing zao le*	*mei zao*
j. *zao* (糟, “rotten”)	**yijing zao le*	**mei zao*
k. *yan* (严, “strict”)	*yijing yan le*	*mei yan*
l. *yan* (严, “tight”)	**yijing yan le*	**mei yan*

I added *zao* (62i, j) to the above list (62) because it is found in the CRD although it is not found in the CNC. Since (62a, c, e, g, i, k) pass both the *yijing* and *mei* tests, they can be considered dynamic adjectives. In contrast, the other adjectives (62b, d, f, h, j, l) can be considered static adjectives in Zhang’s (2005) term. The adjectives (62b) “moved/touched” and (62j) “rotten” are static adjectives because the former refers to a psychological state and the latter to the state of an object. The adjectives (62h) “fixed/rigid” (of a screw being rusted fast, for example) and (62l) “tight” (of a door being closed tightly, for example) are also static adjectives. The adjectives (62d) “distinct” and (62f) “well/enough” are a little different from the above four adjectives, but they can be considered as a type of static adjective because they refer to the quality of a perceptual or sensory state respectively.

Furthermore, Mandarin RVCs cause the deverbalization of V2. For example, in (61a),

at least 21 V2 instances are deverbal and they all pass both the *yijing* and *mei* tests, but they are construed as adjectives with derived meanings only when they are used in RVCs. Therefore, they should be treated differently from "genuine" dynamic adjectives. Consider the examples below. Table (63) contrasts the original verbal meanings and the derived meanings of the predicates in (61a).

(63) Original Verbal Meaning vs. Derived Meaning

Original Verbal Meaning	Derived Meaning
a. *dong* (动, "move")	*piao-dong* (飘动, "about" in "flow about")
b. *fei* (飞, "fly")	*zha-fei* (炸飞, "up" in "blow up")
c. *pao* (跑, "run")	*xia-pao* (吓跑, "away" in "run away in fright")
d. *zou* (走, "walk")	*qi-zou* (气走, "leave" in "leave in anger")

In particular, the verb *zou* in (63d) greatly changes in meaning when it is used in an RVC. V2 z*ou* in *qi-zou* ("leave in anger") loses its activity sense; it means that someone has already left a particular place. Likewise, the other deverbal adjectives add the resultative meanings "about", "up" and "away" to RVCs respectively.

As discussed above, RVCs license not only dynamic adjectives, but also static adjectives and verbs as V2. I think this unselectiveness of RVCs can be attributed to the aspectual structure of the V-R construction. The V-R construction composes the initial boundary provided by V1 and the result state derived from V2. The compound is regularly negated by the state negation adverb *mei*, not the activity negation adverb *bu*. The adverb *mei* always modifies V2, although V2 may not necessarily be a lexically static adjective. Therefore I suggest that the aspectual property of V2 is structurally derived from the compounding of V1 and V2.

4.5.5 Semantic Types of Licensed V1

In this section, I will explore what types of verbs are licensed as V1. Table (64) shows the semantic classes of verbs that appear in the V1 position of the genuine RVCs found in the CNC. The list only covers the top 25 classes of verbs sorted by frequency of appearance. (For details, see Appendix C6.)

(64) Top 25 V1 Verb Classes (Total: 518 tokens)

Rank	Verb Class	Tokens	Percentage	Verb Examples (Not exhaustive)
1	Verbs of putting#	42	8.1%	*bai* (摆, "place"), *dao* (倒, "pour"), *tian* (填, "fill"), *zhuang* (装, "install")

2	Verbs of motion#	41	7.9%	*fei* (飞, “fly”), *pa* (爬, “climb”), *pao* (跑, “run”), *zou* (走, “walk”)
3	Verbs of change of state#	38	7.3%	*chang* (长, “grow”), *dong* (冻, “freeze”), *kai* (开, “open”), *shao* (烧, “bake/burn/heat”)
4	Verbs of communication	35	6.7%	*jiang* (讲, “speak”), *shuo* (说, “say”), *tan* (谈, “talk”), *wen* (问, “ask”)
5	Verbs of contact by impact	33	6.4%	*da* (打, “hit”), *ke* (磕, “knock”), *peng* (碰, “bump”), *ti* (踢, “kick”)
6	Psychology verbs	27	5.2%	*dou* (逗, “amuse”), *ji* (急, “annoy”), *qi* (气, “get angry”), *xia* (吓, “frighten”)
7	Perception verbs	26	5.0%	*kan* (看, “watch/see”), *jian* (见, “see”), *ting* (听, “listen”), *wen* (闻, “smell”)
8	Do verb*[52]	20	3.9%	*ban* (办, “do/manage”), *gao* (搞, “do/make”), *nong* (弄, “do/manage”), *zuo* (做, “do”)
9	Verbs of exerting force	20	3.9%	*la* (拉, “pull”), *tui* (推, “push”), *tuo* (拖, “drag”), *ya* (压, “press”)
10	Verbs of ingesting	20	3.9%	*chi* (吃, “eat”), *he* (喝, “drink”), *ken* (啃, “gnaw”), *yao* (咬, “bite”)
11	Verbs of change of possession (?#)	19	3.7%	*jie* (借, “borrow”), *mai* (买, “buy”), *mai* (卖, “sell”), *shou* (收, “accept”)
12	Verbs of bodily process	17	3.3%	*chui* (吹, “blow”), *ku* (哭, “cry”), *niao* (尿, “urinate”)[53], *shui* (睡, “sleep”)
13	Verbs of creation & transformation#	16	3.1%	*mo* (磨, “grind”), *hua* (画, “draw”), *xie* (写, “write”), *zuo* (做, “make”),
14	Verbs of cutting#	12	2.3%	*ju* (锯, “saw”), *kan* (砍, “chop”), *qie* (切, “cut”), *si* (撕, “tear”)
15	Verbs of existence	12	2.3%	*dun* (蹲, “squat”), *liu* (留, “stay”), *zhan* (站, “stand”), *zuo* (坐, “sit”)
16	Verbs of removing#	12	2.3%	*bao* (剥, “pare”), *chou* (抽, “take out”), *sao* (扫, “sweep”), *xi* (洗, “wash”)
17	Verbs of mental process*	10	1.9%	*cai* (猜, “guess”), *suan* (算, “calculate”), *wang* (忘, “forget”), *xiang* (想, “think”)

[52] Verb classes marked with an asterisk (*) are not listed in Levin’s (1993) verb list.
[53] This is usually used as a noun.

18	Verbs of sending & carrying#	9	1.7%	*ban* (搬, “move”), *bei* (背, “carry on one’s back”), *dai* (带, “bring”), *song* (送, “deliver”)
19	Hold & keep verbs(?#)	8	1.5%	*fang* (放, “leave”), *fu* (扶, “support”), *na* (拿, “take/hold”), *zhua* (抓, “catch”)
20	Verbs of body state & damage to the body	7	1.3%	*e* (饿, “starve”), *yun* (晕, “dizzy”)
21	Verbs of combining & attaching#	7	1.3%	*bang* (绑, “bind”), *bu* (补, “replenish”), *ding* (钉, “(of a nail) drive”), *feng* (缝, “sew”)
22	Verbs of contact	7	1.3%	*ca* (擦, “wipe”), *shua* (刷, “brush”), *mo* (摸, “touch”), *cuo* (搓, “rub”)
23	Verbs of judgment & assessment	6	1.2%	*kao* (考, “give/take an exam”), *pan* (判, “decide”), *cha* (查, “check”), *ren* (认, “admit”)
24	Activity verbs	6	1.2%	*chang* (唱, “sing”), *deng* (等, “wait”), *lian* (练, “train”), *wan* (玩, “play”)
25	Verbs of grooming#	6	1.2%	*chuan* (穿, “(of clothes) wear”), *zai* (戴, “(of a hat) wear ”)
25	Others	62	12%	

One of the salient features of the above distribution is that verb classes that involve a change of state/location rank very high in the list on a token basis. For example, the V1 classes “verb of putting” and “verb of motion” respectively account for 8.1% and 7.9% of a total of 518 V1 tokens. This tendency is commonly observed with the main verbs of English resultatives and V1s of Japanese V-V compounds.

At the same time, Table (64) shows that the V1 position is also open to various types of verbs that do not usually appear in English adjective resultatives. In particular, among such V1 verbs, there are a considerable number of verb classes that do not necessarily imply a change of state/location caused by direct exertion of force. Note that only those verbs that imply a change of state/location are marked with a pound symbol (#) in (64).

To further analyze the distribution of this tendency, I reorganized the V1 verb classes in (64) into nine different superordinate classes based on the common semantic features. Consider (65).

(65) Nine Superordinate Classes (Total: 518 tokens)

1. Causative change of state/location (173 tokens, 33.4%)

    Verbs of putting (42), verbs of change of state (38), verbs of change of possession (19), verbs of creation & transformation (16), verbs of cutting (12), verbs of removing (12), verbs of sending & carrying (9), verb of combining & attaching (7), verbs of separating & disassembling (4), engender verbs (3), verbs of consumption (3), verbs of killing (3), verbs of adjustment & arrangement (2), verbs of throwing (2), fix verbs (1)

2. Non-causative transitive (93 tokens, 18%)

    Verbs of communication (35), verbs of ingesting (20), hold & keep verbs (8), verbs of grooming (6), learn verbs (5), use verbs (4), verbs of performance (4), choose verbs (3), help verbs (2), verbs of searching (2), cook verbs (1), defend verbs (1), encounter verbs (1), verbs of social interaction (1)

3. Psychology/mental process (69 tokens, 13.3%)

    Psychology verbs (27), perception verbs (26), verbs of mental process (10), verbs of judgment & assessment (6)

4. Contact/Force (62 tokens, 12%)

    Verbs of contact by impact (33), verbs of existing force (20), verbs of contact (7), poke verbs (2)

5. Activity (43 tokens, 8.3%)

    Do verbs (20), verbs of bodily process (17), activity verbs (6)

6. Motion (41 tokens, 7.9%)

    Verbs of intransitive motion (41)

7. Existence/state (19 tokens, 3.7%)

    Verbs of existence (12), lodge verbs (3), state predicates (3), verbs of assuming a position (1)

8. Control (4 tokens, 0.8%)

    Verbs of rushing (2), control verbs (1), persuade verbs (1)

9. Others (14 tokens, 2.7%)

    Verbs of body state & damage to the body (7), verbs of emission (4), aspectual verbs (3)

Interestingly, Class No.3 (Psychology/mental process) represents over 13%, which outnumbers the percentage of Class No. 4 (Activity). Furthermore, verbs of Class No. 7 (Existence/state) includes unaccusative verbs and state predicates, which can appear in either the V1 or V2 position although the absolute number of their tokens is not large. If

the V-R construction of RVCs encodes the kinetic causative event based on the agent-patient opposition, the distribution patterns observed in (59), (64) and (65) cannot be explained well. Again, I suggest that the causative relation of Mandarin RVCs is based on the temporal relation encoded in the V-R construction, and that this is the source of its openness to a wide variety of verb classes licensed in the V1 position. This claim is also endorsed by the observation made in (57), Section 4.5.2, that over 49% of V2 can be predicated of the subject, which suggests that the agent argument of V1 can be identified with the experiencer/patient/theme argument of V2. This clearly violates the DOR.

4.5.6 Composition Principle of RVCs

S. Huang (2001) analyzed 456 verbs in *Hanyu Dongci Yongfa Cidian* (1999, eds. Zong Meng, et al. Shangwuyin Shuguan: Beijing) and classified them into 7 different lexical categories along the scale of volitionality. She then chose 76 verbs that are also listed in *Hanyu Dongci—Jieguo Buyu Dapei Cidian* (1987, eds. Nong Wang, et al. Beijing Yuyan Xueyuan Chubanshe: Beijing) and examined the distribution of these verbs. In her paper, she reports the relation between the lexical category of component verbs (V1 and V2) and the position where they appear, as in (66). Each verb example listed in (66) is the label of a group of verbs that share the same semantic distinction. There are a total of 12 verb groups in (66).

(66) Distribution of V1 and V2 by Lexical Category (S. Huang 2001: 102, (62))

[+volitional] ←——————————————→ [± or -volitional]

Weak resultative V			Activity V		Stative V	Unergative V		Unaccusative V			
kai	*sha*	*xi*	*chi*	*zhao*	*ai*	*guo*	*zou*	*ku*	*bing si*		*dong*
(open)	(kill)	(wash)	(eat)	(look for)	(love)	(pass)	(walk)	(cry)	(sick)	(die)	(understand)
V1	V1		V1		V1	V1		V1	V1		
V2[54]						V2		V2	V2		V2

She concludes that verbs that only appear in the V1 position, by and large, are not able to denote a result state of an event. She reports, in contrast, that verbs that appear in the V2 position are unaccusative verbs, which share the semantic features of [-volitional], [+state] and [+result], and that such unaccusative verbs never lose these semantic features when they are used as V1.

[54] This is represented as "C" in the original text. However it is changed to V2 in this paper for the convenience of representation.

Her analyses are based on the relation between the verbal distribution and the semantic categories of verbs as along the volitionality scale. Her conclusion is also supported by the results of my corpus analyses of V2s in (59) and V1s in (64). Beyond the domain of volitionality, I have attempted to classify the verbs of genuine RVCs from the CRD by the type of event denoted by the verb. This classification basically follows Levin's (1993) verbal classification.

The results of our analyses in (59) and (64) show that the most typical combination pattern of V1 and V2 in Mandarin RVCs is that verbs involving change of state or location appear in the V1 position most frequently, and that such verbs tend to choose as V2, verbs of state, evaluation, space/distance, orientation or shape, as shown in (67). The schema (67) shows the top five V1 and V2 verbs in frequency.

(67) Typical Combination of V1 and V2 (when viewed from V1 to V2)

V1		V2
1. Verbs of causative change of state		1. Verbs of state
2. Verbs of intransitive motion		2. Verbs of evaluation
3. Verbs of putting	→	3. Verbs of space/distance
4. Verbs of communication		4. Verbs of orientation
5. Verbs of change of location		5. Psych-verbs

When we look at the combination patterns reversely, we can find an interesting tendency in the data. The most frequently used verb classes for V2 include state predicates (235 tokens, 46%) and verbs of evaluation (66 tokens, 12.7%). (See the data in (59).) These two classes of V2 can combine with most verb classes of V1. This tendency is also confirmed with the data from the CNC. This suggests that RVCs typically assign the activity meaning to V1 and the result meaning to V2 as S. Huang (2001) claims. However, considering that state/evaluation V2s can choose most types of V1, the incorporation of an activity V1 is not a requisite condition in forming a resultative compound.

Secondly, some types of non-causative V1s, specifically V1s of perception, psychology and state, can combine with a V2 predicate of homogenous semantic type, such as sensation, psychology and state, as shown in (68). For each pair of figures in (68), the figure on the left is the token count in the CRD, and the one in the parentheses is the token count in the CNC.

(68) Non-change of State/Location V1 Combined with Sensation or Psychology V2

V1 \ V2	Sensation: 197 (29)	Psychology: 133 (16)	State: 1,070 (45)
a. Verbs of perception: 72 (35)	15 (5)	18 (2)	14 (5)
b. Psychology verbs: 64 (31)	15 (5)	11 (4)	14 (6)
c. State predicates: 30 (10)	1 (0)	3 (0)	13 (3)

From the data in (68), one can see that Mandarin RVCs allow the combination of a similar type of V1 and V2 in meaning, and that RVCs not only denote (causative) change of state/location events, but also denote non-causative events, such as a result of human perception or psychology, and a transition of the stative phases of a particular entity, although such instances are not so large in number. This tendency shows a striking contrast with English AP resultatives, which are extremely biased toward causative change of state/location events.

4.5.7 Lexical Meaning, Derived Meaning and Construction Meaning

4.5.7.1 Factors that Determine Argument Structure of RVCs

Mandarin RVCs can be either subject-oriented (intransitive) or object-oriented (transitive), depending primarily on the meaning of V2, as shown in (69).

(69) a. Subject-Oriented (Intransitive)
Ta he-zui le jiu.
he drink-drunk Asp liquor
(他喝醉了酒。)
"He got drunk by drinking liquor."

b. Object-Oriented (Transitive)
Ta he-guang le jiu.
he drink-nothing.left Asp liquor
(他喝光了酒。)
"He finished the liquor by drinking it."

The transitive/intransitive distinction of V2, whether being predicated of the subject or object, is primarily determined by the meaning of V1. In (70), the two RVCs share the same V2 *da* ("large"), but (70a) is intransitive, and (70b) is transitive.

(70) a. Subject-Oriented (Intransitive)
Haizi zhang-da le.

Child grow-large Prt
(孩子长大了。)
"The child grew up."

b. Object-Oriented (Transitive)
Tamen yang-da le haizi.
they raise-large Asp child
(他们养大了孩子。)
"They raised the child."

However, the causativization of RVCs is motivated more often by the meanings of an argument NP(s) of the RVC. The example (19a) is repeated in (71a) in comparison with an RVC with a different causer subject (71b).

(71) a. *Na jian dayi xi-guang-le san kuai xiangzao.*
that Cl overcoat wash-use.up-Asp three piece soap
(那件大衣洗光了三块香皂。)
"Washing that overcoat used up three bars of soap."

b. {?*Na kuai shoupa /?Nage} xi-guang-le san kuai xiangzao.*
{that Cl handkerchief/that-Cl} wash-use.up-Asp three piece soap
({?那块手帕/?那个}洗光了三块香皂。)
"Washing {that handkerchief/that thing} used up three bars of soap."

The subject "overcoat" is not the external argument of V1 *xi* ("wash"); it is introduced externally as the causer of the causative relation denoted by the RVC. The sentence (71a) is felicitous because the causativization of the RVC is clearly motivated by the construal of the size of the coat. In contrast, the sentence (71b) is less acceptable because the subjects in (71b) do not refer to things that are large enough to consume three bars of soap.

Based on the above discussion, one can conclude that the intransitive/transitive distinction is determined by the semantics of V2 or V1, and that the causativization is motivated not only by the meanings of component verbs, but also by the semantics of other lexical items of the construction, typically its subject NP. This is schematized in (72).

(72) Argument Structures and Structure Determinants

Argument Structure Type of RVCs	Structure Determinant
a. Intransitive/Transitive RVC	Verbal meaning (V2 or V1)

b. Causativized RVC: Verbal meaning (V2 or V1)
Semantics of other lexical items

4.5.7.2 Semantics of RVCs and Construction Meaning

In 4.5.4, I claimed that the meaning of the V2 predicate is coerced into a stative, adjectival sense in RVCs. There is a good reason to think that this aspectual coercion is caused by the V-R construction because the process occurs unconditionally despite the original lexical meaning of the V2.

In this coercion process, the whole, superordinate event is interpreted as involving a change of state due to the inference induced by the serialization of the anteceding event and the subsequent event in the V-R construction. This type of inference can also be observed with the semantics of English adjective resultatives.

Furthermore, RVCs can be causativized irrespective of the argument structure of V1 or V2. Active RVCs present agentive, transitive and causative uses, and unaccusative RVCs present unaccusative and causative uses, as discussed in 4.3.6. It can be thought that the causative sense is made available by the serialization of the two events in the V-R construction. This inferred causative sense is also motivated by the semantics of other lexical items, such as argument NPs. In an active or transitive RVC, the causative sense is made possible by the lexical properties of the active/transitive V1s, because they are able to assign an agent to the external argument. But in an unaccusative RVC, the causative reading is induced by a non-verval component of the compound because unaccusative V1s have no external argument.

4.6 Headedness of RVCs

There have been many discussions over the headedness of RVCs in various linguistic frameworks including generative grammar, lexical semantics, cognitive linguistics, linguistic typology, etc. Basically there are four major accounts for the headedness of RVCs: head-initial account, head-final account, double-head account and no-head account. In the following sections, I will summarize major studies of these four accounts, and closely examine the nature of the headedness of RVCs.

4.6.1 Previous Literature

4.6.1.1 C.-T. Huang's (1992) Account

As already discussed in 4.2, C.-T. Huang (1992) claims that a parallelism exists between the phrasal compound structure (complex V' predicate) and the lexical compound structure (V^0 compound or RVC). The phrasal compound has the following syntactic

structure in (73a), and the lexical compound in (73b-2) is derived from the structure (73b-1) by a process of V'→V^0 reanalysis.[55]

(73) a. Zhangsan [$_{VP}$[$_{V'}$ [$_{V0}$ ku-de shoupa [$_{RC}$ [$_{NP}$ Pro [$_{VP}$ dou shi le]]]]]
Zhangsan cry-DE[56] handkerchief all wet Asp
(张三哭得手帕都湿了。)
"Zhangsan cried so much that the handkerchief got wet."
(C.-T. Huang 1992 (44a))

b-1. Zhangsan [$_{VP}$ [$_{NP}$ shoupa [$_{V'}$ [$_{V0}$ ku [$_{RC}$ shi-le]]]]]
Zhangsan handkerchief cry-wet-Asp

b-2.→Reanalyzed as: Zhangsan [$_{VP}$[$_{V0}$ ku-shi-le [$_{NP}$ shoupa]]]
Zhangsan cry-wet-Asp handkerchief
(张三哭湿了手帕。)
"Zhangsan cried until the handkerchief got wet."

C.-T. Huang (1992) claims that the only difference between (73a) and (73b-1, 2) is whether their structures are phrasal or lexical. According to this claim, V1 *ku* ("cry") in (73b-2) was originally generated in the head position of the VP in (73b-1), and thus it may be concluded that the complex predicate is head-initial. Sybesma (1999) also supports this head-initial view of Huang's. He proposes a small clause analysis for Mandarin RVCs. In his analysis, V1, as the head of the VP, takes a small clause comprised of an NP and a V2, which is its complement.

4.6.1.2 Li's (1990, 1993) Account

Li (1990) proposes a head-initial account based on the salience of the component verbs of the event structure. He claims that the theta-role (Θ1) assigned by V1 to its argument is the most prominent, and that this hierarchy information is strictly maintained in the compound in the way that the causer theta role (Θ1) assigned by V1 is always higher in salience than the causee theta role (Θa) assigned by V2. He concludes that this can be accounted for by the percolation principle of the head features (Selkirk 1982, Leiber 1983, Di Sciullo & Williams 1987), and that V1 is thus the morphological head of the

[55] For convenience, in (73) I have added some brackets and the reanalysis process to C.-T. Huang's original examples.

[56] Note that this *de* (得) is the degree manner marker, also being referred to as the CSC (Complement Stative Construction) marker by Li & Thompson (1981), and it is distinguished from the potential marker *de* (得) although they share the identical character and reading. Also, see Section 3.2.2.13.

compound.[57] Furthermore, Li (1993) modifies Grimshaw's event structure model (Event = Activity & State) and incorporates it into his headed-event structure model (Event = Aspectual head & Aspectual complement). The former model is too strict to account for RVCs such as *lei-ku* (累哭: be.tired-cry, "cry because of being tired"), but the latter model can handle such RVCs.

4.6.1.3 Cheng & Huang's (1994) Account

Cheng & Huang (1994) support a head-initial account, assuming that the term "head" must refer to a structural notion, not a conceptual notion. They claim that V1 is the head of the compound because it always determines the syntactic behavior of the compound. If V1 is an active verb, the entire RVC is an active type (such as activity or transitive RVCs). If V1 is a non-active verb, the entire RVC is a non-active type (such as unaccusative RVCs). In addition, Cheng & Huang (1994) claim that a group of semantically related RVCs may represent a set of different results of the action denoted by V1. For example, a set of phrasal verbs including *push up*, *push down*, *push in*, etc., is headed by the same verb *push*, but the particles determine the type of the result.

4.6.1.4 Gu's (1992) Double-Head Account

Gu (1992) rejects the notion of the relativized head account by Di Sciullo & William (1987), claiming that it is invalid with respect to Mandarin RVCs. She argues that the application of the account can incorrectly rule out many well-formed RVCs. The relativized head analysis is based on the percolation of the categorical features of the head to the compound. But in the compounding process of Mandarin RVCs, the component category features are not necessarily percolated to the entire compound in a principled way. For example, the RVCs [chi_V-wan_A]$_V$ (吃完: eat-late, "finish eating") and [lei_A-ku_V]$_V$ (累哭: be.tired-cry, "cry out of fatigue") show that there is no principled agreement between the categorical features of the components and those of the compounds.

Instead, she proposes a double-head analysis by citing the examples in (74) to demonstrate that V1 and V2 are equally responsible for determining the argument structure of the compounds.

[57] Claire H.-H. Chang (1997) suggests that compounds composed of two intransitives with no shared entity (such as *lei-si* (累死, "become.tired-die")) are actually double-headed, given the assumption that the syntactic features and transitivity are determined by the head.

(74) a. *Zhangsan jiao*(*-hui*)*-le* *Lisi nei shou shi.*
Zhangsan teach(-know)-Asp Lisi that Cl poem
(张三教(会)了李四那首诗。)
"Zhangsan taught Lisi that poem (and as a result Lisi learned it)."
(Gu 1992: 124, (56))

b. *Zhangsan* (*xia-*)*ying-le* *Lisi san* *pan qi.*
Zhangsan (play-)win-Asp Lisi three Cl chess
(张三(下)赢了李四三盘棋。)
"Zhangsan beat Lisi in three games of chess." (ibid: 125, (58))

In (74a), V1 is a three-place predicate and V2 is omissible. Thus, it can be considered that the three-place argument structure of the compound is provided by V1. On the contrary, V2 is the head in (74b) because V2 is a three-place predicate and V1 is omissible. In this way, either V1 or V2 of an RVC can function as the head that determines the argument structure of the compound.

4.6.1.5 L. Shen (1993), Tai (1973, 1985, 2003) and J. Shen (2003)

L. Shen (1993) proposes the head-final account based on the observation that V1 is omissible when the RVC is used in the unaccusative use. He claims that this suggests V1 is semantically subordinated to V2. Those in (75) are such examples.

(75) a. *Feng gua-dao-le* *shu*.
wind blow-fall-Aps tree
(风刮到了树。)
"The wind blew down the tree."

b. *Shu gua-dao le*.
tree blow-fall Prt
(树刮到了。)
"The tree fell down by being blown."

c. *dao* ((x' *shu*)) → *gua-dao* ((x' *shu*))
fall blow-fall (L. Shen 1993: (34a, b, c))

In (74a), the argument of V1 (*gua*: 刮, "blow") and the argument of V2 (*dao*: 倒, "fall") refer to different entities (*feng*: 风, "wind," and *shu*: 树, "tree"). When this is the case, the argument of V1 can be omitted as in (75b) because, as L. Shen claims, the argument of V2 is an inherent argument of the RVC while the argument of V1 is not.

Therefore, V2 is the head of the compound.

Tai (1973, 2003) also proposes a head-final account based on the semantic analyses of RVCs. He analyzes the result complement V2 as the center of predication because the result complement V2 seems to indicate foreground information, and the action verb V1 seems to indicate background information. For example, the active/transitive verb *sha* ("kill") in Mandarin does not necessarily imply the attainment of the goal as shown in (76a),[58] whereas the verb compound with a result complement must imply the attainment of the goal, as in (76b).

(76) a. *Wo sha-le John liang ci, ta dou mei si*.
I kill-Asp John two Cl he all not die
(我杀了 John 两次,他都没死。)
"I performed the action of attempting to kill John twice, but he didn't die."
b. **Wo sha-si-le John liang ci, ta dou mei si*.
I kill-die-Asp John two Cl he all not die
(*我杀死了 John 两次,他都没死。)
"I killed John twice, but he didn't die." (Tai 2003: 306; (12), (13))

For RVCs to denote an accomplishment event, V2 is always necessary although it is not considered the main verb in surface syntax in the framework of generative grammar, whereas the activity verb (V1) functions like a manner adverb in RVCs. This view is also supported by Talmy's (2000b) treatment of the semantic category of result, which is incorporated in the main event, not in the co-event. Based on these observations, Tai (2003) concludes that Mandarin should be viewed primarily as a verb-framed language and only secondarily a satellite-framed language.

On the other hand, J. Shen (2003) examines the headedness of RVCs by giving various tests proposed by other researchers.[59] In conclusion, he judges that RVCs are head-initial because phrases of the head-final construction do not pass the "A *mei* A test," whereas RVCs do pass it.

(77) A-*Mei*-A Test
a. RVC:

[58] In spite of this claim, some Chinese researchers hold that the verb *kill* clearly implies the death of the patient.

[59] The reduction tests by Linding Li (1984) and the expansion test by Xiwen Ma (1987) support a head-final view; Ren Ying (2001) suggests that RVCs can be either head-initial or head-final because Mandarin allows a mix of verb-framed type and the satellite-framed type structures.

Maozi chui-diao le. →	*Maozi chui mei chui-diao.*
hat blow-away Prt	hat blow MEI blow-away
(帽子吹掉了。)	(帽子吹没掉。)
"The hat was blown away."	"The hat was blown but it was not blown away"
	(Shen 2003:19 (citation from Ma (1987)))

b. Head-final phrase:

Zuo-kan chengbai →	**Zuo mei zuo-kan chengbai*
sit-watch success-and-failure	sit MEI sit-watch success-and-failure
(坐看成败)	(*坐没坐看成败)
"watch whether something will result in success or not by sitting"	"sat but did not watch whether something would result in success or not by sitting"
	(Shen 2003: 21)

However, J. Shen (2003) rejects a view that Mandarin is a strong satellite-framed language. He claims that it can be considered a type of satellite-framed language, but not a typical type like English.

4.6.2 Discussions

4.6.2.1 Nature of Notion of Head

Given the previous discussions, it is clear that the traditional event schema of Activity-Result used to account for English resultatives cannot fully capture the semantics of Mandarin RVCs. In the traditional view, the head has been considered a syntactical or morphological entity responsible for determining any grammatical properties of the whole linguistic unit that incorporates the head. Such grammatical properties are typically associated with the following grammatical domains:

(78) a. Realization of the arguments
b. Aspectual properties of the complex predicate
c. Event structure
d. Grammatical categories of the component verbs and the complex predicate

Many attempts have been made to define the grammatical features of the head of RVCs in the above domains, and various analyses have been proposed from different theoretical perspectives. However, in these studies, little attention has been paid to the questions of whether the head is:

1) A single grammatical entity or a set of compositionally derived features
2) A semantic constant or variable

In the following sections, I will propose how the above two questions can be elucidated in identifying the nature of the headedness of RVCs. Based on the discussions in the previous sections, I will suggest that it is not that only a single grammatical item/factor is responsible for determining the whole linguistic properties of RVCs, but rather such properties are compositionally determined by V1, V2 and the V-R construction. I will also suggest that the grammatical properties of V1, V2 and the V-R construction are mutually influenced by one another.

4.6.2.2 V2 as Center of Predication

As Tai (2003) claims, the attainment of the goal of an activity denoted by the RVC is determined by the presence of V2 in the V-R construction. It is V2 that provides the achievement/accomplishment aspect to RVCs, which other lexical agentive verbs do not have. Furthermore, the activity process of the V1 event is aspectually invisible to the RVC. (See discussions in 4.4.4.2.) Thus RVCs are negated by *mei* (没), not by *bu* (不), which is normally used for the negation of V1 when the verb is used independently. For this reason, it is considered appropriate to treat V2 as the center of predication.

4.6.2.3 Semantic Coercion of V2

The center of predication and the notion of head are utterly different in that the head is a grammatical category, whereas the center of predication is not. Indeed, V2 seems to determine the aspect of the entire RVC because adjectival V2s and entire RVCs are negated by the same negation marker *mei*. But the adjectival status of V2 is not necessarily attributed to the lexical properties of V2 because lexical activity verbs also appear in the V2 position. Consider the examples in (79).

(79) *chi-tu* (吃吐: eat-vomit, “vomit after eating”), *dou-xiao* (逗笑: tease-laugh, “laugh by being teased”), *lei-ku* (累哭: be.tired-cry, “cry out of fatigue”), *lei-pao* (累跑: be.tired-away, “leave (somewhere) out of fatigue”), *xia-ku* (吓哭: get.surprised-cry, “cry out of surprise”)

Given these facts, it is reasonable to think that the V-R construction coerces the semantics of V2 into that of an adjective. Verbs such as *kai* (开, “open”) and *huai* (坏, “break” or “be broken”) have both verbal and adjectival meanings. However, when they

appear in the V2 position, only the adjectival meaning is chosen and the verbal meaning is cancelled by the V-R construction. Pure adjectives such as *da* (大, "large") and *duan* (短, "short") can freely appear in the V2 position, but purely verbal predicates such as *chi* (吃, "eat") and *xie* (写, "write") are rejected by the V-R construction.

The above claim is supported by the statistical data of the CRD. In the CRD, I found 78 verbs that can appear both in the V1 and V2 positions. (For the complete list, see Appendix C5.) The largest class (42 instances; 53.8%) is a group of verbs that denotes a (causative) change of state when used as V1 and a stative use when used as V2. They include verbs such as *ding* (定, "fix/fixed"), *kai* (开, "open"), *liang* (亮, "(make/become) bright"), *si* (撕, "tear/torn"), *wen* (温, "(make/become) warm") and *zhi* (直, "(make/become) straight"). Some of these verbs have a causative reading when they are used alone.

Other smaller classes include motion verbs (4 verbs) and verbs of physical response (8 verbs). These two small verb classes also include some agentive verbs that can depict a result state when used in the V2 position. Consider (80). Those marked with an asterisk have an agentive reading when they are used as a lexical verb.

(80) a. Motion Verbs

*dong (动, "move"), *fei (飞, "fly/off"), *pao (跑, "run/away"), *zou (走, "walk/away")

b. Verbs of Physical Response

bing (病, "(become) ill"), *ku (哭, "cry"), kun (困, "sleepy"), lei (累, "become/be tired"), *shui (睡, "sleep"), *xiao (笑, "laugh"), xing (醒, "wake up/awoken")

Finally, there is a group of verbs (15 verbs) that have different usages when they are used in the V1 or V2 positions. Such examples are given in (81).

(81) Verbs with Different Meanings as V1 and V2

	Meaning as V1	Meaning as V2
a. *chou* (抽)	pull, suck	be shrunk
b. *chuan* (穿)	wear	be penetrated
c. *fu* (服)	dose	be convinced
d. *ning* (拧)	twist/pinch,[60] turn	mistaken
e. *za* (砸)	hit	in failure

[60] Pronounced in the second tone for this meaning.

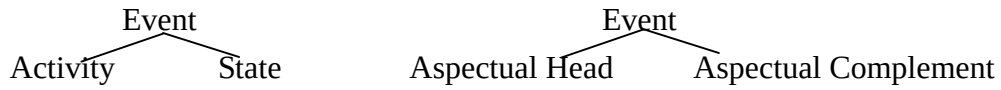
f. *zha* (炸) cook,[61] explode angry

Following the above observations, I believe it is reasonable to propose that V2 is the center of predication, but V2 per se does not have any ability to determine a grammatical feature of the compound. Rather, its grammatical status in the compound is defined by the V-R construction through semantic coercion.

4.6.2.4 Aspectual Head

Grimshaw (1990) proposes an event structure model as in (82a). The model, however, cannot capture non-active predicates that appear in the V1 position of Mandarin RVCs. Li (1990) introduces an event structure model which consists of the aspectual head and the aspectual complement to account for the fact that a non-active V1 appears in the position of the cause event.

(82) a. Grimshaw's Event Model b. Li's Event Model



Li's (1990) proposal that V1 is the aspectual head is based on the assumption that the causer argument has the highest salience in both the causative hierarchy (or aspectual hierarchy to use Grimshaw's term) and the thematic hierarchy. As discussed previously, however, the causative relation of Mandarin RVCs does not necessarily encode the direct transmission of force from a volitional agent/causer to its paired patient/causee. Rather, the causative relation of RVCs is conceptualized based on a temporal relation between the anteceding event (V1) and the subsequent event (V2). (See the discussions in 4.3.2, 4.3.3, 4.3.4, 4.4.4.4 and 4.4.5.)

Given this, it can be considered that the backgrounded V1 event aspectually marks the realization of the foregrounded V2 event. In other words, the V1 event is lower in salience than the V2 event, and it sets the initial boundary for the aspectual structure of the V2. The term "initial boundary" was proposed by Fillip (1994), who points out that in Slavic languages there are two types of perfective verbs: one type "focus[es] on the tail end or (the crossing of) the final boundary of a full-fledged situation," and the other type "encode[s] the beginning of a situation (inchoatives) in particular, if they are derived from imperfective verbs denoting atelic states and processes." She uses the term initial boundary for the latter type of the aspectual crossing.

[61] Pronounced in the second tone for this meaning.

The grammatical function of the V1 event is to set the initial boundary for the V2 event so that the V2 event may be understood as a resultative state. This explains why RVCs do not allow the progressive form, and also why the compounds are negated by the negation marker *mei*, which is used to negate stative aspect. These discussions can be summed up as follows:

1) Since the V1 event is lower in salience than the V2 event in the temporal relation of the subevents of an RVC, V1 should not be regarded as the aspectual head.
2) V1 determines the initial boundary of the V2 event.
3) The result sense of the V2 event is generated by the serial arrangement of the two component verbs.
4) The aspectual properties of RVCs are compositionally determined by the two component verbs.

4.6.2.5 Cliticization of V2

The cliticization of V2 is a process in which V2 comes to assume a grammatical function in the compound, instead of expressing its original lexical meanings. V2 can basically be regarded as the center of predication, but some V2 verbs lose their lexical meaning through cliticization. This causes a mismatch between the grammatical status of the V2 position and the predicative meaning of V2. Consider (83).

(83) a. *Dafeng chui-diao-le wo de maozi*.
strong wind blow-drop-Asp I Gen hat
(大风吹掉了我的帽子。)
"A strong wind blew off my hat."

a'. *Wo de maozi* (*chui*-)*diao le*.
I Gen hat (blow-)drop Prt
(我的帽子吹(掉)了。)
"My hat fell off (by being blown)."

b. *Wo diu*(-*diao*[62])-*le yaoshi*.
I loose(-gone)-Asp key.
(我丢(掉)了钥匙。)
"I lost the key."

[62] In the southern district of China, as well as in Taiwan, the verb *diao* (掉) is more commonly used than in the northern district, as a result predicate which denotes that something has been finished or has disappeared. Native speakers in Beijing may generally omit *diao* in this example.

b’. *Yaoshi* * (*diu-*)*diao*[63] *le*.
key (loose-)gone Prt
(钥匙*(丢)掉了。)
“The key is gone.”

The V2 *diao* (掉, “drop”) in (83a, a’) is a full-fledged verb while the counterpart in (83b, b’) functions as a clitic (or phase marker) that only represents the disappearance of something. In the cases of (83a, a’), V2 is clearly considered the center of predication. On the contrary, in the cases of (83b, b’), V1 should be treated as the center of predication because V1 is the sole component that preserves predicative meaning in the compound. V2 loses its lexical meaning through cliticization, but the negation adverb *mei* still modifies the cliticized V2, as in (84).

(84) a. *mei diao* (没掉)
Neg loose
b. *mei* (*chui-*)*diao* (没(吹)掉)
Neg (blow-)gone
c. *mei* *(*diu-*)*diao* (没*(丢)掉)
Neg (loose-)gone

This type of mismatch between lexical meanings and grammatical meanings is often seen in Japanese V-V compounds too. For example, the verb *mawaru* (回る, “turn around, go around”) has a clitic use that functions like the English particle *around*. Consider (85).

(85) a. *machi wo* (*aruki-*)*mawaru*
city Pth (walk-)go.around
“walk around the city”
b. *kodomo wo* *(*sagashi*)-*mawaru*
child Acc (search.for-)around
“walk around to find one’s child”

In (85a), V1 and V2 share the path argument (*machi*, “city”) and V1 is omissible because V2 determines the aspect of the compounds as the head. But in (85b), V1 is not omissible because V1 is the center of predication that supports the argument relation

[63] The sentence is legitimate if the verb means “to drop.”

with the patient (*kodomo*, “child”). V2 has lost its original verbal meaning through semantic bleaching, and it only adds the adverbial meaning “around” to V1.

The examples in (83) and (84) present cases where the “aspectual center”[64] and the center of predication are borne by two different components of the compound, even if the compounds morphologically share the same V2. As far as Mandarin RVCs are concerned, it is extremely difficult to draw a clear line between lexically productive V2s and cliticized V2s. What makes things more complicated is that this distinction is neither morphologically marked nor lexically consistent. Therefore, I see no advantage in introducing the notion of head to grammatically distinguish RVCs with a lexical V2 from those with a cliticized V2.

4.6.2.6 Argument Realization

We have seen the possible argument relations of Mandarin RVCs in 4.2.2, 4.2.3 and 4.3.5. From the discussions therein, the argument realization of Mandarin RVCs can be characterized by the following features:

(86) a. V1 and V2 do not necessarily have to share the theme/patient argument.
b. What is not selected by V1 can be realized as the causer argument if it is understood as having a causal effect on other argument NP(s).

The feature (86a) can also be observed with English non-subcategorized resultatives (or English EMC resultatives). But in the case of English non-subcategorized resultatives, the AP must be predicated of the theme/patient argument. But this is not the case with Mandarin RVCs. Consider the examples in (87). V2 of (87a) is predicated of the subject (*wo*: 我, “I”), and V2 of (87b) is predicated of the object (*toufa*: 头发, “hair”). English resultatives never allow the subject-oriented type like (87a).

(87) a. *Wo chi-ni-le* *Chuancai*.
I eat-be.fed.up-Asp Sichuan food
(我吃腻了川菜。)
“I got sick of eating Sichuan food.”
b. *Wo shui-luan-le* *toufa*.
I sleep-messy-Asp hair
(我睡乱了头发。)

[64] This notion is different from Li’s (1990) term “aspectual head.” I use the term “aspectual center” as the component that primarily contributes the core aspectual structure to the compound.

"I made my hair untidy while sleeping."

Secondly, the object of (87a) (*Chuancai*: 川菜, "Sichuan food") is not an argument of the compound, but rather is a non-referential object. RVCs with a post-verbal non-referential object are grammatically parallel to verb copying constructions like (88), which is more frequently used than the pattern in (87a).

(88) *Wo chi Chuancai chi-ni le.*
I eat Sichuan food eat-be.fed.up Prt
(我吃川菜吃腻了。)
"I got sick of eating Sichuan food."

Apart from these argument realization principles, the biggest question is how an unselected argument of V1 can be realized as the causer of RVCs. (For details of the grammatical constraints on causer NPs, see 4.3.6.) As discussed in 4.5.6.1, I suggest that the semantics of a nonverbal lexical component are involved in justifying the causativization of RVCs. But at the same time, it must be noted that the type of V1 determines the type of the inanimate causer that the RVC can take. If V1 is an active verb, the causer is an NP that refers to the target of the V1, an activity or an event associated with V1. The examples from (19a, b, c) are repeated in (89a, b, c) respectively.

(89) a. Target of Activity
Na jian dayi xi-guang-le san kuai xiangzao.
that Cl overcoat wash-use.up-Asp three piece soap
(那件大衣洗光了三块香皂。)
"Washing that overcoat used up three bars of soap."
b. Activity
Shanghai de chefei hen gui, meitian zuo che
Shanghai Gen vehicle fare very expensive, everyday sit vehicle
dou ba wo zuo-qiong le.
entirely BA I sit-poor Prt
(上海的车费很贵、每天坐车都把我坐穷了。)
"Public transport fares are very expensive in Shanghai, and my taking public transport every day made me completely poor."
c. Event associated with V1

Zuotian de malasong bisai ke ba wo de tui pao-suan le.
yesterday Gen marathon race really BA I Gen leg run-tired Prt
(昨天的马拉松比赛可把我的腿跑酸了。)
"Running in yesterday's marathon made my legs really tired."

On the other hand, if V1 is a non-active verb, the causer is an NP that refers to a situation, an incident or a circumstantial factor. The examples from (19d, e, f) are repeated in (90).

(90) a. Situation
Duonian de xinku lei-dao-le mama.
many year Gen hardship tired-collapse mother
(多年的辛苦累倒了妈妈。)
"My mother collapsed from fatigue after many years of hardship"

b. Incident
Na nian de hanzai e-si-le hen duo ren.
that year Gen drought starve-die-Asp very many people
(那年的旱灾饿死了很多人。)
"That year's drought starved many people to death."

c. Circumstantial factor
Dongtian de lengyu ba wo de shou dong-jiang le.
winter Gen cold-rain BA I Gen hand freeze-stiff Prt
(冬天的冷雨把我的手冻僵了。)
"The winter's cold rain froze my hands stiff."

These data show that the lexical properties of both V1 and V2 are involved in defining the semantic type of the inanimate causer. In addition, the construal of the causer NP can effect the causativization of RVCs. This suggests that non-verbal components of the compound also help determine the realization of the result event. The example (71), repeated here as (91), illustrates this point.

(91) *Na jian dayi xi-guang-le san kuai xiangzao.*
that Cl overcoat wash-use.up-Asp three piece soap
(那件大衣洗光了三块香皂。)
"Washing that overcoat used up three bars of soap."

In (91) the subject NP “overcoat” is realized as the causer in the surface syntax. However, the central causative factor is the largeness of the coat in the depicted situation, not just the coat itself. Our knowledge about the referent of the subject NP leads us to build an interpretation that an activity of washing a whole coat can cause a particular result, which justifies the causativization of the sentence.

In conclusion, the grammatical functions of what we understand as the “head” are borne by various lexical or non-lexical factors in RVCs, and sometimes multiple factors are compositionally involved in the determination of a particular grammatical feature of RVCs. The notion of head has traditionally been considered a single lexical component in the complex structure determines the major grammatical features of RVCs. However such a view is not appropriate for effectively capturing the grammatical behaviors of Mandarin RVCs.

4.7 Summary

I have discussed various linguistic properties of Mandarin RVCs, such as agentivity/causativity, aspect structure, event composition principles, semantics of the V-R construction, and issues associated with headedness, in an attempt to compare their grammatical behaviors with those of English resultatives and Japanese V-V compounds.

Most importantly, the causal relation of Mandarin RVCs is derived from the temporal relation between V1 and V2, rather than the transmission of direct force from the volitional agent to the patient as in English resultatives. In addition, V1 of Mandarin RVCs serves to provide the initial boundary for V2. This is the opposite of English resultatives, whose V1 is aspectually delimited by V2. As to the headedness of Mandarin RVCs, it is not that a sole single lexical component that determines the grammatical features of the compound. In other words, various factors including component verbs, the V-R construction, and the semantic properties of argument NP(s) are compositionally involved in this process.

Chapter 5

Conclusion

5.1 Summary of Previous Chapters

In Chapters 2 though 4, we have seen the semantic features of resultatives of English, Japanese and Mandarin. English encodes resultative events syntactically, whereas Japanese does so by means of morphological compounds. Mandarin also realizes resultative constructions by means of compounds. However despite the nature of their morphological structures, Mandarin V-V compounds also show a change of syntactic valence such as causative alternations.

In terms of agentivity or causativity, English AP resultatives denote the agent/patient opposition encoded in the first causing segment of the causal chain. Therefore to link the causing segment to the result segment, the theme argument of the result predicate must be linked to the patient argument of the verb, not the agent argument. In contrast, Mandarin and Japanese V-V compounds can ignore this linking condition. In these languages, the theme of change of state event can be linked to the agent of the verb. This suggests that in these two languages, resultatives do not necessarily have the causative event structure. Therefore an agentive event can start at the second node of the causal chain by linking the agent to the theme of change of state.

In the semantics of the temporal relation between the causing event and the result events, it is shown that English AP resultatives have stronger constraints on the mediation of a temporal gap between the two subevents than Japanese or Mandarin do. In particular, Mandarin resultatives allow such a temporal gap considerably freely. This seems to be correlated with our claim that Mandarin resultatives do not necessarily encode a causative relation as an underlying structure.

As for aspectual structures, the event structure of Mandarin resultatives does not rely on the causal chain, but on the temporal transition chain between the V1 event and the V2 event. This type of event structure enables the appearance of a situational causer in the subject position. This temporal transition chain is structured by the compounding of the two subevents. In this sense, if the head specifies aspectual information of the compound, the existing definition of head should be reconsidered.

Japanese V-V compounds, because of their nature as being genuine lexical compounds, show different behaviors that cannot be found in either English or Mandarin. In this discussion, it is proposed that Japanese V-V compounds are subject to

the Causal Hierarchy Condition when V1 selects its partner V2. Since the notion of cause cannot syntactically be encoded, it has to encode in V1 or V2. If the notions of manner/means and cause are to be encoded in a single compound, the notion of manner/means must be encoded in V2 and the notion of cause in V2, because verbs of manner/means are higher than lexical causative verbs in the verb hierarchy.

5.2 Implications to Existing Approaches: Lexical Approach and Constructional Approach

The lexical approach and the constructional approach are often compared as conflicting theories. This paper, however, does not intend to reject either one of these approaches, but to explore what grammatical notions are shared and what distinctive linguistic strategies are taken across languages of different typological features in order to denote resultative events.

Above all, one of the most important themes is to explicate the semantics of how each lexical component is construed in relation to the whole construct, as well as of how the whole construct governs the components. The construction grammar assumes that the semantic relation of an expression originates not from the total sum of the componential properties, but from a gestalt of the construction as a whole. If so, it can also be assumed that the semantic relation of an expression is determined in the way that the semantic elements are merged into a larger, seamless whole, which in turn governs the semantic distribution of the components. In other words, a sentential meaning is determined through a dynamic semantic relativism among the components, and also among the whole construct and its components. In English, Japanese and Mandarin, resultatives are not like fixed idioms with no internal structure, but they present a high level of productivity. In this sprit, I think that it is very important to clarify the semantic dynamism inside the internal structure of resultative constructions.

5.3 Concluding Remarks

In this study, I have attempted to explicate the semantics of resultatives by comparing English resultatives with Japanese and Mandarin V-V compounds. However I was unable to discuss Japanese periphrastic resultatives because of space limitations. They represent resultative expressions by using an adverbial phrase. Korean can also represent resultative expressions periphrastically or by means of V-V compounds. Mandarin is able to represent resultative events by means of a semi-periphrastic strategy: *de*-construction. I believe that it is of great significance to examine such a semantic parallelism of these two different levels of resultatives cross-linguistically.

Also it is worth attempting to explore the semantics of the construction continuum between the resultative construction and the presentative construction of Mandarin.

Reference

Akiyama, Atsushi. 1998. “Goi gainen kouzou to douho fukugou doushi.” *Chuugokugogaku*, No. 245: 32-41, 1998. The Chinese Linguistic Society of Japan. (秋山淳. 1998.「語彙概念構造と動補複合動詞」『中国語学』245: 32-41. 日本中国語学会.)

Alsina, Alex. 1996. “Resultatives: A Joint Operation of Semantic and Syntactic Structures.” Paper presented at the LFG Workshop, Grenoble, France, August 1996.

Anderson, J. M. 1971. *The Grammar of Case: Towards a Localistic Theory*. London: Cambridge University Press.

Bhuvana Narasimhan, Vittorio Di Tomaso and Cornelia M. Verspoor. 1996. “Unaccusative or Unergative? Verbs of Manner of Motion.” *Quaderni del laboratorio di linguistica*, 10, Scuola Normale Superiore of Pisa Narasimhan. et. al.

Boas, Hans C. 2003. *A Constructional Approach to Resultatives.Center for the Study of Language and Information* - Stanford Monographs in Linguistics. Stanford: CSLI Publications.

Burzio, L., 1986. *Italian Syntax: A Government-Binding Approach*. Dordrecht: Reidel.

Carrier, Jill-Janet H. Randall 1992. “The argument structure and syntactic structure of resultative.” *Linguistic Inquiry* 23: 173-234.

Chang, Jung-Hsing. 2001. “The Syntax of Event Structure in Chinese.” Honolulu: University of Hawaii dissertation.

Chang, Jung-Hsing. 2003. “Event Structure and Argument Linking in Chinese.” *LANGAGE AND LINGUISTICS 4.2*: 317-352.

Chang, L.-S. Lisa, C.-T. James Huang, Y.-H. Audrey Li, and C.-C. Jane Tang. 1997. “Causative Compounds across Chinese Dialects: A Study of Cantonese, Mandarin and Taiwanese.” *Chinese Languages and Linguistics IV: Typological Studies of Languages in China, Symposium Series of the Institute of History and Philology, Number 2* (pp. 199-224). Taiwan: Academia Sinica.

Chao, Yuen Ren. 1968. *A grammar of spoken Chinese.* Berkley: University of California Press.

Chen 1998. “Lun xiandai Hanyu shijian xitong de san yuan jiegou.” *Zhongguo Yuwen*, vol. 6. (陈平. 1988: 410-430. 「论现代汉语时间系统的三元结构」《中国语文》1988 年第 6 期: 410-430.)

Cheng, Lisa Lai-Shen. and C.-T. James Huang. 1994. “On the Argument Structure of Resultative Compounds.” In Matthew Chen and Ovid Tzeng (Eds.), *In honor of William S.-Y. Wang Interdisciplinary studies on language and language change* (pp. 187-221). Taipei: Pyramid Press.

Chomsky, Noam. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.

Chomsky, Noam. 1986. *Knowledge of Language: Its Nature, Origin, and Use*. New York: Praeger.

Comrie, Bernard. 1976. *Aspect*. Cambridge: Cambridge University Press. (『アスペクト』1988. 山田小枝訳. むぎ書房.)

Comrie, Bernard. 1981. *Language Universals & Linguistic Typology*. University of Chicago. (『言語普遍性と言語類型論』松本克巳･山本秀樹訳. 1992. 東京: ひつじ書房.)

Croft, William. 1991. *Syntactic Categories and Grammatical Relations.* Chicago: University of Chicago Press.

Croft, William. 1994. "The Semantics of Subjecthood." In M. Yaguello (Ed.), *Subjecthood and Subjectivity: The Status of the Subject in Linguistic Theory* (pp. 29-75). Ophrys: Paris.

Croft, William. 1998. "Event Structure in Argument Linking." In M. Butt and W. Geuder (Eds.), *The Projection of Arguments*. CSLI Publications.

Croft, William. 2000. *Verbs: Aspect and Argument Structure*. Ms. University of Manchester and Max Planck Institut für Evolutionäre Anthropologie.

Di Sciullo, Anna-Maria, and Edwin Williams. 1987. *On the Definition of Word*. Cambridge, Mass.: MIT Press.

Dixon, R.M.W. 2000. "A typology of causatives: form, syntax and meaning." In Dixon and Aikhenvald (2000), *Changing Valency* (pp. 30-83). Cambridge: Cambridge University Press.

Dowty, D.R. 1991. "Thematic Proto-Roles and Argument Selection." *Language* 67: 547-619.

Filip, Hana. 1997. "Integrating Telicity, Aspect and NP Semantics: The Role of Thematic Structure." In Jindřich Toman (Ed), *Formal Approaches to Slavic Linguistics, Volume III*, *The College Park Meeting 1994* (pp. 61-96). Ann Arbor Michigan Slavic Publications.

Fillmore, Charles. 1968. "The Case for Case." In Emmon Back and Robert Harms (Eds.), *Universals in Linguistic Theory* (pp.1-88). New York: Rinehart & Winston.

Fillmore, Charles. 1971. "Verbs of judging: an exercise in semantic description." In Fillmore and Langendoen (Eds.), *Studies in Linguistic Semantics* (pp. 272-289). New York: Holt, Rinehart & Winston.

Fillmore, Charles. 1982. "Frame semantics." *Linguistics in the Morning Calm* (pp. 111-137). Seoul, Hanshin Publishing Co.

Goldberg, Adele E. 1995. *Constructions: A Construction Grammar Approach to Argument Structure*. The University of Chicago Press.

Goldberg, Adele E. and Ray Jackendoff. 2004. "The English Resultative as a Family of Constructions." *Language 80, 3*: 532-568.

Gu, Yang. 1992. "The Syntax of Resultative and Causative Compounds in Chinese." Doctoral dissertation, Cornell University.

Grimshaw, Jane. 1990. *Argument Structure*. LI monographs. MIT Press.

Hale, Ken & Samuel J. Keyser. 1991. "On the Syntax of Argument Structure." *Lexicon Project*

Working Papers 34. Cambridge, MA.: Center for Cognitive Science, MIT.

Hale, Ken, and Samuel J. Keyser. 1993. "On argument structure and the lexical expression of syntactic relations." In Ken Hale and Jay Keyser (Eds.), *The View from Building 20*: *A Festschrift for Sylvain Bromberger* (pp. 53-108). MIT Press.

Himeno, Masako. 1978. "Fukugou doushi '-komu,' oyobi naibu idou wo arawasu fukugou doushirui." *Nihongo Gakkou Ronshu 5* (pp. 47-70). Tokyo University of Foreign Studies. (姫野昌子. 1978. 「複合動詞『～こむ』、および内部移動を表す複合動詞類」『日本語学校論集』5 (pp. 47-70). 東京外国語大学.)

Himeno, Masako. 1999. *Fukugou Doushi no Kouzou to Imi Yohou*. Tokyo: Hituji Syobo Publishing. (姫野昌子. 1999. 『複合動詞の構造と意味用法』東京: ひつじ書房.)

Hoekstra, Teun. 1988. "Small Clause Results." *Lingua*, 74: 101-139.

Hoekstra, T. 1992. "Aspect and Theta Theory." In I.M. Roca (Ed.), *Thematic Structure*: *Its Role in Grammar* (pp. 145-174). Foris, Berlin.

Hopper, J. Paul and Sandra Thompson. 1980. "Transitivity in Grammar and Discourse." *Language 56*.

Huang, James C. -T. 1988. "Wo pao de kuai and Chinese phrase structure." *Language 64*: 274-311.

Huang, James C. -T. 1992. "Complex Predicates in Control." In R. Larson, Utpal Lahiri, Sabine Iatridou, and J. Higginbotham (Eds.), *Control and Grammar* (pp. 109-147). Dordrecht: Kluwer Academic Publishers.

Huang, Su-miao. 2001. "Nihongo to Chuugokugo ni kansuru taishou kenkyuu – Gainen kousei ni okeru goika to kouzouka wo chuushin ni –." Doctoral dissertation, Language and Information Sciences, the University of Tokyo Graduate School. (黄淑妙. 2001. 「日本語と中国語に関する対照研究一概念構成における語彙化と構造化を中心に一」 東京大学大学院言語情報博士論文.)

Ikegami, Yoshihiko. 1978. "How universal is a localistic hypothesis? A linguistic contribution to the study of "semantics styles" of language." Reproduced by Linguistic Agency, University of Trier.

Ikegami, Yoshihiko. 1985. "'Activity'-' Accomplishment'-' Achievement'- A language that can't say 'I burned it but didn't burn' and one that can". In Wells, Makkai, Adam and Alan K. Melby (Eds.), *Linguistics and Philosophy*. Festschrift for Rulon S: 265 ff.

Inue, Masaru, N. Ogoshi and H. Kimura. 2002. "Tensu – asupekuto no hikaku taishou: Nihongo, Chousengo, Chuugokugo." *Taisho Gengogaku, Shiriizu Gengogaku 4*. Tokyo Daigaku Shuppankai. (井上優, 生越直樹, 木村英樹. 2002. 「テンス･アスペクトの比較対照一日本語･朝鮮語･中国語」『対照言語学』シリーズ言語学 4. 東京大学出版会.)

Ishimura, Hiroshi. 2000. "Chuugokugo kekka koubun no imi kouzou to boisu." *Chuugokugogaku*, No. 247: 142-157, 2000. The Chinese Linguistic Society of Japan. (石村広. 2000. 「中国

語結果構文の意味構造とヴォイス」『中国語学』 247: 142-157. 日本中国語学会.)

Jackendoff, Ray. 1983. *Semantics and Cognition*. Cambridge: The MIT Press.

Jackendoff, Ray. 1987. "The Status of Thematic Relations in Linguistic Theory." *Linguistic Inquiry 18* : 369-411.

Jackendoff, Ray. 1990. *Semantic Structures*. Cambridge, Mass.: MIT Press.

Jackendoff, Ray. 1991. "Parts and boundaries." In Beth Levin & St. Pinker (Eds.), *Lexical and conceptual semantics* (pp. 9-45). Cambridge, MA, Blackwell.

Jackendoff, Ray. 1996. "The Proper Treatment of Measuring Out, Telicity and Perhaps Event Quantification in English." *Natural Language and Linguistic Theory 14*: 305-354.

Jaxontov, Sergej Je. 1988. "Resultative in Chinese." In Vladimir P. Nedjalkov (Ed.), *Typology of Resultative Constructions* (pp.113-33). Amsterdam: Benjamins.

Jin, Lixin. 2002. "Xiandai Hanyu Quxiang Buyu he Binyu de Weizhi Guanxi." *Duiwai Hanyu Jiaoyan Luncong, 2* (pp. 47-61). Huadong Shifan Daxue Chubanshe. (金立鑫. 2002.〈现代汉语趋向补语和宾语的位置关系〉《对外汉语教研论丛(2)》(pp. 47-61). 华东师范大学出版社.)

Kageyama, Taro and Yumoto Yoko. 1997. *Gokeisei to Gainen Kouzou*. M. Nakau (Ed.), Kenkyusha Publishing. (影山太郎･由本陽子. 1997. 『語形成と概念構造』中右実編. 研究社出版.)

Kageyama, Taro. 1993. *Bunpou to gokeisei*, Hitsuzi Syobo Publishing. (影山太郎. 1993 『文法と語形成』 東京: ひつじ書房.)

Kageyama, Taro. 1996. *Doushi imiron*. Tokyo: Kuroshio Publishers. (影山太郎. 1996. 『動詞意味論』 東京:くろしお出版.)

Kageyama, Taro. 2007. "Eigo kekka jutsugo no imi bunrui to tougo kouzou." In N. Ono (Ed.), *Kekka Koubun Kenkyuu no Shinshiten*. Tokyo: Hituji Syobo Publishing. (影山太郎. 2007. 「英語結果述語の意味分類と統語構造」小野尚之編『結果構文研究の新視点』東京: ひつじ書房.)

Kageyama, Taro.2001. *Nichiei Taisho – Doushi no Imi to Koubun*. Tokyo: Taishukan Publishing. (影山太郎. 2001. 『日英対照－動詞の意味と構文』東京: 大修館.)

Kennedy, Christopher and Louise McNally, 1999. "From Event Structure to Scale Structure: Degree Modification in Deverbal Adjectives." In Mathews, T. and D. Strolovitch. (Eds.), SALT IX (pp.163–180). Ithaca: CLC Publications.

Kimura, Hideki. 2000. "Chuugokugo boisu no kouzouka to kategorika." *Chuugokugogaku*, No. 247: 19-39, 2000. The Chinese Linguistic Society of Japan. (木村英樹. 2000: 19-39. 「中国語ヴォイスの構造化とカテゴリ化」『中国語学』247. 日本中国語学会.)

Kimura, Hideki. 2002a. "Chuugokugo nijuu shugobun no imi to kouzou." *Ninchi Gengogaku I: Jisho Kouzou, Shiriizu Gengogaku 2*. Tokyo Daigaku Shuppankai. (木村英樹. 2002a. 「中国語二重主語文の意味と構造」『認知言語学 I: 事象構造』シリーズ言語学 2. 東京大学

出版会.)

Kimura. Hideki 2002b. “Z no shoyuu ryouiki.” *Chuugokugo*, March. Tokyo: Uchiyama Shoten. (木村英樹. 2002b. 「Z の所有領域」『中国語』3 月号. 内山書店.)

Kindaichi, Haruhiko. 1950. “Kokugo doushi no ichi bunrui.” *Gengo Kenkyuu 15*. (金田一春彦. 1950. 「国語動詞の一分類」『言語研究』15.)

Lakoff, George and Johnson, Mark. 1980. *Metaphors we live by*. Chicago: The University of Chicago Press.

Lakoff, George. 1977. “Linguistic Gestalts.” *CLS 13*: 236-287.

Lakoff, George. 1993. “The Contemporary Theory of Metaphor.” *Metaphor and Thought*. Cambridge: Cambridge University Press.

Lamarre, Christine. 2005. “The Linguistic Encoding of Motion Events in Chinese-with Reference to Cross-dialect Variation-.” the COE Program Center for Evolutionary Cognitive Sciences at the University of Tokyo.

Langacker, Ronald. 1987. *Foundations of Cognitive Grammar*, *Vol.1: Theoretical Prerequisites.* Stanford: Stanford University Press.

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

Langacker, Ronald. 2000. *Grammar and Conceptualization*, CLR14. Berlin/New York: Mouton de Gruyter.

Levin, Beth, and Malka Rappaport Hovav. 1991. “Wiping the slate clean: A lexical semantic exploration.” In Levin, Beth, and Stephen Pinker (Eds.), *Lexical & Conceptual Semantics* (pp. 123-151). Blackwell: Cambridge, MA.

Levin, Beth, and Malka Rappaport Hovav. 1995. *Unaccusativity*: *At the Syntax-Lexical Semantics Interface*. The MIT Press: Cambridge, Mass.

Levin, Beth, and Malka Rappaport Hovav. 1999. “Two Structures for Compositionally Derived Events.” In *Proceedings of SALT 9* : 199-223.

Levin, Beth, and Malka Rappaport Hovav. 2005. *Argument Realization*. New York: Cambridge University Press.

Levin, Beth. 1993. *English Verb Classes and Alternations: A Preliminary Investigation*. Chicago: University of Chicago Press.

Li, Charles N., Sandra A. Thompson. 1981. *Mandarin Chinese, A Functional Reference Grammar.* University of California Press.

Li, Linding. 1980. “Dongbu Gejushi.” *Zhongguo Yuwen,* vol. 2: 93-102. (李临定. 1980.〈动补格句式〉,《中国语文》1980 年第 2 期: 93-102.)

Li, Linding. 1993. *Chuugokugo bunpou gairon*. (Ichiro Miyata, trans.) Tokyo: Kouseikan. (李臨定. 1993. 『中国語文法概論』宮田一郎訳. 東京: 光生館.)

Li, Yafei. 1990. “On V-V compounds in Mandarin Chinese.” *Natural Language and Linguistic Theory 8* : 177-207.

Li, Yafei. 1993. “Structural Head and Aspectuality.” *Language 69*,3: 490-504.

Li, Yafei. 1995. “The Thematic Hierarchy and Causativity.” *Natural Language and Linguistic Theory 13*: 255-282.

Li, Yafei. 1997. “Chinese Resultative Construction and the Uniformity of Theta Assignment Hypothesis.” In Jerome L. Packard (Ed.), *Trends in Linguistics - S. a. M. 105: New Approaches to Chinese WordFormation*. Berlin/New York: Mouton de Gruyter.

Liu et al. 1983. *Shiyong Xiandai Hanyu Yufa*. Waiyu Jiaoxue yu Yanjiu Chubanshe. 〔刘月华, 潘文娱, 故韡. 1983.《实用现代汉语语法》外语教学与研究出版社.〕

Lu, Jianmin. 2001. “’VA le’ Shubu Jiegou Yuyi Fenxi Buyi－Dui Duzhe Yijian de Huifu.” *Hanyu Xuexi 6*, December, 2001. (陆俭民. 2001.〈“VA 了”述补结构语义分析补议－对读者意见的回复〉《汉语学习》2001 年 12 月第 6 期.)

Lyons, John. 1977. *Semantics vol. 2*. Cambridge: Cambridge University Press.

Ma, Qingzhu. 1981. “Shiliang Binyu he Dongci de Lei.” *Zhongguo Yuwen*, vol. 2: 86-90. (马庆株. 1981.〈时量宾语和动词的类〉《中国语文》1981 年第 2 期: 86-90.)

Ma, Qingzhu. 1995. “Duochong Dingming Jiegou zhong Xingrongci de Leibie he Cixu” *Zhongguo Yuwen*, vol. 5: 357-366. (马庆株. 1995.〈多重定名结构中形容词的类别喝次序〉《中国语文》1995 年第 5 期: 357-366.)

Ma, Qingzhu. 2004. *Hanyu Dongci he Dongcixing Jiegou Yi Bian*. Beijing Daxue Chubanshe: Beijing. (马庆株. 2004.《汉语动词和动词性结构・一编》北京: 北京大学出版社.)

Matsumoto, Yo. 1996. *Complex predicates in Japanese: A syntactic and semantic study of the notion ‘word.’* Stanford: CSLI Publications, and Tokyo: Kuroshio Publishers.

Matsumoto, Yo. 1997. “Kukan idou no gengo hyougen to sono kakuchou.” Tanaka, Shigenori, and Matsumoto, Yo. *Nihongo Hikaku Senso 6: Kukan to Idou no Hyougen*. Tokyo: Kenkyusha Shuppan. (松本曜. 1997. 「空間移動の言語表現とその拡張」田中茂範･松本曜『日英語比較選書 6: 空間と移動の表現』東京: 研究社出版.)

Matsumoto, Yo. 1998. “Nihongo no goiteki fukugou doushi ni okeru doushi no kumiawase.” *Gengo Kenkyuu* 114: 37-83. (松本曜. 1998. 「日本語の語彙的複合動詞における動詞の組み合わせ」『言語研究』114: 37-83.)

Matsumoto, Yo. 2003. “Talmy ni yoru idou hyougen no ruikei wo meguru mondai- Idou no imiron I-.” *The Meiji Gakuin Review vol. 695*, English and American literature and linguistics, No. 111. (松本曜. 2003. 「タルミーによる移動表現の類型をめぐる問題-移動の意味論 I-」明治学院論叢第 695 号. 英語･英米文学第 111 号.)

Matsushita, Daizaburo. 1928. *Kaisen Hyoujun Nihongo Bunpou*. Kigensha. (松下大三郎. 1928.『改撰標準日本文法』紀元社.)

Mochizuki, Keiko. 1990a. “Doho kozo no keisei.” *Chugoku Gogaku*, No. 237, 1990, the Chinese Linguistic Society of Japan.

Mochizuki, Keiko. 1990b. “Nitchuu ryougo no kekka wo arawasu fukugou doushi.” *Area and Cultural Studies*, No.40, 1990. Tokyo University of Foreign Studies. (望月圭子. 1990. 「日・中両語の結果を表わす複合動詞」『東京外国語大学論集』40, 1990. 東京外国語大学.)

McNally, Louise and Christopher, Kennedy. 2008. *Adjectives and Adverbs: Syntax, Semantics, and Discourse*. Oxford: Oxford University Press.

Michiaki, Saito. 1992. *Gendai Nihongo no gokouseironteki kenkyuu*. Hituzi Publishing. 〔斉藤倫明. 1992. 『現代日本語の語構成論的研究』 東京: ひつじ書房.〕

Nakamura, Sonoko. 1998. “A Study of the Semantic Structure of Compound Verbs in Japanese.” *Tama University Journal of Management and Information Sciences*, No.2, 1998. Tama University. (中村その子. 1998. 「「日本語複合動詞の意味形成と特性:言語認知の立場から」『経営・情報研究:多摩大学研究紀要』2, 1998. 多摩大学.)

Nedjalkov, Vladimir P., Sergej Je Jaxontov. “The typology of resultative constructions.” *The Typology of Resultative Constructions* (pp. 3-58). Amsterdam: Benjamins.

Nishimura, Yoshiki. 1998. “Dai nibu: Kouisha to shiekisha.” In M. Nakau (Ed.), *Koubun to Jishou Kouzou, Nichiei Hikaku Sensho 5*. Tokyo: Kenkyusha Publishing. (西村義樹. 1998. 『構文と事象構造』日英比較選書 5, 中右実(編). 東京: 研究社出版.)

Ono, Naoyuki. 2007 “Kekka jutsugo no sukeeru kouzou to jishou taipu.” In N. Ono (Ed.), *Kekka Koubun Kenkyuu no Shinshiten*. Tokyo: Hituji Syobo Publishing. (小野尚之.2007. 「結果述語のスケール構造と事象タイプ」小野尚之編『結果構文研究の新視点』東京: ひつじ書房.)

Perlmutter, D. M. 1978. “Impersonal Passives and the Unaccusative Hypothesis.” In *Proceedings of the Fourth Annual Meeting of the Berkeley Linguistics Society*. Berkeley Linguistics Society, University of California, Berkeley.

Pinker, Steven. 1989. *Learn ability and Cognition: The Acquisition of Argument Structure*. Cambridge, Mass.: MIT Press.

Pustejovsky, James. 1991a. “The syntax of event structure.” In B. Levin and S. Pinker (Eds.), *Lexical & Conceptual Semantics*. Oxford: Blackwell.

Pustejovsky, James. 1991b. “The Generative Lexicon.” *Computational Linguistics, Volume 17, Issue 4* (December 1991) (pp. 409 - 441).Cambridge, MA: MIT Press.

Pustejovsky, James. 1995. The *Generative Lexicon*. Cambridge, MA: The MIT Press.

Rappaport Hovav, Malka and Beth Levin. 1999b. “Two types of compositionally derived events.” Ms., Bar-Ilan University, Ramat-Gan, Israel and Northwestern University.

Rappaport Hovav, Malka and Beth Levin: 1998, “Building Verb Meanings.” In M. Butt and W.

Geuder (Eds.), *The Projection of Arguments. Lexical and Compositional Factors* (pp. 97-134). Stanford, CSLI Publications.

Rappaport Hovav, Malka, and Beth Levin. 1999a, "A Revaluation of the Direct Object Restriction on English Resultatives." Unpublished ms., Bar Ilan University and Stanford University, Ramat Gan, Israel and Stanford, CA.

Rappaport Hovav, Malka, and Beth Levin. 2001. "An Event Structure of English Resultatives." *Language, vol. 77*.

Saito, Michiaki. 1992. *Gendai Nihongo no Gokoseironteki Kenkyuu: Go ni okeru Katachi to Imi*. Tokyo: Hituji Syobo Publishing.

Sakakura, Atsuyoshi. 1957. "Gokosei Josetsu." *Nihongo Bunpo Kouza 1 Soron*. Tokyo: Meiji Shoin. (阪倉篤義. 1957. 「語構成序説」『日本語文法講座 1 総論』東京: 明治書院.)

Shen, Jiaxuan. 2003. "Xiandai Hanyu 'Dongbu Jiegou' de Leixingxue Kaoca." *Shijie Hanyu Jiaoxue* vol. 3: 17-23. (沈家煊. 2003.〈现代汉语"动补结构"的类型学考察〉《世界汉语教学》第 3 期: 17-23.)

Shen, Jiaxuan. 2006. *Renzhi yu Hanyu Yufa Yanjiu*. Beijing: Shangwuyin Shuguan. (沈家煊. 2006.《认知与汉语语法研究》北京: 商务印书馆.)

Shen, Li. 1993. "Guanyu Hanyu Fuhe Dongci zhong Canxiang Jiegou de Wenti." *Yuwen Yanjiu*, vol. 3: 12-21. (沈力. 1993.〈关于汉语结果复合动词中参项结构的问题〉《语文研究》1993 年第 3 期: 12-21.)

Shen, Li. 1997. "A Study of Verbal Semantics of Modern Mandarin Chinese." Doctoral dissertation, Kyoto University Graduate School of Letters. (沈力. 1997.「現代中国語の動詞構造の研究—語形成と句形成の並行性を中心に」京都大学大学院文学研究科博士論文)

Shi, Yuzhi. 2002. *The Establishment of Modern Chinese Grammar: The Formation of the resultative construction and its effects, Studies in Language Companion Series 59*. Amsterdam/Philadelphia: John Benjamins Publishing Company.

Shibatani, M., Prashant Pardeshi. 2002. "The causative continuum." *The Grammar of Causation and Interpersonal Manipulation* (pp. 85-126). Amsterdam/Philadelphia: John Benjamins Publishing Company.

Shibatani, Masayoshi., 1973. "Semantic of Japanese Causativization." *Foundations of Language*, *Vol. 9, No. 3*: 327-373.

Shibatani, Masayoshi. 1976. "The Grammar of Causative Constructions: A Conspectus." *Syntax and Semantics 6* (pp. 1-40). New York: Academic Press.

Simpson, Jane. 1983. "Resultatives." In L. Levin, M. Rappaport and A. Zaenen (Eds.), *Papers in Lexical-Functional Grammar* (pp. 143-158). Bloomington, Indiana: Indiana University Linguistics Club.

Smith, Carlota S. 1994. "Aspectual viewpoint and situation type in Mandarin Chinese." *Journal of.*

East Asian Linguistics 3: 3-146.

Smith, Carlota. 1985. “Notes on Aspect in Chinese.” *Texas Linguistic Forum 26*: 1-36.

Smith, Carlota. 1997. *The Parameter of Aspect*. Dordrecht: Kluwer Academic Publishers. Second edition.

Song, Wenhui. 2007. *Xiandai Hanyu Jiedongshi de Renzhi Yanjiu (On the Syntax of Modern Chinese V-R Constrictions: A Study Based on Conceptual Structures)*. Beijing: Peking University Press. (宋文辉. 2007.《现代汉语结动式的认知研究》北京:北京大学出版社.)

Suzuki, Takeo. 1999. “Kango noukaku doushi ni okeru hitaikakusei no bunseki – Goi gainen imiron no kanten kara.” M.A thesis, Graduate School of Language Science, Kanda University of International Studies. (鈴木武生.1999.「漢語能格動詞における非対格性の分析ー語彙概念意味論の観点から」神田外語大学大学院言語科学研究科修士論文.)

Suzuki, Takeo. 2000. “An Analysis on the Unaccusativity of Kanji Compound Ergative Verbs.” In *Proceedings of the 24th Annual Meeting of Kansai Linguistic Society, 2000*: 218-228. (鈴木武生.2000.「漢語能格動詞における非対格性の分析」第 28 回関西言語学会プロシーディングス.)

Suzuki, Takeo. 2002. “Shieki koutai wo shimesu Chuugokugo fukugou doushi no kitei goi gainen kouzou – Shieki tasseigata gainen kouzou to asupekuto tokusei wo meguru mondai – .” *Journal of Language and Information Sciences 2002, No.7*. Language and Information Sciences, the University of Tokyo. (鈴木武生. 2002.「使役交替を示す中国語複合動詞の規定語彙概念構造ー使役達成型概念構造とアスペクト特性をめぐる問題ー」『言語情報科学研究』2002, 第 7 号. 東京大学言語情報科学研究会.)

Suzuki, Takeo. 2003. “English Subject-Oriented Resultatives and the Aspectual Coordination Principles.” In *Proceedings of the 27th Annual Meeting of Kansai Linguistic Society, 2003*: 1-11.

Suzuki, Takeo. 2004. “Event Structure of the Mandarin Chinese Resultative Construction and Causative Alternation.” In *Proceedings of the 28th Annual Meeting of Kansai Linguistic Society, 2004*: 176-186. (鈴木武生. 2004.「中国語結果構文のイベント構造と使役交替」第 28 回関西言語学会プロシーディングス.)

Sybesma, Rint. 1999. *The Mandarin VP*. Dordrecht: Kluwer.

Tai, James H-Y. 1973. “On the center of predication in Chinese verb-complement construction.” Paper presented at 1973 Annual Meeting of Linguistic Society of America.

Tai, James H-Y. 1985. “Temporal sequence and Chinese word order.” In John Haiman (Ed.), *Iconicity in syntax: proceedings of a symposium on iconicity in syntax* (pp. 49-72). Amsterdam: John Benjamins.

Tai, James H-Y. 1989. Tai, James H-Y. 1989. “Iconicity: Motivation in Chinese syntax.” Paper resented at the First Northeast Conference on Chinese Linguistics, the Ohio State

University, May 1989.

Tai, James H.-Y. 2003. “Cognitive Relativism: Resultative Construction in Chinese.” *Language and linguistics 4.2*: 301-316.

Takami, Ken-ichi, Susumu Kuno. 2002. *A Functional Analysis of Intransitive Constructions in English and Japanese*. Tokyo: Kenkyusha Publishing. (高見健一, 久野すすむ. 2002. 『日英語の自動詞構文』東京: 研究社.)

Takebe, Yoshiaki. 1953. “Fukugou-doushi ni okeru hojoteki youso ni tsuite.” *Kindaichi Hakushi Koki Kinen Gengo Minzoku Ronsou*. Tokyo: Sanseido.(武部良明. 1953. 「複合動詞における補助詞的要素について」『金田一博士古稀記念言語民族論叢』東京: 三省堂.)

Talmy, Leonard. 2000a. *Toward a cognitive semantics, vol..1: concept-structuring systems*. Cambridge, Mass.: MIT Press.

Talmy, Leonard. 2000b. *Toward a cognitive semantics, vol..2: typology and process in concept-structuring*. Cambridge, Mass.: MIT Press.

Talmy, Leonard. 2000c. “Ebento tougou no ruikeiron.” *Ninchi Gengogaku no Hatten*. Hituzi Syobo Publishing. (Talmy, Leonard. 「イベント統合の類型論」高尾享幸訳, 『認知言語学の発展』坂原茂編. 2000. 東京: ひつじ書房.)

Tang, T s ingchi. 1992a. “Hanyu Yufa de ‘Bingru” Xianxiang.” *Hanyu Cifa Jufa 3*. Taipei: Xuesheng Shuju. (湯廷池. 1992a.〈漢語語法的「併入現象」〉『漢語詞法句法三集』台北: 學生書局.)

Tang, Tingchi. 1992b. “Hanyu Shubushi Fuhe Dongci de Jiegou, Gongneng yu Qiyuan.” *Hanyu Cifa Jufa 4*. Taipei: Xuesheng Shuju. (湯廷池. 1992b.〈漢語述補式複合動詞的結構、功能與起源〉『漢語詞法句法四集』台北: 學生書局.)

Tang, Tingchi. 1999. *The Syntax and Semantics of Resultative Complements in Chinese: A Comparative Study of Mandarin and South Min*. Taipei: Xuesheng Shuju. (湯廷池. 1999. 『閩南語語法研究試論』台北: 學生書局.)

Tenny, Carol. 1992. “The Aspectual Interface Hypothesis.” In I. Sag and A. Szabolsci (Eds.), *Lexical Matters* (pp. 1-27). Stanford: Center for the Study of Language and Information.

Tenny, Carol. 1994. *Aspectual Roles and the Syntax-Semantics Interface*. Dordrecht: Kluwer.

Tenny, Carol. 1995. “Modularity in Thematic versus Aspectual Licensing: Paths and Moved Objects in Motion Verbs.” *Canadian Journal of Linguistics/Revue cannadienne de linguistique 40(2)* (pp. 201-234), June/juin 1995.

Teo, Chuu Yong. 2009. “Nihongo to Chuugokugo no kekka kyanseru koubun no bunseki.” *In Proceedings of Di yijie Han-Ri Duibi Yuyanxue Yantaohui*, October, 2009, Beijing. (張楚栄. 2009. 「日本語と中国語結果キャンセル構文の分析」第一届汉日对比语言学研讨会 2009 での発表原稿, 北京.)

Teramura, Hideo. 1969. “Katsuyou gobi, jodoushi, hojodoushi to asupekuto (sono ichi).”

Nihongo-Nihon Bunka 1. Osaka University of Foreign Studies.(寺村秀夫. 1969.「活用語尾・助動詞・補助動詞とアスペクト（その一）」『日本語・日本文化』1, 大阪外国語大学.)

Teramura, Hideo. 1982. *Nihongo no shintakusu to imi 1*. Tokyo: Kuroshio: Publishers. (寺村秀夫. 1982. 『日本語のシンタクスと意味 I』東京: くろしお出版.)

Teramura, Hideo. 1984. *Nihongo no shintakusu to imi II*. Tokyo: Kuroshio: Publishers. (寺村秀夫. 1984. 『日本語のシンタクスと意味 II』東京: くろしお出版.)

Tsuboi, Eijiro. 2002. "Jueisei to ukemi." In Y Nishimura (Ed.), *Ninchi Gengogaku I: Jishou Kouzou, Shiriizu Gengogaku 2*. Tokyo Daigaku Shuppankai. (坪井栄治郎. 2002. 「受影性と受け身」『認知言語学 I: 事象構造』シリーズ言語学 2. 東京大学出版会)

Tsuzuki, Masako. 2004. "" In Y. Nakamura (Ed.), *Ninchi Bunpouron II*. Tokyo: Taishukan Publishing. (都築雅子. 2004. 「行為連鎖と構文 II: 結果構文」中村芳久編. 東京: 大修館書店)

Tsuzuki, Masako. 2007. "Geruman syogo ni mirareru haseiteki kekka koubun ni kansuru ichikousatsu." In N. Ono (Ed.), *Kekka Koubun Kenkyuu no Shinshiten* (pp. 143-176). Tokyo: Hituji Syobo Publishing. (都築雅子. 2007. 「ゲルマン諸語に見られる派生的結果構文に関する一考察」『結果構文研究の新視点』ひつじ書房.)

Van Valin, R.D. Jr. 1990. "Semantic Parameters of Split Intransitivity." *Language 66*: 221-260.

Vendler, Zeno. 1967. *Linguistics in Philosophy*. Cornell University Press.

Verspoor, Cornelia Maria. 1997. "Contextually Dependent Lexical Semantics." PhD thesis, University of Edinburgh Lexical and Syntactical Constructions and the Construction of Meaning.

Washio, Ryuichi. 1997. "Resultatives, Compositionality and Language Variation." *Journal of East Asian Linguistics*, 6: 1-49.

Washio, Ryuichi. 2003. "Gengo hikaku no houhou – Gengo riron o Ajia kara miruto nani ga mieru ka –." In *Handout of the Summer Seminar July, 2003*, Tokyo Institute for Advanced Studies of Language. (鷲尾龍一. 2003. 「言語比較の方法―言語理論をアジアから見ると何が見えるか―」東京言語研究所夏季特別講座ハンドアウト, 2003 年 7 月.)

Wechsler, Stephen. 1997. "Resultative Predicates and Control." In R. Blight and M. Moosally (Eds.), *Texas Linguistic Forum 38: The Syntax and Semantics of Predication* (pp. 307-321). Austin, Texas: University of Texas Department of Linguistics.

Wechsler, Stephan. 2000. "An Analysis of English Resultatives Under the Event-Argument Homomorphism Model of Telicity." In *Proceedings of the 3rd Workshop on Text Structure*, University of Texas, Austin.

Wittgenstein, Ludwig. 1953. *Philosophical investigations*. (Anscombe, G.E.M., trans.). Oxford: Basil Blackwell.

Yamada, Yoshio. 1935. *Nihon bunpougaku gairon*. Hobunkan. (山田孝雄. 1935. 『日本文法学概

論』宝文館.)

Yamaguchi. Naoto. 1991. “Douho kouzou no ruikei to keisei ni tsuite.” *Chuugokugogaku*, No. 238: 115-124, 1991. The Chinese Linguistic Society of Japan. (山口直人. 1991.「動補動詞の類型と形成について」『中国語学』 238: 115-124. 日本中国語学会.)

Yamamoto, Kiyotaka. 1984. “Fukugou doushi no kaku shihai.” *Todai Ronkyu 21*: 32-49. (山本清隆 1984.「複合動詞の格支配」『都大論究』21: 32-49.)

Yang, Ming. 2009. “Chuugokugo ni okeru Douho Kouzo no Kenkyuu.” Doctoral dissertation, Chiba University Graduate School of Sciences and Humanities. (楊明. 2009.「中国語の結果構文における動補構造の研究」千葉大学大学院社会科学研究科博士論文.)

Yang, Kairong. 1989. *Nihongo to Chuugokugo no shieki hyougen ni kansuru taishou kenkyuu*. Tokyo: Hituji Syobo Publishing. (楊凱栄.1989.『日本語と中国語の使役表現に関する対照研究』東京:くろしお出版.)

Yang, Kairong. 2001. “Chuugokugo no ‘le’ ni tsuite.” *“Ta” no Gengogaku*, Tsukuba Gengo Bunka Fooramu-hen. Tokyo: Hituji Syobo Publishing. (楊凱栄. 2001.「中国語の“了”について」『「た」の言語学』つくば言語文化フォーラム編. 東京: ひつじ書房.)

Ye, Xiangyang. 2004. “‘Ba’ Ziju de Zhishixing Jieshi.” *Shijie Hanyu Jiaoxu, 2, 2004*. (叶向阳. 2004.〈“把”字句的致使性解释〉《世界汉语教学》2004 年第 2 期.)

Yong, Shin. 1997. “The grammatical functions of verb complements in Mandarin Chinese.” *Linguistics 35*: 1-24.

Yumoto, Yoko. 1996. “Gokousei to goi gainen kouzou－Nihongo no ‘doushi + doushi’ no fukugougo keisei ni tsuite.” *Gengo to Bunka no Shosou－Okuda Hiroyuki Kyouju Taikan Kinen Ronbunshuu－* (pp. 105-118). Hoeisha. (由本陽子. 1996.「語形成と語彙概念構造－日本語の「動詞＋動詞」の複合語形成について－」『言語と文化の諸相－奥田博之教授退官記念論文集－』(pp. 105–118). 英宝社.)

Yumoto, Yoko. 2001. “Doushi kara doushi wo keisei suru gokeisei ni okeru kai hanchuuka sosei no uketsugi ni tsuite.” *Gengo Bunka Kenkyuu*, *vol. 27*. (由本陽子. 2001.「動詞から動詞を形成する語形成における下位範疇化素性の受け継ぎについて」『言語文化研究 第 27 号』.)

Yumoto, Yoko. 2005. *Fukugou doushi & hasei doushi no imi to tougo – Mojuuru keitairon kara mita nichi-eigo no doushi keisei*. Hituzi Syobo Publishing. (由本陽子. 2005『複合動詞･派生動詞の意味と統語－モジュール形態論から見た日英語の動詞形成』 東京: ひつじ書房.)

Xing, Zhongru. 2004. Xiandai Hanyuzhong de Zhishi Jushi. Hefei: Anhui Daxue Chubanshe. (熊仲儒. 2004.《现代汉语中的致使句式》合肥: 安徽大学出版社.)

Zhang, Bojiang. 2000. “Lun “Ba” Zi Ju de Jushi Yuyi.” *Yuan Yanjiu, 1, vol. 38, 2000*: 29-39. (张伯江. 2000.〈论“把”字句的句式语义〉《语言研究》2000 年第 1 期(总期第 38 期): 29-39.)

Zhang, Guoxian. 1995. “Xiandai Hanyu de Dongtai Xingrongci.” *Zhongguo Yuwen*, vol. 3: 221-229. (张国宪. 1995〈现代汉语的动态形容词〉《中国语文》1995 年第 3 期: 221-229.)

Zhang, Guoxian. 2005. “Xingzhi, Zhuangtai he Bianhua.” In *Proceedings of Nitchu Taisho Gengo Gakkai 14 kai Taikai* (张国宪. 2005.〈性质,状态和变化〉日中对照语言学会 14 回大会论文.)

Zhang, Guoxian. 2006. “Xingshi Xingrongci Chong Lun.” *Shijie Hanyu Jiaoxue*, vol.1: 5-17.

Zhang, Ren. 2005. *Enriched Composition and Inference in the Argument Structure of Chinese*. New York: Taylor & Francis Group, LLC.

Zhang, Wei. 1998. *Kekka kanou hyougen no kenkyuu－Nihongo-Chuugokugo taishou kenkyuu no tachiba kara, Nihongo Kenkyuu Sousho 10*. Tokyo: Kuroshio Publishers. (張威. 1998.『結果可能表現の研究－日本語･中国語対照研究の立場から』日本語研究叢書 10. 東京: くろしお出版.)

Zhu, Dexi. 1981. *Yufa Jiangyi*. Beijing: Shangwu Yinshuguan. (朱德熙. 1981.《語法講義》商務印書館.)

Corpora and Dictionaries:

BNC Consortium. 2000. *British National Corpus*, World Edition, 2000.

Chinese Novel Corpus (971,471 characters) from texts of novels by Chen Jiangong, Lao She, Wang Shuo and Zhang Xin (陈建功, 老舍, 王朔, 张欣).

Mei, Jiaju, et al. (Eds.). 1999. *Xiandai Hanyu Dapei Cidian*. Shanghai: Hanyu Dacidian Chubanshe. (梅家驹主编. 1999.《现代汉语搭配词典》上海: 汉语大词典出版社.)

Wang Yannong, Jiao Qun, Pang Yong (Eds.), *Hanyu Dongci - Jieguo Buyu Dapei Cidian*. Beijing: Beijing Language University Press. (王砚农, 焦群, 庞颙编. 1987.《汉语动词－结果补语搭配词典》北京: 北京语言学院出版社.)

Matsumura, Akira (Ed.). 1992. *Daijirin Electronic Version, 1992*. Tokyo: Sanseido. (松村明編.1992. 大辞林電子ブック版. 東京: 三省堂.)

Appendix A1

816 "Normal" AP Resultatives and Subject Semantic Types
(Sorted in ascending order of verb infinitives)

Seq No.	Verb inf	ST	Verb	Object	Adjective
7527	bash	A	bash	it	senseless
384	bash	A	bash	the enemy	senseless
4394	beat	A	beat	him	black and
7215	beat	A	beat	me	black and
7216	beat	A	beat	you	black and
7219	beat	A	beat	you	black and
15488	beat	A	beat	him	senseless
5877	beat	A	beating	someone	senseless
5882	beat	A	beat	you	senseless
495	bite	A	bit	gobbets	loose
501	blast	A	blast	a race	open
17771	bleed	S	bleed	him	dry
16073	bleed	A	bleed	me	dry
502	bleed	A	bleed	the Federation	dry
6776	bleed	U	Bleeding	us	dry
8500	bleed	A	bleeds	you	white
503	blot	A	Blot	the slide	dry
16938	blow	A	blow	it	askew
505	blow	A	blew	the ashes	clear
507	blow	A	blowing	hair	dry
506	blow	E	blow	the yarn	dry
15089	blow	E	blowing	it	open
510	blow	E	blew	the tank	open
509	blow	E	blows	things	open
6037	bore	A	boring	me	rigid
20781	bore	A	bore	them	rigid
18115	bore	A	bored	you	rigid
20615	bore	S	bores	me	stupid
3357	bore	S	bored	me	witless
2221	break	E	break	them	free
158	break	A	broke	it	open
3627	break	A	break	it	open
9390	break	B	break	it	open
534	break	A	break	the urchin	open
535	break	A	break	the shell	open
536	break	A	Broke	the window	open
6963	break	A	break	them	open
589	brush	A	brush	the rest	dry
590	brush	A	brushing	the snow	free
591	brush	A	brush	the gaps	free
7562	brush	A	brushing	them	free
1232	burn	A	burn	it	black
623	burst	A	burst	the warheads	open

624	burst	A	bursting	the door	open
625	burst	A	burst	the the	open
764	carve	A	carved	the tourists	open
820	chafe	S	chafed	the skin	raw
18803	choke	A	choked	him	mute
856	chuck	A	chucked	the book	open
18760	clean	A	clean	them	ready
18764	clean	A	clean	them	ready
880	click	A	clicked	the line	dead
10492	click	A	clicked	it	open
881	click	A	clicked	the back	open
882	click	A	clicking	the door	open
14599	club	A	clubbed	him	senseless
891	coddle	A	coddle	Apples	nice and
13581	colour	A	colour	it	black
17308	colour	A	colour	them	brown
17310	colour	A	colour	them	brown
17309	colour	A	colour	them	pale pink
1334	crack	E	crack	it	open
9162	crack	A	cracked	it	open
16509	crack	A	cracked	it	open
1193	crack	A	crack	the egg	open
1196	crash	A	crashed	the door	open
1271	cut	A	cut	wreckage	clear
5274	cut	A	cutting	him	dead
5668	cut	A	cut	him	dead
5673	cut	A	cut	him	dead
6036	cut	A	cut	him	dead
15839	cut	A	cutting	him	dead
16369	cut	A	cut	him	dead
4002	cut	A	cut	me	dead
8188	cut	A	cut	me	dead
8629	cut	A	cut	me	dead
14617	cut	A	cut	me	dead
14618	cut	A	cut	me	dead
307	cut	A	cut	them	dead
14100	cut	A	cut	them	dead
610	cut	A	cut	it	fine
15565	cut	U	cutting	it	fine
16093	cut	A	cutting	it	fine
16394	cut	A	cutting	it	fine
18386	cut	A	cut	it	fine
1279	cut	A	cut	a driver	free
1282	cut	A	cut	girl	free
5290	cut	A	cut	him	free
8154	cut	A	cut	him	free
10560	cut	A	cut	him	free
14003	cut	A	cut	him	free

1790	cut	A	cut	it	free
13638	cut	A	cut	me	free
1281	cut	S	cuts	people	free
1274	cut	A	cut	the raffia	free
1275	cut	A	cut	the Zodiac	free
1276	cut	A	cut	the batch	free
1277	cut	A	cutting	the model	free
1278	cut	A	cut	the woman	free
1280	cut	A	cut	the man	free
17096	cut	A	cut	them	free
18550	cut	A	cut	them	free
293	cut	A	cuts	it	open
3565	cut	A	cutting	me	open
1283	cut	A	cut	the animal	open
1284	cut	A	cut	the door	open
19464	cut	A	cut	them	open
1285	cut	A	cut	discussion	short
19843	cut	A	Cut	it	short
20325	cut	A	cut	them	thin
20569	cut	A	Cut	them	thin
13938	dab	A	dabbing	it	dry
13815	drag	A	dragged	me	clear
1579	drag	A	dragged	the man	free
15553	drag	A	Dragging	it	open
1580	drag	A	drag	the door	open
6432	drain	S	drained	him	dry
14588	drain	A	drain	it	dry
1581	drain	A	drain	the goblet	dry
1585	draw	A	drew	a pillow	close
1518	draw	A	drawing	her	close
14693	draw	B	draw	her	close
15073	draw	A	drew	her	close
17780	draw	A	drew	her	close
17832	draw	A	drew	her	close
17890	draw	A	drew	her	close
18054	draw	A	drew	her	close
18790	draw	A	drew	her	close
7199	draw	A	drew	him	close
10778	draw	A	draw	him	close
13991	draw	A	drew	him	close
11860	draw	A	drew	me	close
10765	draw	S	drawn	them	close
292	draw	A	draws	us	close
5509	draw	B	draw	you	close
1681	draw	A	draw	it	taut
1598	drink	A	drink	a distillery	dry
1597	drink	A	drunk	the barrel	dry
1599	drink	A	drank	the clubhouse	dry

11018	drum	A	drumming	him	awake
4794	dye	A	dyed	it	black
9152	dye	A	dying	it	black
5574	dye	A	dyed	mine	black
17733	dye	A	dye	it	yellow
17734	dye	A	dye	it	yellow
2834	dye	A	dyed	them	yellow, pink, orange and scarlet
10624	ease	A	eased	it	free
10627	ease	A	eased	it	free
14193	ease	A	eased	it	open
1653	ease	A	eased	the door	open
1654	ease	A	eased	the door	open
1655	ease	A	eased	the door	open
1656	ease	A	eased	the door	open
1657	ease	A	eased	the door	open
1658	ease	A	eased	the door	open
1659	ease	A	eased	the door	open
1673	edge	A	edged	the door	open
1679	elbow	A	elbowed	the door	open
11006	feed	A	fed	them	silly
2062	file	A	filed	the edges	smooth
2063	file	A	filing	the hole	smooth
11306	fill	A	fill	it	full
19421	fill	A	fill	it	full
6745	fill	A	filled	it	half-full
2503	flap	A	flapped	the blanket	free
19308	flatten	A	flattened	you	dead
11477	flatten	A	flattening	it	open
9713	flay	S	flayed	it	bare
7867	flick	A	flicked	it	open
10482	flick	A	flicked	it	open
2508	flick	A	flick	the zippo	open
2509	flick	A	flicked	the register	open
2510	flick	A	flicked	the file	open
18108	fling	E	flung	them	helpless
14174	fling	A	flung	it	open
16055	fling	A	flung	it	open
19183	fling	A	flung	it	open
2511	fling	A	flung	the wardrobe	open
2512	fling	A	flung	the door	open
2513	fling	A	flung	the door	open
2514	fling	E	flung	the door	open
2515	fling	A	flung	the door	open
2516	fling	A	flung	the door	open
2517	fling	A	flung	the door	open
2518	fling	A	flung	the door	open

2519	fling	A	flung	the window	open
9075	fling	A	flung	them	open
18012	fling	A	flung	them	open
5048	fling	A	flinging	him	unconscious
2520	flip	A	flipped	the lid	open
3584	flog	A	flogged	him	senseless
10796	fold	A	folded	it	open
2560	force	E	forced	the door	open
2561	force	A	forced	the door	open
2562	force	E	force	the door	open
2563	force	U	forced	the door	open
2564	force	A	forcing	the windows	open
2565	force	A	forced	the door	open
2566	force	A	forced	the door	open
2567	force	A	forced	the door	open
4061	frighten	S	frightened	him	awake
2316	frighten	A	frightened	them	sick
2605	frighten	A	frighten	the cat	spitless
10642	fuck	A	Fuck	me	silly
8	haul	A	Hauling	it	open
14157	hug	A	hugged	her	close
5530	hug	A	hugged	him	close
14535	hug	A	hug	him	close
3806	hug	A	Hugging	the girl	close
8446	hurl	S	hurls	us	free
1258	jerk	B	jerking	him	awake
15968	jerk	S	jerked	me	awake
1784	jerk	E	jerks	them	awake
4135	jerk	B	jerking	the laces	free
3270	jerk	A	jerk	you	free
4136	jerk	A	jerked	the door	open
4137	jerk	A	jerked	the door	open
15545	jerk	A	jerked	them	open
4086	kick	A	kicked	him	awake
5034	kick	A	kicking	the ball	dead
2596	kick	A	Kicking	it	open
3228	kick	A	kicked	it	open
5035	kick	A	kicked	the door	open
5036	kick	A	kicking	the door	open
5037	kick	A	kicked	the door	open
2508	kill	S	killed	it	dead
9013	kill	S	kill	it	stone-dead
4777	knock	A	knocking	it	askew
1769	knock	U	knock	you	brainless
13257	knock	A	knock	them	clear
3711	knock	A	knock	'em	cold
5045	knock	A	knocked	the pictures	crooked
561	knock	A	knocking	em	dead

4664	knock	S	knock	em	dead
14024	knock	A	knock	em	dead
6585	knock	A	knock	him	dead
19562	knock	A	knock	them	dead
5046	knock	A	knocked	others	insensible
3999	knock	B	knocking	him	off-balance
14577	knock	U	Knock	it	senseless
14560	knock	A	knocked	me	senseless
5047	knock	A	knocked	the girl	senseless
3629	knock	A	knocked	him	silly
11430	knock	A	knocked	him	silly
13249	knock	S	knock	you	silly
969	knock	A	knocked	him	unconscious
2214	knock	B	knock	him	unconscious
2366	knock	A	knocking	him	unconscious
6947	knock	A	knocking	him	unconscious
8021	knock	A	knocked	him	unconscious
18530	knock	A	knocking	him	unconscious
5733	lever	A	lever	the window	open
4068	lick	A	licked	it	clean
4268	lick	B	licked	it	clean
4275	lick	A	licked	it	clean of
19440	lick	A	lick	it	yucky
15552	lift	A	lifted	it	clear
5744	lift	S	lifts	the base	clear
5742	lift	A	lift	the model	clear of
5745	lift	A	lifting	the board	clear of
2215	lift	S	lifting	him	free
18058	lift	A	lift	him	free
5746	lift	A	lifted	the cat	free
5747	lift	A	lifted	the microphone	free
2222	lift	E	lifting	it	high
5327	lift	S	lifted	them	level
5749	lift	A	lifted	the door	open
10868	lift	S	lifted	me	sky-high
5808	lock	A	lock	the door	open
14849	mash	A	mash	it	dead
10388	mash	B	mashing	hers	helpless
9012	mash	A	mash	it	smooth
12598	milk	A	milked	it	dry
7668	nudge	A	nudge	the door	ajar
16427	nudge	A	nudged	me	alert
10505	nudge	A	nudge	him	awake
7669	nudge	A	nudged	the door	open
12790	open	A	opened	them	empty
7792	open	A	opened	the door	wide
7793	open	A	opened	the door	wide
7794	open	A	opened	the door	wide

7795	open	A	open	the door	wide
8844	open	A	opened	them	wide
7847	pack	A	packing	a suitcase	full
6116	pack	A	packed	it	full
9048	pack	A	packed	everything	ready
19273	pack	A	packing	them	ready
7848	padlock	A	padlocks	the door	open
19980	paint	A	paint	it	black
7849	paint	A	paint	the wings	black
20141	paint	A	paint	them	brown
3607	paint	A	painted	it	green
20469	paint	A	paint	it	green
7852	paint	A	Paint	the horizon	pale Green
10470	paint	A	paint	it	red and green
14820	paint	A	Paint	everything	white
3173	paint	A	paint	it	yellow
7855	paper	A	papered	the walls	white
7858	pare	A	pare	the surface	clean and smooth
7859	pare	A	pare	the heel	clean and smooth
1024	pat	A	pat	them	dry
4623	pat	A	pat	them	dry
7941	pile	A	pile	children	high
1852	pile	A	Pile	em	high
11908	pin	A	pin	it	open
10745	polish	A	polished	them	clean
16193	polish	A	polished	it	dry
8005	power	A	powered	a boot	free
10558	press	A	press	her	close
8059	press	A	press	the seam	open
8060	press	A	Press	the seams	open
16651	prize	A	prise	it	free
8073	prize	A	prising	Poll	free
8072	prize	A	prize	the claws	free
2041	prize	A	prised	them	free
2980	prize	A	prised	it	open
8074	prize	A	prise	the egg	open
14656	prize	A	prise	them	open
4404	prop	A	prop	it	open
8191	prop	A	prop	the bonnet	open
8192	prop	A	prop	the door	open
20125	pry	A	pry	it	open
8331	pull	A	pulled	a curtain	clear of
4053	pull	A	pulled	her	close
10838	pull	A	pulled	her	close
11407	pull	A	pulled	her	close
11408	pull	A	pulled	her	close

12092	pull	A	pulled	her	close
12952	pull	A	pulled	her	close
13525	pull	A	pulled	her	close
13530	pull	A	pulled	her	close
13539	pull	A	pulled	her	close
13623	pull	A	pulled	her	close
14078	pull	A	pulling	her	close
14534	pull	A	pulled	her	close
14690	pull	A	pull	her	close
8698	pull	A	pull	him	close
11704	pull	B	pull	him	close
11416	pull	A	pulled	me	close
14658	pull	A	pulls	me	close
8332	pull	A	pulled	the dog	close
8333	pull	A	Pull	the board	close
8334	pull	A	pulling	the gown	close
2433	pull	S	pulling	them	close
1336	pull	U	pulling	him	free
2935	pull	A	pulled	it	free
5992	pull	A	pulled	it	free
7609	pull	A	pulled	it	free
10967	pull	A	pulled	it	free
11382	pull	A	pulling	it	free
11509	pull	A	pull	it	free
14637	pull	B	pulled	it	free
14855	pull	A	pulls	it	free
8336	pull	A	pulled	the knife	free
8337	pull	A	pulled	the drawer	free
8338	pull	A	pulled	the pistol	free
8339	pull	A	pull	the guts	free
8340	pull	A	pulled	the shirt	free
8341	pull	A	pulled	the microphone	free
8342	pull	I	pull	the vehicle	free
4377	pull	A	pull	them	free
18488	pull	A	pull	them	free
8345	pull	A	pulled	the belt	good and tight
18244	pull	S	pull	them	level
18912	pull	A	pulled	them	level
11429	pull	A	pulled	it	open
16304	pull	A	Pulling	it	open
18023	pull	A	pull	it	open
8346	pull	A	pulled	the door	open
8347	pull	A	pulled	the door	open
8348	pull	A	pulled	the shutters	open
8349	pull	A	pulled	the drawstrings	open
8350	pull	A	pulling	the drawer	open
8351	pull	A	pulled	the door	open
8352	pull	A	pulling	the door	open

8353	pull	A	pulled	the	door	open
8354	pull	A	pulled	the	door	open
8355	pull	A	Pulling	the	door	open
8356	pull	A	pulled	the	door	open
8357	pull	A	pulled	the	door	open
8358	pull	A	pulled	the	door	open
8359	pull	A	pulled	the	door	open
8360	pull	A	pulled	the	door	open
8361	pull	A	pulled	the	door	open
7225	pull	A	pull	them		open
19725	pull	A	pull	them		open
4272	pull	A	pulling	it		taut
8363	pump	I	pumped	the	mine	clear of
12337	pump	A	pumped	him		full
4184	pump	S	pumped	it		full
9566	pump	A	pumping	me		full
9578	pump	U	pumped	me		full
7185	pump	A	pump	them		full
7144	pump	S	pumping	us		full
13745	pump	A	pump	you		full
8383	push	A	pushed	the	door	ajar
8384	push	A	pushed	the	door	ajar
8385	push	A	pushed	the	dress	free
8388	push	A	push	a	person	off-balance
8395	push	A	pushed	a	door	open
8417	push	A	pushed	a	door	open
5748	push	A	pushed	it		open
9582	push	A	pushed	it		open
11032	push	A	pushed	it		open
11593	push	A	pushed	it		open
11954	push	A	pushed	it		open
11962	push	A	pushed	it		open
14067	push	A	pushing	it		open
14074	push	A	pushed	it		open
14083	push	A	pushed	it		open
14113	push	A	pushed	it		open
14711	push	A	pushes	it		open
16079	push	A	pushed	it		open
16579	push	A	pushed	it		open
17412	push	A	pushed	it		open
17812	push	A	pushed	it		open
18020	push	A	pushed	it		open
18820	push	A	pushed	it		open
8389	push	A	Pushing	the	door	open
8390	push	A	push	the	door	open
8391	push	A	pushed	the	door	open
8392	push	A	push	the	window	open
8393	push	A	pushed	the	door	open

8394	push	A	push	the	door	open
8396	push	A	pushed	the	mailbox	open
8397	push	A	pushed	the	door	open
8398	push	A	push	the	door	open
8399	push	A	pushed	the	door	open
8400	push	A	pushed	the	door	open
8401	push	A	pushed	the	door	open
8402	push	A	pushed	the	door	open
8403	push	A	pushed	the	door	open
8404	push	A	pushed	the	door	open
8405	push	A	pushed	the	door	open
8406	push	A	pushed	the	door	open
8407	push	A	pushed	the	door	open
8408	push	A	pushing	the	door	open
8409	push	A	Pushing	the	door	open
8410	push	A	pushing	the	door	open
8411	push	A	pushed	the	door	open
8412	push	A	pushed	the	door	open
8413	push	A	pushed	the	door	open
8414	push	A	pushed	the	door	open
8415	push	A	pushed	the	door	open
8416	push	A	pushed	the	door	open
8418	push	A	push	the	gate	open
8419	push	A	pushed	the	door	open
8420	push	A	pushed	the	door	open
8421	push	A	pushed	the	door	open
8422	push	A	pushed	the	door	open
8423	push	A	pushed	the	door	open
8424	push	A	pushed	the	door	open
8425	push	A	pushed	the	door	open
8426	push	A	pushed	the	door	open
8427	push	A	pushed	the	door	open
8428	push	A	pushed	the	mouth	open
8429	push	A	pushed	the	door	open
8430	push	A	push	the	door	open
8431	push	A	pushed	the	door	open
8432	push	A	pushed	the	door	open
8433	push	A	pushed	the	door	open
8434	push	A	pushed	the	gate	open
8435	push	A	pushed	the	door	open
8436	push	A	pushed	the	door	open
8437	push	A	pushed	the	door	open
8438	push	A	pushed	the	door	open
8439	push	A	pushed	the	door	open
2133	push	A	pushed	them		open
7375	push	A	push	them		open
12087	push	A	pushed	them		open
13594	push	A	pushed	them		open

15580	push	A	pushed	them	open
8440	push	A	pushed	the door	open wide
8441	push	A	pushed	the door	wide
5651	rake	A	rake	it	level
4389	rasp	A	rasping	them	smooth
8636	rattle	A	rattling	the bolt	free
9163	ring	S	ring	a bell	loud and clear
11515	rinse	A	rinse	them	free
9165	rip	E	rip	the roof	free
14162	rip	A	ripped	it	open
17996	rip	E	ripped	it	open
9166	rip	A	ripped	the box	open
9167	rip	A	ripped	the flap	open
9168	rip	A	rip	the cloth	open
9169	rip	A	ripped	the envelope	open
9170	rip	A	ripped	the car	open
9569	rip	A	ripping	them	open
9764	rob	A	robbing	them	blind
6610	rub	A	rub	everything	clean
9178	rub	A	rubbed	the board	clean
9179	rub	A	rubbed	the lamp	clean
9180	rub	A	rubbed	the surface	smooth
9181	rub	A	rub	the woodwork	smooth
9871	rub	A	rubbing	them	smooth
9872	rub	A	rub	them	smooth
2939	scare	S	scared	him	rigid
17319	scare	A	scared	me	rigid
4234	scare	A	scare	em	shitless
12651	scare	A	scared	him	shitless
16541	scare	A	scares	him	shitless
13783	scare	S	scared	me	shitless
16036	scare	A	scare	you	shitless
10229	scare	S	scared	me	silly
14063	scare	S	scares	me	silly
14064	scare	A	scares	me	silly
16637	scare	A	scared	me	silly
6342	scare	A	scare	them	silly
1264	scare	A	scares	me	stupid
18421	scare	A	scared	me	stupid
20033	scare	A	scared	me	witless
9297	scare	A	scaring	the boy	witless
9302	scour	E	scouring	the bird-ledges	clean
9306	scrape	A	scrape	the frets	clean of
9308	scrub	A	scrubs	the wastes	clean
9309	scrub	A	Scrub	the decks	clean
9310	scrub	A	scrub	the disk	clean
4867	scrub	A	scrub	them	clean
11335	scrub	A	Scrub	them	white

7151	shag	S	shag	them	senseless
1437	shake	A	shook	him	awake
10559	shake	A	shook	him	awake
11424	shake	A	shaken	him	awake
13538	shake	A	shook	him	awake
18792	shake	A	shook	him	awake
18811	shake	A	shook	him	awake
13997	shake	A	shook	me	awake
13998	shake	A	shook	me	awake
14004	shake	A	shook	me	awake
14978	shake	A	shook	me	awake
14979	shake	A	shook	me	awake
5011	shake	A	Shook	Me	Cold
4324	shake	A	shake	it	free
10673	shake	A	shook	it	free
11496	shake	A	shook	it	free
15543	shake	A	shake	it	free
17960	shake	A	shaking	it	free
9583	shake	A	shaking	the ball	free
2851	shake	A	shook	them	free
6122	shake	A	shook	it	loose
9585	shake	A	shaking	a paper	open
13817	shake	A	shook	me	rigid
20379	shake	A	shook	me	rigid
12781	shock	A	shock	me	awake
1708	shock	A	shocked	them	awake
9602	shoot	A	shot	a stag	dead
9610	shoot	A	shot	a man	dead
9606	shoot	A	shoot	gunman	dead
20209	shoot	A	shot	her	dead
268	shoot	A	shot	him	dead
302	shoot	A	shot	him	dead
903	shoot	A	shot	him	dead
1221	shoot	A	Shoot	him	dead
3184	shoot	A	shoot	him	dead
5875	shoot	A	shot	him	dead
6950	shoot	A	shoot	him	dead
7354	shoot	A	shot	him	dead
7357	shoot	A	shot	him	dead
9151	shoot	A	shot	him	dead
10801	shoot	A	shot	him	dead
12276	shoot	A	shot	him	dead
6697	shoot	A	shot	it	dead
9603	shoot	A	shot	the bomber	dead
9604	shoot	A	shot	the bear	dead
9605	shoot	A	Shoot	the buggers	dead
9609	shoot	A	shot	the bomber	dead
20531	shoot	A	shot	you	dead

17084	shoot	A	shoot	it	full
11426	shoulder	A	shouldered	them	open
9611	shove	A	shoved	the door	open
9689	slam	A	slammed	a drawer	open
9690	slam	A	slammed	the door	open
9691	slam	A	slammed	the room	silent
11996	slash	A	slashing	it	open
9692	slide	A	sliding	the diary	free
9693	slide	A	slid	the chain	free
9694	slide	A	slid	the door	open
9695	slide	A	slid	the window	open
9696	slide	A	sliding	the door	open
9697	slide	A	slid	the door	open
14843	sling	A	sling	it	open
9698	slip	A	slipped	the magazine	free
9699	slit	A	slit	the envelope	open
9700	slit	A	slit	the corpse	open
18458	slit	A	slit	you	open
9702	smash	A	smashed	a piece	open
9703	smash	A	smash	the door	open
9704	smear	A	smear	the mud	clear of
16106	smite	A	smite	him	dead
12857	snap	A	snapping	it	free
9708	snap	E	snap	the locket	open
9709	snap	A	snaps	the door	open
13813	snap	A	snapped	them	open
9710	snatch	A	snatching	the door	open
13340	split	A	split	it	open
9762	split	E	split	the sky	open
9766	spoil	A	spoiled	Champ	rotten
532	spoil	A	spoilt	him	rotten
14271	spoil	A	spoil	him	rotten
14272	spoil	A	spoil	him	rotten
6814	spoil	A	spoil	me	rotten
9767	spoil	A	spoiled	the child	rotten
6671	spoil	A	spoils	them	rotten
11784	spoil	A	spoiling	them	rotten
14422	spoil	A	spoil	them	rotten
4977	spoil	A	spoil	us	rotten
14561	spoil	A	spoiled	you	rotten
6062	spoon	A	spooned	it	full
9771	spoon	A	spooned	the ball	wide
19639	spray	A	sprayed	it	pink
74	squeeze	A	squeeze	him	dry
11979	squeeze	A	squeezed	him	dry
9778	squeeze	A	squeezing	the puree	dry
9779	squeeze	S	squeezed	the economy	dry
20488	stain	A	stained	me	black

10968	stain	A	staining	them	brown
11646	stain	A	stains	it	red or green
7227	startle	A	startled	me	awake
6385	steam	A	steam	them	clean
9816	steam	A	steaming	the letter	open
9817	steam	A	steaming	the envelope	open
9818	steam	A	steamed	the letter	open
9819	steam	A	steaming	the letter	open
12183	steam	A	steaming	them	open
3221	sting	A	stings	me	bloodless
9831	stop	A	stopped	the Plans	dead
9832	stop	A	stop	the ball	dead
9833	stop	A	stopped	the Archdeacon	dead
9834	stop	A	stop	the mallet	dead
8712	stop	A	stop	them	dead
4995	strike	A	strike	them	blind
18795	strike	A	struck	him	dead
1373	strike	A	strike	me	dead
11480	strike	A	strike	me	dead
8309	strike	A	strike	you	dead
11421	strike	A	strike	you	dead
18807	strip	A	stripped	it	bare
9852	strip	S	stripped	the mountains	bare
9853	strip	E	strip	the country	bare
4273	strip	A	stripping	them	bare
5028	strip	A	stripping	everyone	naked
8755	strip	A	stripped	him	naked
13989	strip	A	stripped	him	naked
12262	strip	A	stripped	me	naked
9854	strip	A	stripped	the victim	naked
9855	strip	B	Strips	the interrogator	naked
1866	strip	A	strip	them	naked
11242	strip	A	stripped	them	naked
12871	strip	A	strip	you	naked
14966	stuff	A	stuff	it	full
17943	stuff	A	stuffed	it	full
4855	stuff	A	stuffing	them	full
6752	stuff	A	stuffing	them	full
13353	stuff	A	stuffed	them	full
9869	stun	S	stuns	the crowd	rigid
12795	suck	A	sucked	them	blank
8979	suck	A	suck	them	clean
3147	suck	A	suck	us	clean
9870	suck	A	suck	a plant	dry
2045	suck	A	sucking	him	dry
10639	suck	A	sucked	him	dry
11670	suck	A	sucks	him	dry
13705	suck	A	sucked	him	dry

13706	suck	A	sucked	him	dry
9871	suck	A	sucking	the sport	dry
9872	suck	A	sucking	the prey	dry
9873	suck	S	suck	the coral	dry
9689	suck	A	sucked	them	dry
15831	suck	A	sucked	us	dry
13610	suck	A	sucked	them	empty
9967	swab	A	swabbed	the wash-basin	clean
9969	sweep	A	swept	the room	clean
9970	sweep	A	sweep	the surface	clean
9971	sweep	A	sweeping	the floor	clear of
9972	sweep	A	sweep	the seas	clear of
9973	sweep	I	sweeps	the track	free
12532	swing	A	swing	him	free
9976	swing	A	swung	the rake	free
9977	swing	A	swung	the gate	open
9978	swing	A	swung	the gate	open
9979	swing	A	swung	the door	open
9980	swing	A	swung	the window	open
9981	swing	I	swung	the gates	open
9982	swing	A	swung	the door	open
9983	swing	A	swung	the door	open
7673	tear	A	torn	it	free
10093	tear	E	tearing	the rifle	free
10103	tear	A	tore	a roll	open
10094	tear	B	tear	armour	open
10565	tear	A	tear	it	open
11600	tear	A	tore	it	open
12619	tear	A	tear	it	open
13483	tear	A	tear	it	open
13666	tear	A	tore	it	open
10095	tear	A	tore	the envelope	open
10096	tear	S	tore	the pocket	open
10097	tear	A	tearing	the envelope	open
10098	tear	A	Tear	the packet	open
10099	tear	A	tore	the panel	open
10100	tear	A	tore	the door	open
10101	tear	A	tore	the despatch	open
10102	tear	A	tore	the envelope	open
4779	thrash	A	thrash	thee	senseless
4802	throw	A	throw	it	high or low
10191	throw	A	throws	a door	open
7241	throw	A	throw	it	open
7429	throw	A	throw	it	open
10555	throw	A	threw	it	open
11033	throw	A	Throwing	it	open
13996	throw	A	threw	it	open
16251	throw	A	throwing	it	open

17373	throw	A	threw	it	open
10181	throw	A	threw	the subject	open
10182	throw	A	threw	the subject	open
10183	throw	A	throws	the contest	open
10184	throw	A	throwing	the competition	open
10185	throw	A	threw	the meeting	open
10186	throw	A	threw	the window	open
10187	throw	A	throw	the debate	open
10188	throw	A	threw	the door	open
10189	throw	A	throwing	the door	open
10190	throw	A	threw	the door	open
10192	throw	A	throwing	the door	open
10193	throw	S	throwing	the way	open
10194	throw	A	threw	the door	open
4029	throw	A	threw	them	open
10770	throw	A	threw	them	open
12684	throw	A	throw	them	wide
10197	thrust	A	thrust	the doors	open
10198	thrust	A	thrust	the door	open
17816	towel	A	towelling	it	dry
3177	towel	A	towel	them	dry
1464	tread	A	tread	it	firm
1793	tread	A	tread	it	firm
7587	tread	A	tread	it	firm
10234	tug	A	tugged	a blanket	free
11599	tug	A	tugged	it	free
18007	tug	A	tugged	it	free
10235	tug	A	tugged	the gown	free
10236	tug	A	tugged	the leather	free
10897	tug	A	tugged	them	loose
10260	twist	U	twist	reality	askew
5915	wash	A	wash	it	clean
13434	wash	A	washed	it	clean
10592	wash	A	Wash	the surface	clean
10593	wash	A	washed	the podger	clean
1432	wash	A	wash	them	clean
540	wash	A	washes	us	clean
9111	wash	A	wash	them	free
16644	wear	A	wore	me	numb
6054	wear	A	wear	them	smooth
7379	wedge	A	Wedging	it	open
9132	whip	A	whip	you	raw
13609	whisper	A	whispered	nothing	awake
10680	winch	A	winching	the ship	free
15852	wipe	A	wipe	it	blank
15853	wipe	A	wipe	it	blank
10691	wipe	A	wiped	a table	clean
832	wipe	A	wipe	it	clean

2153	wipe	A	wiped	it	clean
7755	wipe	A	wiped	it	clean
9029	wipe	A	wipe	it	clean
13595	wipe	A	wiped	it	clean
10681	wipe	A	wipe	the slate	clean
10682	wipe	A	Wiping	the board	clean
10683	wipe	A	wipe	the slate	clean
10684	wipe	A	wipe	the slate	clean
10685	wipe	U	Wiping	the Slate	Clean
10686	wipe	A	wipe	the slate	clean
10687	wipe	A	wiped	the blade	clean
10688	wipe	A	wiped	the slate	clean
10689	wipe	A	wipe	the mallet	clean
10690	wipe	A	wiping	the bowl	clean
10692	wipe	A	wiping	the slate	clean
10693	wipe	A	wipe	the slate	clean
10694	wipe	A	wipe	the screen	clean
10695	wipe	A	wipe	the slate	clean
10696	wipe	A	wipe	the bugger	clean
4088	wipe	A	wipe	them	clean
20008	wipe	A	wipe	them	clean
20361	wipe	A	wipe	them	clean
10665	wipe	A	wiped	them	clear
10697	wipe	A	wipe	the screen	clear of
10698	wipe	A	wipe	the oilskins	dry
10699	wipe	A	wiped	the floor	dry
8751	wipe	A	wiping	them	dry
14435	wipe	A	wiped	them	dry
10700	wipe	A	Wipe	the slide	free
10701	wipe	A	wiped	the floor	moist
16082	wobble	A	wobbled	him	awake
16462	work	A	work	it	free
3998	work	A	worked	it	loose
10718	worm	A	wormed	the gate	open
2462	wrap	A	wrap	me	snug and
2463	wrap	A	wrap	me	snug and
10719	wrench	I	wrench	the buoy	adrift
18107	wrench	A	wrench	him	free
3588	wrench	A	wrenched	it	free
10387	wrench	A	wrenched	it	free
14882	wrench	A	wrenched	it	free
10720	wrench	A	wrenched	the ring	free
10721	wrench	A	wrench	the thing	free
5999	wrench	A	wrenched	it	open
10722	wrench	A	wrenched	the door	open
10723	wrench	A	wrenched	the bonnet	open
10724	wrench	A	wrenched	the door	open
10725	wrestle	A	wrestle	the boat	free

1335	yank	A	yanked	it	free
6773	yank	A	yanked	it	free
14873	yank	A	yank	them	free
2010	yank	A	yanked	it	open
14862	yank	A	yanked	it	open
10738	yank	A	yanked	the door	open
10739	yank	A	yanked	the door	open
10740	yank	A	yanked	the door	open
6642	zap	A	zapped	you	insensible

Fields

1.	Seq No.	Sequential No.
2.	Verb Inf	Infinitive form of verb
3.	ST	Semantic type of subject NP A: Agent I: Instrument B: Body part E: Event S: Non-agentive subject U: Unknown
4.	Verb	Verb
5.	Object	Object NP
6.	Adject	Result adjective

Appendix A2

144 Drive-Headed AP Resultatives and Subject Semantic Types
(Sorted in ascending order of verb infinitives)

Seq No.	Verb inf	ST	Verb	Object		Adjective
1612	drive	S	drive	a	person	insane
1619	drive	S	drive	a	man	mad
1621	drive	S	drive	a	man	mad
1608	drive	S	drive	the	curators	crazy
1617	drive	S	drives	the	people	mad
1618	drive	A	Driving	the	daughters	mad
1620	drive	S	drove	the	producer	mad
1622	drive	A	driving	the	neighbours	mad
17	drive	S	driving	me		crazy
20	drive	S	drove	me		spare
78	drive	S	drives	me		crazy
115	drive	A	drove	me		crazy
265	drive	S	drive	you		crazy
274	drive	U	Driving	Me		Crazy
275	drive	U	Driving	Me		Crazy
756	drive	S	drives	them		crazy
1300	drive	A	drive	me		dotty
1316	drive	S	drive	you		mad
1376	drive	S	drive	you		mad
1606	drive	S	drove	fish		crazy
1607	drive	S	drive	people		crazy
1611	drive	S	drive	golfers		insane
1613	drive	S	drives	men		mad
1614	drive	S	drives	men		mad
1615	drive	S	drove	animals		mad
1616	drive	A	driving	people		mad
1623	drive	S	drives	dogs		mad
1624	drive	S	drive	men		mad
1789	drive	S	driving	me		crazy
2037	drive	A	drive	me		insane
2217	drive	F	driving	them		clear of
2218	drive	F	drive	you		onshore
2290	drive	A	driving	him		mad
2364	drive	S	drive	me		crazy
2385	drive	A	driving	me		barmy
2678	drive	U	DRIVES	ME		CRAZY
2792	drive	A	drove	me		mad
3340	drive	U	Driving	Me		Crazy
3751	drive	S	drove	them		insane
3918	drive	S	drove	him		mad
4009	drive	S	Drive	you		crazy
4259	drive	U	Driving	Me		Crazy
4412	drive	S	drives	us		mad

4773	drive	S	drive	us	mad
4852	drive	S	drive	you	mad
4938	drive	A	drive	me	mad
4939	drive	A	drive	me	mad
4940	drive	A	drive	me	mad
4978	drive	A	driven	me	mad
5014	drive	S	drive	you	mad
5164	drive	F	driving	me	mad
5175	drive	S	drove	him	mad
5223	drive	A	drive	you	crazy
5266	drive	S	drove	me	insane
5389	drive	A	drove	him	frantic
5399	drive	S	drove	him	mad
5538	drive	A	drove	him	mad
5682	drive	S	drive	him	mad
5923	drive	A	drove	him	mad
6263	drive	A	driving	me	mad
6504	drive	S	drives	us	crazy
6565	drive	S	drives	them	insane
6654	drive	S	drive	you	crazy
6717	drive	S	driving	me	crazy
6820	drive	A	driving	him	crazy
6821	drive	A	driving	him	mad
6859	drive	A	driving	me	crazy
6937	drive	A	driving	me	mad
7139	drive	S	drive	you	mad
7213	drive	A	drivin'	me	dizzy
7425	drive	S	drive	you	crazy
8355	drive	S	drives	me	mad
9116	drive	S	drives	them	mad
9117	drive	S	drive	them	mad
9351	drive	A	drove	me	crackers
9938	drive	S	driving	me	insane
10231	drive	S	drives	me	crazy
10691	drive	S	driven	me	mad
10693	drive	S	drive	you	mad
11009	drive	S	drove	him	mad
11228	drive	A	drive	them	crazy
11379	drive	A	driving	me	mad
11797	drive	S	drive	me	insane
11859	drive	A	drives	me	crazy
12153	drive	S	driving	me	mad
12209	drive	S	drives	me	mad
12385	drive	S	drives	me	mad
12396	drive	S	drove	me	mad
12568	drive	A	driving	me	insane
12881	drive	S	drives	you	mad
12978	drive	A	drive	me	mad

13408	drive	S	drove	him	mad
13708	drive	A	drive	me	mad
13810	drive	A	driving	me	insane
13814	drive	A	driving	me	insane
13818	drive	S	drive	me	insane
13841	drive	S	drove	me	batty
13903	drive	S	drive	me	mad
14037	drive	A	driving	me	crazy
14283	drive	S	drives	me	crazy
14408	drive	S	drive	me	demented
14607	drive	S	driving	me	mad
14719	drive	A	drive	me	crazy
15834	drive	S	drive	you	crazy
15861	drive	S	drives	you	mad
16011	drive	S	drives	them	mad
16016	drive	S	drives	them	mad
16128	drive	S	drive	you	insane
16463	drive	A	driving	me	mad
16504	drive	S	drive	you	mad
16974	drive	A	drove	you	mad
17349	drive	A	drove	him	mad
17557	drive	S	driving	me	mad
17825	drive	A	driving	me	crazy
17952	drive	A	driving	me	crazy
18034	drive	S	driving	me	crazy
18110	drive	S	drive	me	crazy
18141	drive	S	driving	me	mad
18443	drive	A	driving	me	mad
19007	drive	S	drives	you	mad
19329	drive	S	driving	me	mad
19337	drive	A	driving	me	mad
19372	drive	S	drives	me	mad
19425	drive	A	drives	me	batty
19426	drive	A	drives	me	batty
19574	drive	S	drives	you	mad
19581	drive	U	drive	you	mad
19727	drive	A	driving	me	batty
19771	drive	A	drives	me	mad
19775	drive	S	drives	me	mad
19832	drive	S	drives	me	insane
19850	drive	A	drove	me	crazy
19890	drive	A	driving	us	crazy
19936	drive	S	driving	me	mad
20004	drive	S	drives	me	dotty
20093	drive	S	driving	me	daft
20197	drive	A	drive	me	mad
20247	drive	U	drives	you	daft
20248	drive	U	Driving	me	mad

20326	drive	S	drives	me	daft
20553	drive	A	driving	me	mad
20585	drive	A	drives	you	insane
20799	drive	S	drive	me	crazy
20800	drive	A	drive	me	crazy

Fields

1.	Seq No.	Sequential No.
2.	Verb Inf	Infinitive form of verb
3.	ST	Semantic type of subject NP
		A: Agent
		I: Instrument
		B: Body part
		F: Fact
		S: Non-agentive subject
		U: Unknown
4.	Verb	Verb
5.	Object	Object NP
6.	Adjective	Result adjective

Note that the verbs *drive* , *run* and *send* are classified in a verb class named *AP complement verb* in this paper.

Appendix A3

33 Turn-Headed AP Resultatives and Subject Semantic Types
(Sorted in ascending order of verb infinitives)

Seq No.	Verb inf	ST	Verb	Object	Adjective
10238	turn	S	turn	a stream	anaerobic
10241	turn	A	turns	shares	bearish
10242	turn	A	turn	the skies	black
10243	turn	A	turn	the skies	black
870	turn	F	turns	them	black
10372	turn	A	turn	it	blue
4789	turn	A	turn	them	blue
12682	turn	F	turn	it	brown
14377	turn	S	turned	it	brown
10244	turn	S	turn	the beer	cloudy
9599	turn	S	turning	it	cold and heavy
19391	turn	S	turn	them	different
17366	turn	S	turn	everyone	foolish and mad
8927	turn	S	turn	it	green
17992	turn	S	turns	it	green
10245	turn	S	turns	limewater	milky
2624	turn	S	turned	it	mushy
10246	turn	S	turns	people	odd
12367	turn	S	turning	it	pale and soft
10248	turn	F	turning	every shadow	pale blue
10249	turn	S	turn	the whites	pink
807	turn	A	turning	it	political
10250	turn	S	turn	the afternoon	predictable
4874	turn	S	turning	it	rancid
4706	turn	S	turns	it	red
10254	turn	S	turn	the lake	saline
12219	turn	A	turned	them	short
10255	turn	U	turned	partnership	sour
10256	turn	A	turn	the water	thick and green
12680	turn	A	turn	it	violet
7950	turn	A	turn	them	white
14569	turn	S	turned	them	white
10285	turn	S	turned	it	yellow

Fields

1. Seq No. Sequential No.
2. Verb Inf Infinitive form of verb
3. ST Semantic type of subject NP
   A: Agent
   I: Instrument
   B: Body part
   F: Fact

		S: Non-agentive subject U: Unknown
4.	Verb	Verb
5.	Object	Object NP
6.	Adjective	Result adjective

Appendix A4

3,820 Verbs in PP (Into) Resultatives and Subject Types plus AP Complement
Verb Resultatives (drive/run/send/turn) and Periphrastic Resultatives (get/let/make)
(Sorted in ascending order of verbs)

Seq No.	Verb	Instance	Agent	Body part	Natural force	Instrument	Other inanimate subject	Un-judgeable
1	absorb	5	4	1	0	0	1	0
2	accept	1	1	0	0	0	0	0
3	admit	3	3	0	0	0	0	0
4	aggregate	1	1	0	0	0	0	0
5	alarm	1	0	0	0	0	0	1
6	alchemise	1	1	0	0	0	0	0
7	allow	9	9	0	0	0	0	0
8	analyse	6	5	0	0	0	0	1
9	arrange	4	4	0	0	0	0	0
10	assemble	1	1	0	0	0	0	0
11	assimilate	2	2	0	0	0	0	0
12	assist	1	1	0	0	0	0	0
13	attach	1	0	0	0	0	0	0
14	attract	4	3	0	0	0	0	0
15	back	2	2	0	0	0	0	0
16	badger	2	2	0	0	0	0	0
17	bake	1	0	0	1	0	0	0
18	bang	1	1	0	0	0	0	0
19	bank	2	1	1	0	0	1	0
20	bark	1	1	0	0	0	0	0
21	batter	1	0	1	0	0	1	0
22	bear	2	2	0	0	0	0	0
23	beat	9	8	0	0	0	0	1
24	beckon	1	0	1	0	0	1	0
25	bend	2	2	0	0	0	0	0
26	bind	3	0	3	0	0	3	0
27	bite	1	1	0	0	0	0	0
28	blackmail	4	4	0	0	0	0	0
29	blast	3	3	0	0	0	0	0
30	blend	2	2	0	0	0	0	0
31	blow	5	4	0	1	0	0	0
32	bludgeon	1	1	0	0	0	0	0
33	bluff	1	1	0	0	0	0	0
34	boot	3	3	0	0	0	0	0
35	bounce	4	3	1	0	0	1	0
36	break	25	23	0	1	0	0	0
37	breathe	2	2	0	0	0	0	0
38	bribe	1	1	0	0	0	0	0
39	bring	189	131	0	0	3	47	7
40	broaden	1	1	0	0	0	0	0

41	browbeat	1	1	0	0	0	0	0
42	brush	1	1	0	0	0	0	0
43	build	3	3	0	0	0	0	0
44	bully	5	5	0	0	0	0	0
45	bump	2	1	1	0	0	1	0
46	bundle	6	5	0	0	1	0	0
47	bung	1	1	0	0	0	0	0
48	burn	5	3	0	1	0	0	0
49	bury	1	1	0	0	0	0	0
50	cajole	1	1	0	0	0	0	0
51	call	7	3	2	0	1	2	1
52	careen	1	1	0	0	0	0	0
53	carry	24	21	1	0	0	0	0
54	carve	5	4	1	0	0	1	0
55	cast	6	6	0	0	0	0	0
56	categorise	2	2	0	0	0	0	0
57	change	14	8	5	0	0	5	0
58	channel	2	2	0	0	0	0	0
59	charm	2	2	0	0	0	0	0
60	chase	1	1	0	0	0	0	0
61	chew	1	1	0	0	0	0	0
62	chisel	1	1	0	0	0	0	0
63	chop	4	4	0	0	0	0	0
64	churn	2	2	0	0	0	0	0
65	classify	6	6	0	0	0	0	0
66	clatter	1	1	0	0	0	0	0
67	clean	1	1	0	0	0	0	0
68	clench	1	1	0	0	0	0	0
69	click	1	1	0	0	0	0	0
70	clip	4	4	0	0	0	0	0
71	close	2	2	0	0	0	0	0
72	coax	1	1	0	0	0	0	0
73	coerce	5	4	1	0	0	1	0
74	coil	1	1	0	0	0	0	0
75	combine	2	2	0	0	0	0	0
76	compound	1	1	0	0	0	0	0
77	compress	1	1	0	0	0	0	0
78	con	3	3	0	0	0	0	0
79	concentrate	3	1	0	0	2	0	0
80	condense	1	1	0	0	0	0	0
81	conduct	1	1	0	0	0	0	0
82	confuse	2	2	0	0	0	0	0
83	connect	1	1	0	0	0	0	0
84	consolidate	1	0	1	0	0	1	0
85	constrain	2	0	2	0	0	2	0
86	convert	72	56	7	1	6	7	0
87	coopt	1	1	0	0	0	0	0
88	copy	3	3	0	0	0	0	0

89	corral	1	1	0	0	0	0	0
90	count	2	2	0	0	0	0	0
91	crack	1	0	0	0	0	0	0
92	craft	1	1	0	0	0	0	0
93	cram	6	6	0	0	0	0	0
94	crash	8	5	0	0	0	0	0
95	credit	1	1	0	0	0	0	0
96	crowd	2	1	1	0	0	1	0
97	crumple	3	3	0	0	0	0	0
98	crush	2	2	0	0	0	0	0
99	curl	3	3	0	0	0	0	0
100	curse	1	1	0	0	0	0	0
101	curve	1	1	0	0	0	0	0
102	cut	67	64	2	0	0	2	0
103	deceive	9	6	3	0	0	3	0
104	decompose	2	2	0	0	0	0	0
105	degrade	2	0	2	0	0	2	0
106	demarcate	1	1	0	0	0	0	0
107	deposit	2	1	1	0	0	1	0
108	develop	7	7	0	0	0	0	0
109	diffuse	2	1	1	0	0	1	0
110	dig	10	9	0	0	0	0	0
111	dimple	1	0	1	0	0	1	0
112	dip	20	19	0	0	0	0	0
113	direct	1	1	0	0	0	0	0
114	disaggregate	1	1	0	0	0	0	0
115	dismantle	1	1	0	0	0	0	0
116	disperse	1	0	0	1	0	0	0
117	dissect	2	2	0	0	0	0	0
118	dissolve	4	0	2	1	0	2	1
119	distil	1	0	1	0	0	1	0
120	distort	1	0	1	0	0	1	0
121	divert	2	1	0	0	1	0	0
122	divide	159	113	34	0	1	34	3
123	drag	13	11	1	0	1	1	0
124	draw	36	20	12	0	3	12	0
125	dredge	1	1	0	0	0	0	0
126	drive	50	36	0	0	1	12	0
127	drop	42	36	0	0	1	0	0
128	dump	3	3	0	0	0	0	0
129	dupe	1	0	0	0	0	0	0
130	dwarf	1	0	1	0	0	1	0
131	ease	10	6	0	0	0	0	2
132	edge	2	2	0	0	0	0	0
133	educate	2	1	0	0	0	0	0
134	electrify	1	0	0	0	0	0	0
135	elevate	2	1	0	0	0	0	0
136	elongate	1	0	1	0	0	1	0

137	embarrass	1	1	0	0	0	0	0
138	embed	1	0	0	0	0	0	0
139	empty	5	4	0	0	0	0	0
140	enable	1	0	1	0	0	1	0
141	encode	3	1	0	0	0	0	0
142	encourage	2	1	1	0	0	1	0
143	enter	18	14	0	0	0	0	1
144	entice	5	3	1	0	0	1	0
145	escalate	4	3	1	0	0	1	0
146	evolve	1	0	0	0	0	0	1
147	expand	2	1	0	0	0	0	0
148	extend	9	3	2	0	0	2	1
149	fasten	1	0	0	0	0	0	0
150	feed	16	12	1	0	0	1	1
151	fire	7	4	0	0	1	0	0
152	fit	15	7	0	0	1	0	0
153	fix	6	4	0	0	0	0	0
154	flare	1	0	0	0	0	0	0
155	flatten	2	1	1	0	0	1	0
156	flick	7	6	0	0	0	0	0
157	fling	4	4	0	0	0	0	0
158	flip	1	0	0	0	0	0	0
159	float	2	1	1	0	0	1	0
160	floor	1	1	0	0	0	0	0
161	flower	1	0	0	0	0	0	0
162	fold	13	11	0	0	0	0	0
163	fool	6	4	0	0	0	0	0
164	force	53	18	13	0	1	13	2
165	form	4	3	0	0	0	0	0
166	freeze	1	1	0	0	0	0	0
167	fret	1	0	0	0	0	0	0
168	frighten	5	5	0	0	0	0	0
169	fumble	1	1	0	0	0	0	0
170	funnel	1	0	0	0	0	0	0
171	galvanise	4	0	2	0	0	2	0
172	gas	1	1	0	0	0	0	0
173	gather	8	7	0	0	0	0	0
174	get	93	84	0	0	0	4	5
175	give	3	3	0	0	0	0	0
176	goad	2	0	1	0	0	1	0
177	grant	1	0	0	0	0	0	0
178	grind	5	2	0	0	0	0	0
179	group	3	1	0	0	0	0	0
180	grow	1	1	0	0	0	0	0
181	guide	6	3	0	0	0	0	0
182	hack	3	1	0	0	0	0	0
183	hammer	8	5	0	0	0	0	0
184	harass	1	1	0	0	0	0	0

185	haul	2	1	0	0	0	0	0
186	head	2	1	0	0	0	0	0
187	heave	3	2	0	0	0	0	0
188	hector	1	0	0	0	0	0	0
189	help	6	4	0	0	0	0	0
190	herd	2	1	0	0	0	0	0
191	hit	3	2	0	0	0	0	0
192	hoist	4	3	0	0	0	0	0
193	hold	2	0	0	0	0	0	0
194	holster	1	1	0	0	0	0	0
195	hoof	1	0	0	0	0	0	0
196	hook	1	1	0	0	0	0	0
197	hurl	6	4	0	0	0	0	0
198	hurry	2	1	0	0	0	0	0
199	impart	1	0	1	0	0	1	0
200	impel	1	0	1	0	0	1	0
201	import	6	4	0	0	0	0	0
202	imprint	1	0	0	0	0	0	0
203	incorporate	23	14	0	0	0	0	0
204	infiltrate	2	1	0	0	0	0	0
205	initiate	3	1	0	0	0	0	0
206	inject	9	4	0	0	0	0	0
207	input	1	0	0	0	0	0	0
208	inscribe	1	0	0	0	0	0	0
209	insert	31	15	0	0	0	0	1
210	install	2	1	0	0	0	0	0
211	instill	1	0	0	0	0	0	0
212	integrate	23	6	0	0	0	0	2
213	interpose	1	0	0	0	0	0	0
214	interpret	1	0	0	0	0	0	0
215	introduce	28	9	0	0	0	0	0
216	inveigle	2	0	0	0	0	0	0
217	invite	6	6	0	0	0	0	0
218	jab	8	7	0	0	0	0	0
219	jam	2	1	0	0	0	0	0
220	jerk	5	4	0	0	0	0	0
221	key	1	1	0	0	0	0	0
222	kick	10	9	0	0	0	0	0
223	knead	1	1	0	0	0	0	0
224	knock	4	2	0	0	0	0	0
225	ladle	2	2	0	0	0	0	0
226	lash	3	0	0	1	0	0	0
227	launch	2	2	0	0	0	0	0
228	lay	2	2	0	0	0	0	0
229	lead	89	41	15	0	1	15	1
230	lean	2	2	0	0	0	0	0
231	let	11	8	0	0	0	3	0
232	lever	3	3	0	0	0	0	0

233	lift	9	4	0	0	0	0	0
234	link	3	2	0	0	0	0	0
235	load	14	9	0	0	0	0	1
236	lob	6	4	0	0	0	0	0
237	locate	1	0	0	0	0	0	0
238	lock	7	2	2	0	0	2	0
239	log	2	1	0	0	0	0	0
240	loosen	1	0	0	0	0	0	0
241	lower	5	1	0	0	0	0	0
242	lug	1	1	0	0	0	0	0
243	lull	9	7	2	0	0	2	0
244	lure	8	4	1	0	1	1	0
245	make	30	22	0	0	0	4	2
246	manhandle	2	1	0	0	0	0	0
247	manipulate	2	2	0	0	0	0	0
248	manoeuvre	6	2	0	0	0	0	0
249	map	1	0	0	0	0	0	0
250	march	1	1	0	0	0	0	0
251	massage	5	3	0	0	0	0	0
252	measure	1	1	0	0	0	0	0
253	merge	1	0	0	0	0	0	0
254	mislead	4	1	0	0	0	0	1
255	mix	3	2	0	0	0	0	0
256	modify	1	0	0	0	0	0	0
257	mould	4	2	0	0	0	0	0
258	mount	1	1	0	0	0	0	0
259	move	20	11	1	0	0	1	0
260	nock	1	1	0	0	0	0	0
261	nudge	3	2	0	0	0	0	0
262	numb	1	0	0	0	0	0	0
263	ordain	1	1	0	0	0	0	0
264	order	4	2	2	0	0	2	0
265	organise	7	1	0	0	0	0	0
266	overawe	1	0	0	0	0	0	0
267	overforce	1	0	0	0	0	0	0
268	pack	12	8	0	0	0	0	0
269	panic	2	0	0	0	0	0	0
270	partition	5	2	1	0	2	1	0
271	pass	5	4	0	0	0	0	0
272	paste	1	0	0	0	0	0	0
273	pat	1	1	0	0	0	0	0
274	pay	3	0	1	0	0	1	0
275	pencil	1	1	0	0	0	0	0
276	persuade	1	0	1	0	0	1	0
277	piece	1	0	0	0	0	0	0
278	pile	8	5	0	0	0	0	0
279	pin	1	0	0	0	0	0	0
280	pipe	2	2	0	0	0	0	0

281	pitch	1	0	1	0	0	1	0
282	place	9	5	1	0	0	1	1
283	plant	1	0	0	0	0	0	0
284	play	1	1	0	0	0	0	0
285	plonk	1	1	0	0	0	0	0
286	plug	8	6	0	0	0	0	0
287	plumb	1	1	0	0	0	0	0
288	plunge	48	16	9	1	0	9	1
289	poke	9	8	0	0	0	0	0
290	pop	6	5	0	0	0	0	0
291	post	1	1	0	0	0	0	0
292	pound	6	2	1	0	0	1	0
293	pour	56	52	0	0	0	0	0
294	press	22	18	0	0	0	0	1
295	pressure	3	0	1	0	0	1	0
296	pressurise	4	1	0	0	0	0	0
297	prime	1	0	0	0	0	0	0
298	project	3	1	1	0	0	1	0
299	prompt	2	0	1	0	0	1	0
300	propel	2	0	1	0	0	1	0
301	provide	3	1	2	0	0	2	0
302	provoke	13	3	1	0	0	1	0
303	psych	1	1	0	0	0	0	0
304	pull	21	13	1	0	1	1	0
305	pump	5	4	0	0	0	0	0
306	punch	4	2	0	0	0	0	0
307	push	103	61	4	0	0	4	0
308	put	353	211	0	0	0	5	4
309	raise	4	2	0	0	0	0	0
310	rake	3	0	0	0	0	0	0
311	ram	6	4	0	0	0	0	0
312	rationalize	1	0	1	0	0	1	0
313	reabsorb	1	0	0	0	0	0	0
314	read	2	0	0	0	0	0	0
315	rearrange	1	0	0	0	0	0	0
316	recast	1	0	0	0	0	0	0
317	receive	1	0	0	0	0	0	0
318	recontour	1	1	0	0	0	0	0
319	recruit	1	1	0	0	0	0	0
320	recycle	1	0	0	0	0	0	0
321	redeploy	1	0	0	0	0	0	0
322	reduce	2	1	0	0	0	0	0
323	refine	2	0	0	0	0	0	0
324	reform	1	0	0	0	0	0	0
325	reformat	2	0	0	0	0	0	0
326	reinsert	1	1	0	0	0	0	0
327	reintroduce	1	0	0	0	0	0	0
328	release	11	4	1	0	0	1	0

329	reorganise	1	1	0	0	0	0	0
330	replace	1	1	0	0	0	0	0
331	represent	1	0	0	0	0	0	0
332	reset	1	0	0	0	0	0	0
333	reshape	1	0	0	0	0	0	0
334	restructure	1	1	0	0	0	0	0
335	retranslate	1	1	0	0	0	0	0
336	return	2	1	0	0	0	0	0
337	rev	1	1	0	0	0	0	0
338	reverse	3	0	0	0	0	0	0
339	rewire	1	0	0	0	0	0	0
340	roll	12	8	0	0	0	0	0
341	rotate	3	2	0	0	0	0	0
342	rotovate	1	0	0	0	0	0	0
343	rub	1	0	0	0	0	0	0
344	run	5	3	0	0	0	0	0
345	rush	1	0	0	0	0	0	0
346	sashay	1	1	0	0	0	0	0
347	saw	1	1	0	0	0	0	0
348	scoop	4	2	0	0	0	0	0
349	scrape	6	2	0	0	0	0	0
350	screw	3	2	0	0	0	0	0
351	sculpt	1	1	0	0	0	0	0
352	seduce	3	0	0	0	0	0	0
353	segment	4	0	0	0	0	0	0
354	segregate	1	0	0	0	0	0	0
355	seize	1	0	0	0	0	0	0
356	sell	2	1	0	0	0	0	0
357	send	24	13	0	0	0	10	1
358	separate	12	4	2	0	0	2	0
359	set	2	1	0	0	0	1	0
360	settle	2	1	0	0	0	0	0
361	sever	2	0	0	0	0	0	0
362	sew	2	1	0	0	0	0	0
363	shake	4	2	0	0	0	0	0
364	shape	8	2	0	0	0	0	0
365	sharpen	2	1	0	0	0	0	0
366	shift	2	0	0	0	0	0	0
367	shock	4	0	1	0	0	1	0
368	shoehorn	2	2	0	0	0	0	0
369	shoo	1	1	0	0	0	0	0
370	shoot	6	5	0	0	0	0	0
371	shove	13	8	0	0	0	0	0
372	shovel	4	2	0	0	0	0	0
373	shunt	2	1	0	0	0	0	0
374	sift	5	0	0	0	0	0	0
375	sign	2	2	0	0	0	0	0
376	simplify	3	1	0	0	0	0	0

377	sink	8	4	0	0	0	0	0
378	slam	10	9	0	0	0	0	0
379	slap	2	2	0	0	0	0	0
380	slash	1	0	0	0	0	0	0
381	slice	7	3	0	0	0	0	0
382	slide	18	17	0	0	0	0	0
383	sling	1	1	0	0	0	0	0
384	slip	44	33	0	0	0	0	0
385	slot	6	2	0	0	0	0	0
386	slow	1	1	0	0	0	0	0
387	smack	1	1	0	0	0	0	0
388	smash	6	4	0	0	0	0	0
389	smooth	1	1	0	0	0	0	0
390	smuggle	3	1	0	0	0	0	0
391	snap	2	2	0	0	0	0	0
392	snatch	1	1	0	0	0	0	0
393	sneak	1	0	0	0	0	0	0
394	snip	1	1	0	0	0	0	0
395	soften	1	0	0	0	0	0	0
396	sort	10	5	0	0	0	0	0
397	spark	1	0	1	0	0	1	0
398	spill	1	1	0	0	0	0	0
399	spin	1	0	0	1	0	0	0
400	spirit	1	0	0	0	0	0	0
401	spit	4	3	0	0	0	0	0
402	splash	1	0	0	0	0	0	0
403	splinter	1	0	0	0	1	0	0
404	split	44	13	3	0	0	3	1
405	spoon	15	13	0	0	0	0	0
406	spray	1	1	0	0	0	0	0
407	spread	1	0	0	0	0	0	0
408	sprinkle	1	1	0	0	0	0	0
409	spur	3	1	0	0	0	0	0
410	square	1	1	0	0	0	0	0
411	squeeze	5	4	0	0	0	0	0
412	stab	4	3	0	0	0	0	0
413	startle	3	2	1	0	0	1	0
414	starve	1	0	0	0	0	0	0
415	steer	10	8	0	0	0	0	0
416	stick	22	13	0	0	0	0	0
417	sting	3	1	0	0	0	0	0
418	stir	15	11	0	1	0	0	1
419	stitch	1	1	0	0	0	0	0
420	stow	2	1	0	0	0	0	0
421	strain	5	3	0	0	0	0	0
422	strike	1	1	0	0	0	0	0
423	stroke	2	0	0	0	0	0	0
424	structure	2	1	0	0	0	0	0

425	stuff	14	8	0	0	0	0	0
426	stun	2	0	1	0	0	1	0
427	subdivide	3	1	0	0	0	0	0
428	suck	3	1	0	0	1	0	0
429	surf	1	0	0	0	0	0	0
430	surprise	2	0	0	0	0	0	1
431	sweep	3	2	0	0	0	0	0
432	swing	8	4	0	0	0	0	0
433	swirl	2	0	0	1	0	0	0
434	switch	4	1	0	0	0	0	0
435	synthesise	1	0	0	0	0	0	0
436	syphon	1	0	0	0	0	0	0
437	take	195	87	0	0	0	5	1
438	talk	4	2	0	0	0	0	0
439	tantalize	1	0	0	0	0	0	0
440	tap	5	5	0	0	0	0	0
441	tax	1	1	0	0	0	0	0
442	tear	7	5	0	0	0	0	0
443	tease	7	1	0	0	0	0	0
444	tempt	3	0	0	0	0	0	0
445	terrify	2	0	0	0	0	0	0
446	terrorise	2	1	0	0	0	0	0
447	thin	1	0	0	0	0	0	0
448	thread	1	0	0	0	0	0	0
449	throw	80	43	4	0	0	4	0
450	thrust	28	20	2	0	0	2	0
451	thump	1	1	0	0	0	0	0
452	tie	2	2	0	0	0	0	0
453	tip	22	13	0	0	0	0	0
454	torment	1	1	0	0	0	0	0
455	torture	1	1	0	0	0	0	0
456	toss	19	12	0	0	0	0	0
457	touch	1	0	0	0	0	0	0
458	tow	2	0	0	0	0	0	0
459	transfer	6	3	0	0	0	0	0
460	transform	59	19	7	0	0	7	2
461	translate	35	11	1	0	1	1	0
462	transmit	2	0	0	0	0	0	0
463	transmute	1	0	0	0	0	0	0
464	transplant	2	0	0	0	0	0	0
465	transpose	2	1	0	0	0	0	0
466	trap	2	0	0	0	0	0	0
467	trick	5	1	0	0	0	0	0
468	trigger	3	0	1	0	0	1	0
469	tuck	11	6	0	0	0	0	0
470	tune	1	0	0	0	0	0	0
471	turn	278	84	0	0	3	15	1
472	tweak	1	1	0	0	0	0	0

473	twist	6	4	0	0	0	0	0
474	type	2	2	0	0	0	0	0
475	unify	1	1	0	0	0	0	0
476	unload	3	1	0	0	0	0	0
477	upend	1	1	0	0	0	0	0
478	usher	1	1	0	0	0	0	0
479	vomit	1	0	0	0	0	0	0
480	waft	1	0	0	0	0	0	0
481	wallop	1	1	0	0	0	0	0
482	wash	2	0	0	0	0	0	0
483	wax	1	0	0	0	0	0	0
484	weave	2	1	0	0	0	0	0
485	wedge	3	2	0	0	0	0	0
486	welcome	4	1	0	0	0	0	0
487	weld	3	0	1	0	0	1	0
488	whack	1	1	0	0	0	0	0
489	wheel	2	2	0	0	0	0	0
490	whip	4	2	0	1	0	0	0
491	whisk	2	1	0	0	0	0	0
492	whittle	1	1	0	0	0	0	0
493	withdraw	1	0	0	0	0	0	0
494	work	4	4	0	0	0	0	0
495	wrap	1	1	0	0	0	0	0
496	write	1	1	0	0	0	0	0

Appendix A5

List of Verbs that Appear in PP (Into) Resultatives Found in BNC

Rank	Verb	Instances
1	divide	159
2	push	103
3	lead	89
4	throw	80
5	convert	72
6	cut	67
7	transform	59
8	pour	56
9	force	53
10	plunge	48
11	slip	44
12	split	44
13	drop	42
14	draw	36
15	translate	35
16	insert	31
17	introduce	28
18	thrust	28
19	break	25
20	incorporate	23
21	integrate	23
22	press	22
23	stick	22
24	tip	22
25	pull	21
26	dip	20
27	move	20
28	toss	19
29	enter	18
30	slide	18
31	feed	16
32	fit	15
33	spoon	15
34	stir	15
35	change	14
36	load	14
37	stuff	14
38	drag	13
39	fold	13
40	provoke	13
41	shove	13
42	pack	12
43	roll	12
44	separate	12
45	release	11
46	tuck	11
47	dig	10
48	ease	10
49	kick	10
50	slam	10
51	sort	10
52	steer	10
53	allow	9
54	beat	9
55	deceive	9
56	extend	9
57	inject	9
58	lift	9
59	lull	9
60	place	9
61	poke	9
62	crash	8
63	gather	8
64	hammer	8
65	jab	8
66	lure	8
67	pile	8
68	plug	8
69	shape	8
70	sink	8
71	swing	8
72	call	7
73	develop	7
74	fire	7
75	flick	7
76	lock	7
77	organise	7
78	slice	7
79	tear	7
80	tease	7
81	analyse	6
82	bundle	6
83	cast	6
84	classify	6
85	cram	6
86	fix	6
87	fool	6
88	guide	6

Rank	Verb	Instances
89	help	6
90	hurl	6
91	import	6
92	invite	6
93	lob	6
94	manoeuvre	6
95	pop	6
96	pound	6
97	ram	6
98	scrape	6
99	shoot	6
100	slot	6
101	smash	6
102	transfer	6
103	twist	6
104	absorb	5
105	blow	5
106	bully	5
107	burn	5
108	carve	5
109	coerce	5
110	empty	5
111	entice	5
112	frighten	5
113	grind	5
114	jerk	5
115	lower	5
116	massage	5
117	partition	5
118	pass	5
119	pump	5
120	run	5
121	sift	5
122	squeeze	5
123	strain	5
124	tap	5
125	trick	5
126	arrange	4
127	attract	4
128	blackmail	4
129	bounce	4
130	chop	4
131	clip	4
132	dissolve	4
133	escalate	4
134	fling	4

Rank	Verb	Instances
135	form	4
136	galvanise	4
137	hoist	4
138	knock	4
139	mislead	4
140	mould	4
141	order	4
142	pressurise	4
143	punch	4
144	raise	4
145	scoop	4
146	segment	4
147	shake	4
148	shock	4
149	shovel	4
150	spit	4
151	stab	4
152	switch	4
153	talk	4
154	welcome	4
155	whip	4
156	work	4
157	admit	3
158	bind	3
159	blast	3
160	boot	3
161	build	3
162	con	3
163	concentrate	3
164	copy	3
165	crumple	3
166	curl	3
167	dump	3
168	encode	3
169	give	3
170	group	3
171	hack	3
172	heave	3
173	hit	3
174	initiate	3
175	lash	3
176	lever	3
177	link	3
178	mix	3
179	nudge	3
180	pay	3

Rank	Verb	Instances
181	pressure	3
182	project	3
183	provide	3
184	rake	3
185	reverse	3
186	rotate	3
187	screw	3
188	seduce	3
189	simplify	3
190	smuggle	3
191	spur	3
192	startle	3
193	sting	3
194	subdivide	3
195	suck	3
196	sweep	3
197	tempt	3
198	trigger	3
199	unload	3
200	wedge	3
201	weld	3
202	assimilate	2
203	back	2
204	badger	2
205	bank	2
206	bear	2
207	bend	2
208	blend	2
209	breathe	2
210	bump	2
211	categorise	2
212	channel	2
213	charm	2
214	churn	2
215	close	2
216	combine	2
217	confuse	2
218	constrain	2
219	count	2
220	crowd	2
221	crush	2
222	decompose	2
223	degrade	2
224	deposit	2
225	diffuse	2
226	dissect	2

Rank	Verb	Instances
227	divert	2
228	edge	2
229	educate	2
230	elevate	2
231	encourage	2
232	expand	2
233	flatten	2
234	float	2
235	goad	2
236	haul	2
237	head	2
238	herd	2
239	hold	2
240	hurry	2
241	infiltrate	2
242	install	2
243	inveigle	2
244	jam	2
245	ladle	2
246	launch	2
247	lay	2
248	lean	2
249	log	2
250	manhandle	2
251	manipulate	2
252	panic	2
253	pipe	2
254	prompt	2
255	propel	2
256	read	2
257	reduce	2
258	refine	2
259	reformat	2
260	return	2
261	sell	2
262	settle	2
263	sever	2
264	sew	2
265	sharpen	2
266	shift	2
267	shoehorn	2
268	shunt	2
269	sign	2
270	slap	2
271	snap	2
272	stow	2

Rank	Verb	Instances
273	stroke	2
274	structure	2
275	stun	2
276	surprise	2
277	swirl	2
278	terrify	2
279	terrorise	2
280	tie	2
281	tow	2
282	transmit	2
283	transplant	2
284	transpose	2
285	trap	2
286	type	2
287	wash	2
288	weave	2
289	wheel	2
290	whisk	2
291	accept	1
292	aggregate	1
293	alarm	1
294	alchemise	1
295	assemble	1
296	assist	1
297	attach	1
298	bake	1
299	bang	1
300	bark	1
301	batter	1
302	beckon	1
303	bite	1
304	bludgeon	1
305	bluff	1
306	bribe	1
307	broaden	1
308	browbeat	1
309	brush	1
310	bung	1
311	bury	1
312	cajole	1
313	careen	1
314	chase	1
315	chew	1
316	chisel	1
317	clatter	1
318	clean	1

Rank	Verb	Instances
319	clench	1
320	click	1
321	coax	1
322	coil	1
323	compound	1
324	compress	1
325	condense	1
326	conduct	1
327	connect	1
328	consolidate	1
329	coopt	1
330	corral	1
331	crack	1
332	craft	1
333	credit	1
334	curse	1
335	curve	1
336	demarcate	1
337	dimple	1
338	direct	1
339	disaggregate	1
340	dismantle	1
341	disperse	1
342	distil	1
343	distort	1
344	dredge	1
345	dupe	1
346	dwarf	1
347	electrify	1
348	elongate	1
349	embarrass	1
350	embed	1
351	enable	1
352	evolve	1
353	fasten	1
354	flare	1
355	flip	1
356	floor	1
357	flower	1
358	freeze	1
359	fret	1
360	fumble	1
361	funnel	1
362	gas	1
363	grant	1
364	grow	1

Rank	Verb	Instances
365	harass	1
366	hector	1
367	holster	1
368	hoof	1
369	hook	1
370	impart	1
371	impel	1
372	imprint	1
373	input	1
374	inscribe	1
375	instill	1
376	interpose	1
377	interpret	1
378	key	1
379	knead	1
380	locate	1
381	loosen	1
382	lug	1
383	map	1
384	march	1
385	measure	1
386	merge	1
387	modify	1
388	mount	1
389	nock	1
390	numb	1
391	ordain	1
392	overawe	1
393	overforce	1
394	paste	1
395	pat	1
396	pencil	1
397	persuade	1
398	piece	1
399	pin	1
400	pitch	1
401	plant	1
402	play	1
403	plonk	1
404	plumb	1
405	post	1
406	prime	1
407	psych	1
408	rationalize	1
409	reabsorb	1
410	rearrange	1

Rank	Verb	Instances
411	recast	1
412	receive	1
413	recontour	1
414	recruit	1
415	recycle	1
416	redeploy	1
417	reform	1
418	reinsert	1
419	reintroduce	1
420	reorganise	1
421	replace	1
422	represent	1
423	reset	1
424	reshape	1
425	restructure	1
426	retranslate	1
427	rev	1
428	rewire	1
429	rotovate	1
430	rub	1
431	rush	1
432	sashay	1
433	saw	1
434	sculpt	1
435	segregate	1
436	seize	1
437	shoo	1
438	slash	1
439	sling	1
440	slow	1
441	smack	1
442	smooth	1
443	snatch	1
444	sneak	1
445	snip	1
446	soften	1
447	spark	1
448	spill	1
449	spin	1
450	spirit	1
451	splash	1
452	splinter	1
453	spray	1
454	spread	1
455	sprinkle	1
456	square	1

Rank	Verb	Instances
457	starve	1
458	stitch	1
459	strike	1
460	surf	1
461	synthesise	1
462	syphon	1
463	tantalize	1
464	tax	1
465	thin	1
466	thread	1
467	thump	1
468	torment	1
469	torture	1
470	touch	1
471	transmute	1
472	tune	1
473	tweak	1
474	unify	1
475	upend	1
476	usher	1
477	vomit	1
478	waft	1
479	wallop	1
480	wax	1
481	whack	1
482	whittle	1
483	withdraw	1
484	wrap	1
485	write	1
486	bring	0
487	carry	0
488	drive	0
489	get	0
490	let	0
491	make	0
492	put	0
493	send	0
494	set	0
495	take	0
496	turn	0

Appendix A6

List of Verbs that Appear in AP Resultatives Found in BNC

Seq No.	Rank	155 Verbs in AP	Instances (Total:1001)
86	1	render	287
31	2	drive	143
82	3	push	79
80	4	pull	65
25	5	cut	45
148	6	wipe	34
140	7	turn	33
135	8	throw	25
57	9	knock	24
99	10	shake	23
101	11	shoot	23
29	12	draw	17
133	13	tear	17
44	14	fling	16
93	15	scare	16
129	16	suck	15
126	17	strip	13
60	18	lift	12
116	19	spoil	11
153	20	wrench	11
34	21	ease	10
68	22	paint	9
89	23	rip	9
132	24	swing	9
10	25	break	8
48	26	force	8
54	27	jerk	8
81	28	pump	8
155	29	yank	8
2	30	beat	7
7	31	blow	7
55	32	kick	7
77	33	prize	7
91	34	rub	7
142	35	wash	7
33	36	dye	6
65	37	open	6
97	38	send	6
106	39	slide	6
122	40	steam	6
125	41	strike	6
139	42	tug	6
5	43	bleed	5
8	44	bore	5

Seq No.	Rank	155 Verbs in AP Resultatives	Instances (Total:1001)
43	45	flick	5
96	46	scrub	5
124	47	stop	5
127	48	stuff	5
131	49	sweep	5
11	50	brush	4
19	51	click	4
22	52	color	4
23	53	crack	4
27	54	drag	4
52	55	hug	4
59	56	lick	4
64	57	nudge	4
66	58	pack	4
113	59	snap	4
119	60	squeeze	4
13	61	burst	3
28	62	drain	3
30	63	drink	3
39	64	fill	3
49	65	frighten	3
62	66	mash	3
76	67	press	3
78	68	prop	3
92	69	run	3
104	70	slam	3
109	71	slit	3
120	72	stain	3
138	73	tread	3
1	74	bash	2
18	75	clean	2
38	76	file	2
41	77	flatten	2
56	78	kill	2
70	79	pare	2
71	80	pat	2
72	81	pile	2
74	82	polish	2
100	83	shock	2
110	84	smash	2
115	85	split	2
117	86	spoon	2
136	87	thrust	2
137	88	towel	2

Seq No.	Rank	155 Verbs in AP	Instances (Total:1001)
143	89	wear	2
150	90	work	2
152	91	wrap	2
3	92	bite	1
4	93	blast	1
6	94	blot	1
12	95	burn	1
14	96	carve	1
15	97	chafe	1
16	98	choke	1
17	99	chuck	1
20	100	club	1
21	101	coddle	1
24	102	crash	1
26	103	dab	1
32	104	drum	1
35	105	edge	1
36	106	elbow	1
37	107	feed	1
40	108	flap	1
42	109	flay	1
45	110	flip	1
46	111	flog	1
47	112	fold	1
50	113	fuck	1
51	114	haul	1
53	115	hurl	1
58	116	lever	1
61	117	lock	1
63	118	milk	1
67	119	padlock	1
69	120	paper	1
73	121	pin	1
75	122	power	1
79	123	pry	1
83	124	rake	1
84	125	rasp	1
85	126	rattle	1
87	127	ring	1
88	128	rinse	1
90	129	rob	1
94	130	scour	1
95	131	scrape	1
98	132	shag	1
102	133	shoulder	1

Seq No.	Rank	155 Verbs in AP Resultatives	Instances (Total:1001)
103	134	shove	1
105	135	slash	1
107	136	sling	1
108	137	slip	1
111	138	smear	1
112	139	smite	1
114	140	snatch	1
118	141	spray	1
121	142	startle	1
123	143	sting	1
128	144	stun	1
130	145	swab	1
134	146	thrash	1
141	147	twist	1
144	148	wedge	1
145	149	whip	1
146	150	whisper	1
147	151	winch	1
149	152	wobble	1
151	153	worm	1
154	154	wrestle	1
156	155	zap	1

Appendix 7

All V-A Paris and Adjective Tests
"Normal" resultatives plus AP complement verb resultatives
and bring/take-headed resultatives (1002 in total)
(Sorted in ascending order of verb infinitives and adjectives)

Seq No	Verbinf	Verb	Obj	Adj	a little	half	more/er	very	com-pletely	Adj type
7527	bash	bash	it	senseless	N	Y	N	N	Y	maximal
384	bash	bash	the enemy	senseless	N	Y	N	N	Y	maximal
4394	beat	beat	him	black and blue	?	Y	N	??	Y	non-gradable
7215	beat	beat	me	black and blue	?	Y	N	??	Y	non-gradable
7216	beat	beat	you	black and blue	?	Y	N	??	Y	non-gradable
7219	beat	beat	you	black and blue	?	Y	N	??	Y	non-gradable
15488	beat	beat	him	senseless	N	Y	N	N	Y	maximal
5877	beat	beating	someone	senseless	N	Y	N	N	Y	maximal
5882	beat	beat	you	senseless	N	Y	N	N	Y	maximal
495	bite	bit	gobbets	loose	N	N	N	N	Y	open
501	blast	blast	a race	open	N	N	N	N	Y	minimal
17771	bleed	bleed	him	dry	N	Y	N	N	Y	maximal
16073	bleed	bleed	me	dry	N	Y	N	N	Y	maximal
502	bleed	bleed	the Federation	dry	N	Y	N	N	Y	maximal
6776	bleed	Bleeding	us	dry	N	Y	N	N	Y	maximal
8500	bleed	bleeds	you	white	U	U	U	U	U	non-gradable/
503	blot	Blot	the slide	dry	N	Y	Y	N	Y	maximal
16938	blow	blow	it	askew	Y	Y	Y	??	Y	minmal
505	blow	blew	the ashes	clear	N	N	N	N	Y	non-
507	blow	blowing	hair	dry	N	?	Y	Y	Y	maximal
506	blow	blow	the yarn	dry	N	?	Y	Y	Y	maximal
15089	blow	blowing	it	open	N	Y	?	N	Y	minimal
510	blow	blew	the tank	open	N	Y	?	N	Y	minimal
509	blow	blows	things	open	N	Y	?	N	Y	minimal
6037	bore	boring	me	rigid	N	Y	N	??	Y	open
20781	bore	bore	them	rigid	N	Y	N	??	Y	open
18115	bore	bored	you	rigid	N	Y	N	??	Y	open
20615	bore	bores	me	stupid	?	Y	N	N	Y	open
3357	bore	bored	me	witless	N	Y	N	N	Y	empahsis
2221	break	break	them	free	??	Y	Y	N	Y	non-
3627	break	break	it	open	N	Y	Y	N	Y	minimal
9390	break	break	it	open	N	Y	Y	N	Y	minimal
158	break	broke	it	open	N	Y	Y	N	Y	minimal
534	break	break	the urchin	open	N	Y	Y	N	Y	minimal
535	break	break	the shell	open	N	Y	Y	N	Y	minimal
536	break	Broke	the window	open	N	Y	Y	N	Y	minimal
6963	break	break	them	open	N	Y	Y	N	Y	minimal
589	brush	brush	the rest	dry	N	N	Y	N	Y	maximal

591	brush	brush	the	gaps	free	N	N	N	N	Y	non-
590	brush	brushing	the	snow	free	N	N	N	N	Y	non-
7562	brush	brushing	them		free	N	N	N	N	Y	non-
1232	burn	burn	it		black	Y	Y	?	Y	Y	non-
623	burst	burst	the	warheads	open	N	Y	N	N	Y	gradable/ minimal
625	burst	burst	the	the	open	N	Y	N	N	Y	minimal
624	burst	bursting	the	door	open	N	Y	N	N	Y	minimal
764	carve	carved	the	tourists	open	N	Y	N	N	Y	minimal
820	chafe	chafed	the	skin	raw	Y	Y	Y	Y	Y	open
18803	choke	choked	him		mute	N	Y	N	N	Y	non-
856	chuck	chucked	the	book	open	N	Y	N	N	Y	minimal
18760	clean	clean	them		ready	N	N	N	N	Y	non-
18764	clean	clean	them		ready	N	N	N	N	Y	non-
880	click	clicked	the	line	dead	N	N	N	N	Y	non-
10492	click	clicked	it		open	N	Y	N	N	Y	minimal
881	click	clicked	the	back	open	N	Y	N	N	Y	minimal
882	click	clicking	the	door	open	N	Y	N	N	Y	minimal
14599	club	clubbed	him		senseless	N	Y	N	N	Y	maximal
891	coddle	coddle	Apples		nice and green	U	U	U	?	U	maximal
13581	colour	colour	it		black	?	Y	Y	?	Y	non-
17308	colour	colour	them		brown	Y	Y	Y	Y	Y	gradable/ non-
17310	colour	colour	them		brown	Y	Y	Y	Y	Y	gradable/ non-
17309	colour	colour	them		pale pink and green	N	N	N	N	N	gradable/ non-
1334	crack	crack	it		open	N	Y	N	N	Y	gradable/ minimal
9162	crack	cracked	it		open	N	Y	N	N	Y	minimal
16509	crack	cracked	it		open	N	Y	N	N	Y	minimal
1193	crack	crack	the	egg	open	N	Y	N	N	Y	minimal
1196	crash	crashed	the	door	open	N	N	Y	N	Y	minimal
1271	cut	cut	wreckage		clear	N	Y	N	N	Y	non-
5668	cut	cut	him		dead	N	N	N	N	Y	non-
5673	cut	cut	him		dead	N	N	N	N	Y	non-
6036	cut	cut	him		dead	N	N	N	N	Y	non-
16369	cut	cut	him		dead	N	N	N	N	Y	non-
5274	cut	cutting	him		dead	N	N	N	N	Y	non-
15839	cut	cutting	him		dead	N	N	N	N	Y	non-
4002	cut	cut	me		dead	N	N	N	N	Y	non-
8188	cut	cut	me		dead	N	N	N	N	Y	non-
8629	cut	cut	me		dead	N	N	N	N	Y	non-
14617	cut	cut	me		dead	N	N	N	N	Y	non-
14618	cut	cut	me		dead	N	N	N	N	Y	non-
307	cut	cut	them		dead	N	N	N	N	Y	non-
14100	cut	cut	them		dead	N	N	N	N	Y	non-
610	cut	cut	it		fine	Y	N	N	Y	N	open
18386	cut	cut	it		fine	Y	N	N	Y	N	open
15565	cut	cutting	it		fine	Y	N	N	Y	N	open
16093	cut	cutting	it		fine	Y	N	N	Y	N	open

16394	cut	cutting	it		fine	Y	N	N	Y	N	open
1279	cut	cut	a	driver	free	N	Y	Y	N	Y	non-
1282	cut	cut	girl		free	N	Y	Y	N	Y	non-
5290	cut	cut	him		free	N	Y	Y	N	Y	non-
8154	cut	cut	him		free	N	Y	Y	N	Y	non-
10560	cut	cut	him		free	N	Y	Y	N	Y	non-
14003	cut	cut	him		free	N	Y	Y	N	Y	non-
1790	cut	cut	it		free	N	Y	Y	N	Y	non-
13638	cut	cut	me		free	N	Y	Y	N	Y	non-
1281	cut	cuts	people		free	N	Y	Y	N	Y	non-
1274	cut	cut	the	raffia	free	N	Y	Y	N	Y	non-
1275	cut	cut	the	Zodiac	free	N	Y	Y	N	Y	non-
1276	cut	cut	the	batch	free	N	Y	Y	N	Y	non-
1278	cut	cut	the	woman	free	N	Y	Y	N	Y	non-
1280	cut	cut	the	man	free	N	Y	Y	N	Y	non-
1277	cut	cutting	the	model	free	N	Y	Y	N	Y	non-
17096	cut	cut	them		free	N	Y	Y	N	Y	non-
18550	cut	cut	them		free	N	Y	Y	N	Y	non-
293	cut	cuts	it		open	N	Y	Y	N	Y	minimal
3565	cut	cutting	me		open	N	Y	Y	N	Y	minimal
1283	cut	cut	the	animal	open	N	Y	Y	N	Y	minimal
1284	cut	cut	the	door	open	N	Y	Y	N	Y	minimal
19464	cut	cut	them		open	N	Y	Y	N	Y	minimal
1285	cut	cut	discussion		short	Y	N	N	Y	N	open
19843	cut	Cut	it		short	Y	N	N	Y	N	open
20325	cut	cut	them		thin	N	N	Y	Y	N	open
20569	cut	Cut	them		thin	N	N	Y	Y	N	open
13938	dab	dabbing	it		dry	N	Y	Y	N	Y	maximal
13815	drag	dragged	me		clear	N	Y	N	N	Y	non-
1579	drag	dragged	the	man	free	N	Y	Y	N	Y	non-
15553	drag	Dragging	it		open	Y	Y	Y	N	Y	minimal
1580	drag	drag	the	door	open	Y	Y	Y	N	Y	minimal
6432	drain	drained	him		dry	N	?	N	N	Y	maximal
14588	drain	drain	it		dry	N	?	N	N	Y	maximal
1581	drain	drain	the	goblet	dry	N	?	N	N	Y	maximal
1585	draw	drew	a	pillow	close	Y	N	Y	Y	N	open
14693	draw	draw	her		close	Y	N	Y	Y	N	open
1518	draw	drawing	her		close	Y	N	Y	Y	N	open
15073	draw	drew	her		close	Y	N	Y	Y	N	open
17780	draw	drew	her		close	Y	N	Y	Y	N	open
17832	draw	drew	her		close	Y	N	Y	Y	N	open
17890	draw	drew	her		close	Y	N	Y	Y	N	open
18054	draw	drew	her		close	Y	N	Y	Y	N	open
18790	draw	drew	her		close	Y	N	Y	Y	N	open
10778	draw	draw	him		close	Y	N	Y	Y	N	open
7199	draw	drew	him		close	Y	N	Y	Y	N	open
13991	draw	drew	him		close	Y	N	Y	Y	N	open
11860	draw	drew	me		close	Y	N	Y	Y	N	open
10765	draw	drawn	them		close	Y	N	Y	Y	N	open
292	draw	draws	us		close	Y	N	Y	Y	N	open
5509	draw	draw	you		close	Y	N	Y	Y	N	open

1681	draw	draw	it		taut	Y	Y	Y	Y	Y	open
1598	drink	drink	a	distillery	dry	N	Y	N	N	Y	maximal
1599	drink	drank	the	clubhouse	dry	N	Y	N	N	Y	maximal
1597	drink	drunk	the	barrel	dry	N	?	N	N	Y	maximal
2385	drive	driving	me		barmy	Y	Y	??	?	Y	minimal
19426	drive	drives	me		batty	Y	Y	??	?	Y	open
19425	drive	drives	me		batty	Y	Y	??	?	Y	open
19727	drive	driving	me		batty	Y	Y	??	?	Y	open
13841	drive	drove	me		batty	Y	Y	??	?	Y	open
2217	drive	driving	them		clear of	N	N	N	N	Y	non-
1606	drive	drove	fish		crazy	Y	Y	Y	Y	Y	max/open
6820	drive	driving	him		crazy	Y	Y	Y	Y	Y	max/open
2364	drive	drive	me		crazy	Y	Y	Y	Y	Y	max/open
14719	drive	drive	me		crazy	Y	Y	Y	Y	Y	max/open
20799	drive	drive	me		crazy	Y	Y	Y	Y	Y	max/open
20800	drive	drive	me		crazy	Y	Y	Y	Y	Y	max/open
18110	drive	drive	me		crazy	Y	Y	Y	Y	Y	max/open
10231	drive	drives	me		crazy	Y	Y	Y	Y	Y	max/open
11859	drive	drives	me		crazy	Y	Y	Y	Y	Y	max/open
2678	drive	drives	ME		crazy	Y	Y	Y	Y	Y	max/open
78	drive	drives	me		crazy	Y	Y	Y	Y	Y	max/open
14283	drive	drives	me		crazy	Y	Y	Y	Y	Y	max/open
274	drive	Driving	Me		crazy	Y	Y	Y	Y	Y	max/open
14037	drive	driving	me		crazy	Y	Y	Y	Y	Y	max/open
4259	drive	Driving	Me		crazy	Y	Y	Y	Y	Y	max/open
1789	drive	driving	me		crazy	Y	Y	Y	Y	Y	max/open
3340	drive	Driving	Me		crazy	Y	Y	Y	Y	Y	max/open
6717	drive	driving	me		crazy	Y	Y	Y	Y	Y	max/open
275	drive	Driving	Me		crazy	Y	Y	Y	Y	Y	max/open
18034	drive	driving	me		crazy	Y	Y	Y	Y	Y	max/open
17952	drive	driving	me		crazy	Y	Y	Y	Y	Y	max/open
17825	drive	driving	me		crazy	Y	Y	Y	Y	Y	max/open
17	drive	driving	me		crazy	Y	Y	Y	Y	Y	max/open
6859	drive	driving	me		crazy	Y	Y	Y	Y	Y	max/open
19850	drive	drove	me		crazy	Y	Y	Y	Y	Y	max/open
115	drive	drove	me		crazy	Y	Y	Y	Y	Y	max/open
1607	drive	drive	people		crazy	Y	Y	Y	Y	Y	max/open
1608	drive	drive	the	curators	crazy	Y	Y	Y	Y	Y	max/open
11228	drive	drive	them		crazy	Y	Y	Y	Y	Y	max/open
756	drive	drives	them		crazy	Y	Y	Y	Y	Y	max/open
6504	drive	drives	us		crazy	Y	Y	Y	Y	Y	max/open
19890	drive	driving	us		crazy	Y	Y	Y	Y	Y	max/open
7425	drive	drive	you		crazy	Y	Y	Y	Y	Y	max/open
4009	drive	drive	you		crazy	Y	Y	Y	Y	Y	max/open
5223	drive	drive	you		crazy	Y	Y	Y	Y	Y	max/open
15834	drive	drive	you		crazy	Y	Y	Y	Y	Y	max/open
6654	drive	drive	you		crazy	Y	Y	Y	Y	Y	max/open
265	drive	drive	you		crazy	Y	Y	Y	Y	Y	max/open
20326	drive	drives	me		daft	Y	Y	Y	?	Y	maximal
20093	drive	driving	me		daft	Y	Y	Y	?	Y	minimal
20247	drive	drives	you		daft	Y	Y	Y	?	Y	maximal

14408	drive	drive	me	demented	Y	Y	N	?	Y	non-
7213	drive	drivin'	me	dizzy	Y	N	Y	Y	Y	open
1300	drive	drive	me	dotty	Y	Y	N	?	Y	minimal
20004	drive	drives	me	dotty	Y	Y	N	?	Y	minimal
9351	drive	drives	me	crackers	U	U	U	U	U	Idiom
5389	drive	drove	him	frantic	Y	Y	Y	Y	Y	open
1612	drive	drive	a person	insane	Y	Y	Y	Y	Y	minimal
1611	drive	drive	golfers	insane	Y	Y	Y	Y	Y	minimal
19832	drive	drives	me	insane	Y	Y	Y	Y	Y	minimal
2037	drive	drive	me	insane	Y	Y	Y	Y	Y	minimal
11797	drive	drive	me	insane	Y	Y	Y	Y	Y	minimal
13818	drive	drive	me	insane	Y	Y	Y	Y	Y	minimal
13810	drive	driving	me	insane	Y	Y	Y	Y	Y	minimal
12568	drive	driving	me	insane	Y	Y	Y	Y	Y	minimal
13814	drive	driving	me	insane	Y	Y	Y	Y	Y	minimal
9938	drive	driving	me	insane	Y	Y	Y	Y	Y	minimal
5266	drive	drove	me	insane	Y	Y	Y	Y	Y	minimal
6565	drive	drives	them	insane	Y	Y	Y	Y	Y	minimal
3751	drive	drove	them	insane	Y	Y	Y	Y	Y	minimal
16128	drive	drive	you	insane	Y	Y	Y	Y	Y	minimal
20585	drive	drives	you	insane	Y	Y	Y	Y	Y	minimal
1621	drive	drive	a man	mad	Y	Y	Y	Y	Y	open
1619	drive	drive	a man	mad	Y	Y	Y	Y	Y	open
1615	drive	drove	animals	mad	Y	Y	Y	Y	Y	open
1623	drive	drives	dogs	mad	Y	Y	Y	Y	Y	open
5682	drive	drive	him	mad	Y	Y	Y	Y	Y	open
6821	drive	driving	him	mad	Y	Y	Y	Y	Y	open
2290	drive	driving	him	mad	Y	Y	Y	Y	Y	open
5538	drive	drove	him	mad	Y	Y	Y	Y	Y	open
3918	drive	drove	him	mad	Y	Y	Y	Y	Y	open
5175	drive	drove	him	mad	Y	Y	Y	Y	Y	open
5399	drive	drove	him	mad	Y	Y	Y	Y	Y	open
17349	drive	drove	him	mad	Y	Y	Y	Y	Y	open
5923	drive	drove	him	mad	Y	Y	Y	Y	Y	open
11009	drive	drove	him	mad	Y	Y	Y	Y	Y	open
13408	drive	drove	him	mad	Y	Y	Y	Y	Y	open
4938	drive	drive	me	mad	Y	Y	Y	Y	Y	open
12978	drive	drive	me	mad	Y	Y	Y	Y	Y	open
13708	drive	drive	me	mad	Y	Y	Y	Y	Y	open
20197	drive	drive	me	mad	Y	Y	Y	Y	Y	open
13903	drive	drive	me	mad	Y	Y	Y	Y	Y	open
4940	drive	drive	me	mad	Y	Y	Y	Y	Y	open
4939	drive	drive	me	mad	Y	Y	Y	Y	Y	open
4978	drive	driven	me	mad	Y	Y	Y	Y	Y	open
19775	drive	drives	me	mad	Y	Y	Y	Y	Y	open
19771	drive	drives	me	mad	Y	Y	Y	Y	Y	open
12385	drive	drives	me	mad	Y	Y	Y	Y	Y	open
12209	drive	drives	me	mad	Y	Y	Y	Y	Y	open
8355	drive	drives	me	mad	Y	Y	Y	Y	Y	open
19372	drive	drives	me	mad	Y	Y	Y	Y	Y	open
17557	drive	driving	me	mad	Y	Y	Y	Y	Y	open

19329	drive	driving	me	mad	Y	Y	Y	Y	Y	open
19337	drive	driving	me	mad	Y	Y	Y	Y	Y	open
11379	drive	driving	me	mad	Y	Y	Y	Y	Y	open
18443	drive	driving	me	mad	Y	Y	Y	Y	Y	open
20553	drive	driving	me	mad	Y	Y	Y	Y	Y	open
20248	drive	Driving	me	mad	Y	Y	Y	Y	Y	open
19936	drive	driving	me	mad	Y	Y	Y	Y	Y	open
16463	drive	driving	me	mad	Y	Y	Y	Y	Y	open
5164	drive	driving	me	mad	Y	Y	Y	Y	Y	open
18141	drive	driving	me	mad	Y	Y	Y	Y	Y	open
6937	drive	driving	me	mad	Y	Y	Y	Y	Y	open
12153	drive	driving	me	mad	Y	Y	Y	Y	Y	open
14607	drive	driving	me	mad	Y	Y	Y	Y	Y	open
6263	drive	driving	me	mad	Y	Y	Y	Y	Y	open
2792	drive	drove	me	mad	Y	Y	Y	Y	Y	open
12396	drive	drove	me	mad	Y	Y	Y	Y	Y	open
10691	drive	driven	me	mad	Y	Y	Y	Y	Y	open
1624	drive	drive	men	mad	Y	Y	Y	Y	Y	open
1613	drive	drives	men	mad	Y	Y	Y	Y	Y	open
1614	drive	drives	men	mad	Y	Y	Y	Y	Y	open
1616	drive	driving	people	mad	Y	Y	Y	Y	Y	open
1617	drive	drives	the people	mad	Y	Y	Y	Y	Y	open
1618	drive	Driving	the daughters	mad	Y	Y	Y	Y	Y	open
1622	drive	driving	the neighbours	mad	Y	Y	Y	Y	Y	open
1620	drive	drove	the producer	mad	Y	Y	Y	Y	Y	open
9117	drive	drive	them	mad	Y	Y	Y	Y	Y	open
16011	drive	drives	them	mad	Y	Y	Y	Y	Y	open
16016	drive	drives	them	mad	Y	Y	Y	Y	Y	open
9116	drive	drives	them	mad	Y	Y	Y	Y	Y	open
4773	drive	drive	us	mad	Y	Y	Y	Y	Y	open
4412	drive	drives	us	mad	Y	Y	Y	Y	Y	open
19581	drive	drive	you	mad	Y	Y	Y	Y	Y	open
1376	drive	drive	you	mad	Y	Y	Y	Y	Y	open
1316	drive	drive	you	mad	Y	Y	Y	Y	Y	open
5014	drive	drive	you	mad	Y	Y	Y	Y	Y	open
4852	drive	drive	you	mad	Y	Y	Y	Y	Y	open
16504	drive	drive	you	mad	Y	Y	Y	Y	Y	open
10693	drive	drive	you	mad	Y	Y	Y	Y	Y	open
7139	drive	drive	you	mad	Y	Y	Y	Y	Y	open
15861	drive	drives	you	mad	Y	Y	Y	Y	Y	open
19007	drive	drives	you	mad	Y	Y	Y	Y	Y	open
19574	drive	drives	you	mad	Y	Y	Y	Y	Y	open
12881	drive	drives	you	mad	Y	Y	Y	Y	Y	open
16974	drive	drove	you	mad	Y	Y	Y	Y	Y	open
2218	drive	drive	you	onshore	N	N	N	N	Y	non-
20	drive	drove	me	spare	Y	Y	N	N	Y	open
11018	drum	drumming	him	awake	??	??	??	??	Y	minmal
4794	dye	dyed	it	black	?	Y	Y	?	Y	non-gradable/
9152	dye	dying	it	black	?	Y	Y	?	Y	non-gradable/

5574	dye	dyed	mine		black	?	Y	Y	?	Y	non-gradable/
17733	dye	dye	it		yellow	?	N	Y	Y	Y	non-gradable/
17734	dye	dye	it		yellow	?	N	Y	Y	Y	non-gradable/
2834	dye	dyed	them		yellow, pink, orange and	N	N	N	N	N	non-gradable/ open
10624	ease	eased	it		free	N	Y	Y	N	Y	non-
10627	ease	eased	it		free	N	Y	Y	N	Y	non-
14193	ease	eased	it		open	Y	Y	Y	N	Y	minimal
1653	ease	eased	the	door	open	Y	Y	Y	N	Y	minimal
1654	ease	eased	the	door	open	Y	Y	Y	N	Y	minimal
1655	ease	eased	the	door	open	Y	Y	Y	N	Y	minimal
1656	ease	eased	the	door	open	Y	Y	Y	N	Y	minimal
1657	ease	eased	the	door	open	Y	Y	Y	N	Y	minimal
1658	ease	eased	the	door	open	Y	Y	Y	N	Y	minimal
1659	ease	eased	the	door	open	Y	Y	Y	N	Y	minimal
1673	edge	edged	the	door	open	Y	Y	Y	N	Y	minimal
1679	elbow	elbowed	the	door	open	Y	Y	Y	N	Y	minimal
11006	feed	fed	them		silly	N	Y	N	N	Y	open
2062	file	filed	the	edges	smooth	N	Y	Y	Y	Y	maximal
2063	file	filing	the	hole	smooth	N	Y	Y	Y	Y	maximal
11306	fill	fill	it		full	N	Y	Y	N	Y	maximal
19421	fill	fill	it		full	N	Y	Y	N	Y	maximal
6745	fill	filled	it		half-full	N	N	N	N	N	maximal
2503	flap	flapped	the	blanket	free	N	Y	Y	N	Y	non-
19308	flatten	flattened	you		dead	N	Y	N	N	Y	non-
11477	flatten	flattening	it		open	N	Y	N	N	Y	minimal
9713	flay	flayed	it		bare	N	Y	Y	N	Y	maximal
7867	flick	flicked	it		open	N	Y	?	N	Y	minimal
10482	flick	flicked	it		open	N	Y	?	N	Y	minimal
2508	flick	flick	the	zippo	open	N	Y	?	N	Y	minimal
2509	flick	flicked	the	register	open	N	Y	?	N	Y	minimal
2510	flick	flicked	the	file	open	N	Y	?	N	Y	minimal
18108	fling	flung	them		helpless	N	N	N	N	Y	non-
14174	fling	flung	it		open	N	Y	N	N	Y	minimal
16055	fling	flung	it		open	N	Y	N	N	Y	minimal
19183	fling	flung	it		open	N	Y	N	N	Y	minimal
2511	fling	flung	the	wardrobe	open	N	Y	N	N	Y	minimal
2512	fling	flung	the	door	open	N	Y	N	N	Y	minimal
2513	fling	flung	the	door	open	N	Y	N	N	Y	minimal
2514	fling	flung	the	door	open	N	Y	N	N	Y	minimal
2515	fling	flung	the	door	open	N	Y	N	N	Y	minimal
2516	fling	flung	the	door	open	N	Y	N	N	Y	minimal
2517	fling	flung	the	door	open	N	Y	N	N	Y	minimal
2518	fling	flung	the	door	open	N	Y	N	N	Y	minimal
2519	fling	flung	the	window	open	N	Y	N	N	Y	minimal
9075	fling	flung	them		open	N	Y	N	N	Y	minimal
18012	fling	flung	them		open	N	Y	N	N	Y	minimal

5048	fling	flinging	him		unconscious	N	Y	N	N	Y	maximal
2520	flip	flipped	the	lid	open	N	Y	N	N	Y	minimal
3584	flog	flogged	him		senseless	N	Y	N	N	Y	maximal
10796	fold	folded	it		open	N	Y	N	N	Y	minimal
2562	force	force	the	door	open	Y	Y	Y	Y	Y	minimal
2560	force	forced	the	door	open	Y	Y	Y	Y	Y	minimal
2561	force	forced	the	door	open	Y	Y	Y	Y	Y	minimal
2563	force	forced	the	door	open	Y	Y	Y	Y	Y	minimal
2565	force	forced	the	door	open	Y	Y	Y	Y	Y	minimal
2566	force	forced	the	door	open	Y	Y	Y	Y	Y	minimal
2567	force	forced	the	door	open	Y	Y	Y	Y	Y	minimal
2564	force	forcing	the	windows	open	Y	Y	Y	Y	Y	minimal
4061	frighten	frightened	him		awake	N	Y	??	??	Y	minmal
2316	frighten	frightened	them		sick	N	N	N	N	Y	minimal
2605	frighten	frighten	the	cat	spitless	N	Y	N	N	Y	empahsis
10642	fuck	Fuck	me		silly	N	Y	N	N	Y	open
8	haul	Hauling	it		open	??	Y	Y	N	Y	minimal
14157	hug	hugged	her		close	Y	??	Y	Y	N	open
14535	hug	hug	him		close	Y	??	Y	Y	N	open
5530	hug	hugged	him		close	Y	??	Y	Y	N	open
3806	hug	Hugging	the	girl	close	Y	??	Y	Y	N	open
8446	hurl	hurls	us		free	N	Y	N	N	Y	non-
1258	jerk	jerking	him		awake	N	Y	??	??	Y	minmal
15968	jerk	jerked	me		awake	N	Y	??	??	Y	minmal
1784	jerk	jerks	them		awake	N	Y	??	??	Y	minmal
4135	jerk	jerking	the	laces	free	N	Y	Y	N	Y	non-
3270	jerk	jerk	you		free	N	Y	Y	N	Y	non-
4136	jerk	jerked	the	door	open	?	Y	Y	N	Y	minimal
4137	jerk	jerked	the	door	open	?	Y	Y	N	Y	minimal
15545	jerk	jerked	them		open	?	Y	Y	N	Y	minimal
4086	kick	kicked	him		awake	N	Y	??	??	Y	minmal
5034	kick	kicking	the	ball	dead	N	N	N	N	Y	non-
3228	kick	kicked	it		open	Y	Y	Y	??	Y	minimal
2596	kick	Kicking	it		open	Y	Y	Y	??	Y	minimal
5035	kick	kicked	the	door	open	Y	Y	Y	??	Y	minimal
5037	kick	kicked	the	door	open	Y	Y	Y	??	Y	minimal
5036	kick	kicking	the	door	open	Y	Y	Y	??	Y	minimal
2508	kill	killed	it		dead	N	Y	N	N	Y	non-
9013	kill	kill	it		stone-	N	N	N	N	Y	empahsis
4777	knock	knocking	it		askew	Y	Y	Y	??	Y	minmal
1769	knock	knock	you		brainless	N	Y	N	N	Y	non-
13257	knock	knock	them		clear	N	Y	N	N	Y	non-
3711	knock	knock	'em		cold	N	Y	N	??	Y	open
5045	knock	knocked	the	pictures	crooked	Y	?	Y	Y	Y	minimal
4664	knock	knock	em		dead	N	Y	??	N	Y	non-
14024	knock	knock	em		dead	N	Y	??	N	Y	non-
561	knock	knocking	em		dead	N	Y	??	N	Y	non-
6585	knock	knock	him		dead	N	Y	??	N	Y	non-
19562	knock	knock	them		dead	N	Y	??	N	Y	non-
5046	knock	knocked	others		insensible	N	Y	N	N	Y	non-

3999	knock	knocking	him		off-	Y	Y	Y	N	Y	minimal
14577	knock	Knock	it		senseless	N	Y	N	N	Y	maximal
14560	knock	knocked	me		senseless	N	Y	N	N	Y	maximal
5047	knock	knocked	the	girl	senseless	N	Y	N	N	Y	maximal
3629	knock	knocked	him		silly	N	Y	N	N	Y	open
11430	knock	knocked	him		silly	N	Y	N	N	Y	open
13249	knock	knock	you		silly	N	Y	N	N	Y	open
2214	knock	knock	him		unconscious	N	Y	N	N	Y	maximal
969	knock	knocked	him		unconscious	N	Y	N	N	Y	maximal
8021	knock	knocked	him		unconscious	N	Y	N	N	Y	maximal
2366	knock	knocking	him		unconscious	N	Y	N	N	Y	maximal
6947	knock	knocking	him		unconscious	N	Y	N	N	Y	maximal
18530	knock	knocking	him		unconscious	N	Y	N	N	Y	maximal
5733	lever	lever	the	window	open	Y	Y	Y	N	Y	minimal
4068	lick	licked	it		clean	N	Y	Y	Y	Y	max/open
4268	lick	licked	it		clean	N	Y	Y	Y	Y	max/open
4275	lick	licked	it		clean of	N	N	Y	Y	Y	non-
19440	lick	lick	it		yucky	Y	N	Y	Y	Y	open
15552	lift	lifted	it		clear	N	Y	Y	N	Y	non-
5742	lift	lift	the	model	clear of	N	N	N	N	Y	non-
5745	lift	lifting	the	board	clear of	N	N	N	N	Y	non-
5744	lift	lifts	the	base	clear of	N	N	N	N	Y	non-
18058	lift	lift	him		free	N	Y	Y	N	Y	non-
2215	lift	lifting	him		free	N	Y	Y	N	Y	non-
5746	lift	lifted	the	cat	free	N	Y	Y	N	Y	non-
5747	lift	lifted	the	microphone	free	N	Y	Y	N	Y	non-
2222	lift	lifting	it		high	Y	N	Y	Y	N	open
5327	lift	lifted	them		level	N	N	Y	N	Y	non-
5749	lift	lifted	the	door	open	Y	Y	Y	N	Y	minimal
10868	lift	lifted	me		sky-high	N	N	N	N	N	non-
5808	lock	lock	the	door	open	N	Y	N	N	Y	minimal
14849	mash	mash	it		dead	N	N	N	N	Y	non-
10388	mash	mashing	hers		helpless	N	N	N	N	Y	non-
9012	mash	mash	it		smooth	N	N	N	Y	Y	maximal
12598	milk	milked	it		dry	N	Y	N	N	Y	maximal
7668	nudge	nudge	the	door	ajar	N	N	?	N	?	minmal
16427	nudge	nudged	me		alert	??	??	?	Y	Y	max/open
10505	nudge	nudge	him		awake	Y	Y	Y	??	?	minmal
7669	nudge	nudged	the	door	open	Y	Y	Y	N	Y	minimal
12790	open	opened	them		empty	U	U	U	U	U	maximal
7795	open	open	the	door	wide	N	N	Y	Y	N	open
7792	open	opened	the	door	wide	N	N	Y	Y	N	open
7793	open	opened	the	door	wide	N	N	Y	Y	N	open
7794	open	opened	the	door	wide	N	N	Y	Y	N	open
8844	open	opened	them		wide	N	N	Y	Y	N	open
7847	pack	packing	a	suitcase	full	N	Y	Y	N	Y	maximal

6116	pack	packed	it		full	N	Y	Y	N	Y	maximal
9048	pack	packed	everything		ready	N	N	N	N	Y	non-
19273	pack	packing	them		ready	N	N	N	N	Y	non-
7848	padlock	padlocks	the	door	open	N	Y	N	N	Y	minimal
19980	paint	paint	it		black	?	Y	Y	?	Y	non-
7849	paint	paint	the	wings	black	?	Y	Y	?	Y	gradable/ non-
20141	paint	paint	them		brown	Y	Y	Y	Y	Y	gradable/ non-
20469	paint	paint	it		green	Y	Y	Y	Y	Y	gradable/ non-
3607	paint	painted	it		green	Y	Y	Y	Y	Y	gradable/ non-
7852	paint	Paint	the	horizon	pale Green	N	N	??	N	Y	gradable/ non-
10470	paint	paint	it		red and green	N	N	N	N	Y	gradable/ non-
14820	paint	Paint	everything		white	N	N	Y	Y	Y	gradable/ non-
3173	paint	paint	it		yellow	?	N	Y	Y	Y	gradable/ non-
7855	paper	papered	the	walls	white	N	Y	N	Y	Y	gradable/ non-
7858	pare	pare	the	surface	clean and smooth	N	N	Y	Y	Y	gradable/ max/open
7859	pare	pare	the	heel	clean and smooth	N	N	Y	Y	Y	max/open
1024	pat	pat	them		dry	N	N	Y	N	Y	maximal
4623	pat	pat	them		dry	N	N	Y	N	Y	maximal
7941	pile	pile	children		high	Y	N	Y	Y	N	open
1852	pile	Pile	em		high	Y	N	Y	Y	N	open
11908	pin	pin	it		open	N	Y	N	N	Y	minimal
10745	polish	polished	them		clean	N	?	Y	Y	Y	max/open
16193	polish	polished	it		dry	N	N	N	??	Y	maximal
8005	power	powered	a	boot	free	N	Y	N	N	Y	non-
10558	press	press	her		close	Y	??	Y	Y	N	open
8059	press	press	the	seam	open	N	??	?	N	Y	minimal
8060	press	Press	the	seams	open	N	??	?	N	Y	minimal
16651	prize	prise	it		free	N	Y	N	N	Y	non-
8073	prize	prising	Poll		free	N	Y	N	N	Y	non-
8072	prize	prize	the	claws	free	N	Y	N	N	Y	non-
2041	prize	prised	them		free	N	Y	N	N	Y	non-
2980	prize	prised	it		open	??	Y	Y	N	Y	minimal
8074	prize	prise	the	egg	open	??	Y	Y	N	Y	minimal
14656	prize	prise	them		open	??	Y	Y	N	Y	minimal
4404	prop	prop	it		open	N	Y	Y	N	Y	minimal
8191	prop	prop	the	bonnet	open	N	Y	Y	N	Y	minimal
8192	prop	prop	the	door	open	N	Y	Y	N	Y	minimal
20125	pry	pry	it		open	Y	Y	Y	N	Y	minimal
8331	pull	pulled	a	curtain	clear of	N	N	N	N	Y	non-
14690	pull	pull	her		close	Y	??	Y	Y	N	open

4053	pull	pulled	her		close	Y	??	Y	Y	N	open
10838	pull	pulled	her		close	Y	??	Y	Y	N	open
11407	pull	pulled	her		close	Y	??	Y	Y	N	open
11408	pull	pulled	her		close	Y	??	Y	Y	N	open
12092	pull	pulled	her		close	Y	??	Y	Y	N	open
12952	pull	pulled	her		close	Y	??	Y	Y	N	open
13525	pull	pulled	her		close	Y	??	Y	Y	N	open
13530	pull	pulled	her		close	Y	??	Y	Y	N	open
13539	pull	pulled	her		close	Y	??	Y	Y	N	open
13623	pull	pulled	her		close	Y	??	Y	Y	N	open
14534	pull	pulled	her		close	Y	??	Y	Y	N	open
14078	pull	pulling	her		close	Y	??	Y	Y	N	open
8698	pull	pull	him		close	Y	??	Y	Y	N	open
11704	pull	pull	him		close	Y	??	Y	Y	N	open
11416	pull	pulled	me		close	Y	??	Y	Y	N	open
14658	pull	pulls	me		close	Y	??	Y	Y	N	open
8333	pull	Pull	the	board	close	Y	??	Y	Y	N	open
8332	pull	pulled	the	dog	close	Y	??	Y	Y	N	open
8334	pull	pulling	the	gown	close	Y	??	Y	Y	N	open
2433	pull	pulling	them		close	Y	??	Y	Y	N	open
1336	pull	pulling	him		free	N	Y	N	N	Y	non-
11509	pull	pull	it		free	N	Y	N	N	Y	non-
2935	pull	pulled	it		free	N	Y	N	N	Y	non-
5992	pull	pulled	it		free	N	Y	N	N	Y	non-
7609	pull	pulled	it		free	N	Y	N	N	Y	non-
10967	pull	pulled	it		free	N	Y	N	N	Y	non-
14637	pull	pulled	it		free	N	Y	N	N	Y	non-
11382	pull	pulling	it		free	N	Y	N	N	Y	non-
14855	pull	pulls	it		free	N	Y	N	N	Y	non-
8339	pull	pull	the	guts	free	N	Y	N	N	Y	non-
8342	pull	pull	the	vehicle	free	N	Y	N	N	Y	non-
8336	pull	pulled	the	knife	free	N	Y	N	N	Y	non-
8337	pull	pulled	the	drawer	free	N	Y	N	N	Y	non-
8338	pull	pulled	the	pistol	free	N	Y	N	N	Y	non-
8340	pull	pulled	the	shirt	free	N	Y	N	N	Y	non-
8341	pull	pulled	the	microphone	free	N	Y	N	N	Y	non-
4377	pull	pull	them		free	N	Y	N	N	Y	non-
18488	pull	pull	them		free	N	Y	N	N	Y	non-
8345	pull	pulled	the	belt	good and tight	N	N	N	N	Y	etc.
18244	pull	pull	them		level	N	N	?	N	Y	non-
18912	pull	pulled	them		level	N	N	?	N	Y	non-
18023	pull	pull	it		open	Y	Y	Y	N	Y	minimal
11429	pull	pulled	it		open	Y	Y	Y	N	Y	minimal
16304	pull	Pulling	it		open	Y	Y	Y	N	Y	minimal
8346	pull	pulled	the	door	open	Y	Y	Y	N	Y	minimal
8347	pull	pulled	the	door	open	Y	Y	Y	N	Y	minimal
8348	pull	pulled	the	shutters	open	Y	Y	Y	N	Y	minimal
8349	pull	pulled	the	drawstrings	open	Y	Y	Y	N	Y	minimal
8351	pull	pulled	the	door	open	Y	Y	Y	N	Y	minimal
8353	pull	pulled	the	door	open	Y	Y	Y	N	Y	minimal

8354	pull	pulled	the	door	open	Y	Y	Y	N	Y	minimal
8356	pull	pulled	the	door	open	Y	Y	Y	N	Y	minimal
8357	pull	pulled	the	door	open	Y	Y	Y	N	Y	minimal
8358	pull	pulled	the	door	open	Y	Y	Y	N	Y	minimal
8359	pull	pulled	the	door	open	Y	Y	Y	N	Y	minimal
8360	pull	pulled	the	door	open	Y	Y	Y	N	Y	minimal
8361	pull	pulled	the	door	open	Y	Y	Y	N	Y	minimal
8350	pull	pulling	the	drawer	open	Y	Y	Y	N	Y	minimal
8352	pull	pulling	the	door	open	Y	Y	Y	N	Y	minimal
8355	pull	Pulling	the	door	open	Y	Y	Y	N	Y	minimal
7225	pull	pull	them		open	Y	Y	Y	N	Y	minimal
19725	pull	pull	them		open	Y	Y	Y	N	Y	minimal
4272	pull	pulling	it		taut	Y	Y	Y	Y	Y	open
8363	pump	pumped	the	mine	clear of	N	N	N	N	Y	non-
12337	pump	pumped	him		full	N	Y	Y	N	Y	maximal
4184	pump	pumped	it		full	N	Y	Y	N	Y	maximal
9578	pump	pumped	me		full	N	Y	Y	N	Y	maximal
9566	pump	pumping	me		full	N	Y	Y	N	Y	maximal
7185	pump	pump	them		full	N	Y	Y	N	Y	maximal
7144	pump	pumping	us		full	N	Y	Y	N	Y	maximal
13745	pump	pump	you		full	N	Y	Y	N	Y	maximal
8383	push	pushed	the	door	ajar	N	N	N	N	N	minmal
8384	push	pushed	the	door	ajar	N	N	N	N	N	minmal
8385	push	pushed	the	dress	free	N	Y	Y	N	Y	non-
8388	push	push	a	person	off-	Y	Y	Y	N	Y	minimal
8395	push	pushed	a	door	open	Y	Y	Y	N	Y	minimal
8417	push	pushed	a	door	open	Y	Y	Y	N	Y	minimal
5748	push	pushed	it		open	Y	Y	Y	N	Y	minimal
9582	push	pushed	it		open	Y	Y	Y	N	Y	minimal
11032	push	pushed	it		open	Y	Y	Y	N	Y	minimal
11593	push	pushed	it		open	Y	Y	Y	N	Y	minimal
11954	push	pushed	it		open	Y	Y	Y	N	Y	minimal
11962	push	pushed	it		open	Y	Y	Y	N	Y	minimal
14074	push	pushed	it		open	Y	Y	Y	N	Y	minimal
14083	push	pushed	it		open	Y	Y	Y	N	Y	minimal
14113	push	pushed	it		open	Y	Y	Y	N	Y	minimal
16079	push	pushed	it		open	Y	Y	Y	N	Y	minimal
16579	push	pushed	it		open	Y	Y	Y	N	Y	minimal
17412	push	pushed	it		open	Y	Y	Y	N	Y	minimal
17812	push	pushed	it		open	Y	Y	Y	N	Y	minimal
18020	push	pushed	it		open	Y	Y	Y	N	Y	minimal
18820	push	pushed	it		open	Y	Y	Y	N	Y	minimal
14711	push	pushes	it		open	Y	Y	Y	N	Y	minimal
14067	push	pushing	it		open	Y	Y	Y	N	Y	minimal
8390	push	push	the	door	open	Y	Y	Y	N	Y	minimal
8392	push	push	the	window	open	Y	Y	Y	N	Y	minimal
8394	push	push	the	door	open	Y	Y	Y	N	Y	minimal
8398	push	push	the	door	open	Y	Y	Y	N	Y	minimal
8418	push	push	the	gate	open	Y	Y	Y	N	Y	minimal
8430	push	push	the	door	open	Y	Y	Y	N	Y	minimal
8391	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal

8393	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8396	push	pushed	the	mailbox	open	Y	Y	Y	N	Y	minimal
8397	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8399	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8400	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8401	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8402	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8403	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8404	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8405	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8406	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8407	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8411	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8412	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8413	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8414	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8415	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8416	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8419	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8420	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8421	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8422	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8423	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8424	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8425	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8426	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8427	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8428	push	pushed	the	mouth	open	Y	Y	Y	N	Y	minimal
8429	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8431	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8432	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8433	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8434	push	pushed	the	gate	open	Y	Y	Y	N	Y	minimal
8435	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8436	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8437	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8438	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8439	push	pushed	the	door	open	Y	Y	Y	N	Y	minimal
8389	push	Pushing	the	door	open	Y	Y	Y	N	Y	minimal
8408	push	pushing	the	door	open	Y	Y	Y	N	Y	minimal
8409	push	Pushing	the	door	open	Y	Y	Y	N	Y	minimal
8410	push	pushing	the	door	open	Y	Y	Y	N	Y	minimal
7375	push	push	them		open	Y	Y	Y	N	Y	minimal
2133	push	pushed	them		open	Y	Y	Y	N	Y	minimal
12087	push	pushed	them		open	Y	Y	Y	N	Y	minimal
13594	push	pushed	them		open	Y	Y	Y	N	Y	minimal
15580	push	pushed	them		open	Y	Y	Y	N	Y	minimal
8440	push	pushed	the	door	open wide	N	N	N	N	N	etc.
8441	push	pushed	the	door	wide	N	N	Y	Y	N	open
5651	rake	rake	it		level	N	?	N	N	Y	non-
4389	rasp	rasping	them		smooth	N	Y	Y	Y	Y	maximal

8636	rattle	rattling	the	bolt	free	Y	Y	Y	N	Y	non-
9163	ring	ring	a	bell	loud and clear	N	N	N	Y	N	open
11515	rinse	rinse	them		free of	N	N	N	N	Y	non-
9165	rip	rip	the	roof	free	N	Y	Y	N	Y	non-
14162	rip	ripped	it		open	N	Y	N	N	Y	minimal
17996	rip	ripped	it		open	N	Y	N	N	Y	minimal
9168	rip	rip	the	cloth	open	N	Y	N	N	Y	minimal
9166	rip	ripped	the	box	open	N	Y	N	N	Y	minimal
9167	rip	ripped	the	flap	open	N	Y	N	N	Y	minimal
9169	rip	ripped	the	envelope	open	N	Y	N	N	Y	minimal
9170	rip	ripped	the	car	open	N	Y	N	N	Y	minimal
9569	rip	ripping	them		open	N	Y	N	N	Y	minimal
9764	rob	robbing	them		blind	N	Y	N	N	Y	maximal
6610	rub	rub	everything		clean	N	Y	Y	Y	Y	max/open
9178	rub	rubbed	the	board	clean	N	Y	Y	Y	Y	max/open
9179	rub	rubbed	the	lamp	clean	N	Y	Y	Y	Y	max/open
9181	rub	rub	the	woodwork	smooth	N	Y	Y	Y	Y	maximal
9180	rub	rubbed	the	surface	smooth	N	Y	Y	Y	Y	maximal
9872	rub	rub	them		smooth	N	Y	Y	Y	Y	maximal
9871	rub	rubbing	them		smooth	N	Y	Y	Y	Y	maximal
17005	run	ran	him		ragged	N	Y	Y	Y	Y	open
8951	run	run	me		ragged	N	Y	Y	Y	Y	open
18497	run	ran	us		ragged	N	Y	Y	Y	Y	open
2939	scare	scared	him		rigid	N	Y	N	??	Y	open
17319	scare	scared	me		rigid	N	Y	N	??	Y	open
4234	scare	scare	em		shitless	N	Y	N	N	Y	empahsis
12651	scare	scared	him		shitless	N	Y	N	N	Y	empahsis
16541	scare	scares	him		shitless	N	Y	N	N	Y	empahsis
13783	scare	scared	me		shitless	N	Y	N	N	Y	empahsis
16036	scare	scare	you		shitless	N	Y	N	N	Y	empahsis
10229	scare	scared	me		silly	N	Y	N	N	Y	open
16637	scare	scared	me		silly	N	Y	N	N	Y	open
14063	scare	scares	me		silly	N	Y	N	N	Y	open
14064	scare	scares	me		silly	N	Y	N	N	Y	open
6342	scare	scare	them		silly	N	Y	N	N	Y	open
18421	scare	scared	me		stupid	?	Y	N	N	Y	open
1264	scare	scares	me		stupid	?	Y	N	N	Y	open
20033	scare	scared	me		witless	N	Y	N	N	Y	empahsis
9297	scare	scaring	the	boy	witless	N	Y	N	N	Y	empahsis
9302	scour	scouring	the	bird-ledges	clean	N	Y	?	Y	Y	max/open
9306	scrape	scrape	the	frets	clean of	N	N	Y	Y	Y	non-
9309	scrub	Scrub	the	decks	clean	N	Y	?	Y	Y	max/open
9310	scrub	scrub	the	disk	clean	N	Y	?	Y	Y	max/open
9308	scrub	scrubs	the	wastes	clean	N	Y	?	Y	Y	max/open
4867	scrub	scrub	them		clean	N	Y	?	Y	Y	max/open
11335	scrub	Scrub	them		white	N	N	Y	Y	Y	non- gradable/
9467	send	sends	the	Fanatics	crazy	Y	Y	Y	Y	Y	max/open
12044	send	sends	them		crazy	Y	Y	Y	Y	Y	max/open
2887	send	sends	you		crazy	Y	Y	Y	Y	Y	max/open

2920	send	sent	him		deaf	Y	Y	N	N	Y	non-
2077	send	send	him		mad	Y	Y	Y	Y	Y	open
9470	send	sent	the	market	mad	Y	Y	Y	Y	Y	open
7151	shag	shag	them		senseless	N	Y	N	N	Y	maximal
11424	shake	shaken	him		awake	N	Y	Y	??	Y	minmal
1437	shake	shook	him		awake	N	Y	Y	??	Y	minmal
10559	shake	shook	him		awake	N	Y	Y	??	Y	minmal
13538	shake	shook	him		awake	N	Y	Y	??	Y	minmal
18792	shake	shook	him		awake	N	Y	Y	??	Y	minmal
18811	shake	shook	him		awake	N	Y	Y	??	Y	minmal
13997	shake	shook	me		awake	N	Y	Y	??	Y	minmal
13998	shake	shook	me		awake	N	Y	Y	??	Y	minmal
14004	shake	shook	me		awake	N	Y	Y	??	Y	minmal
14978	shake	shook	me		awake	N	Y	Y	??	Y	minmal
14979	shake	shook	me		awake	N	Y	Y	??	Y	minmal
5011	shake	Shook	Me		cold	?	?	N	N	Y	open
4324	shake	shake	it		free	N	Y	N	N	Y	non-
15543	shake	shake	it		free	N	Y	N	N	Y	non-
17960	shake	shaking	it		free	N	Y	N	N	Y	non-
10673	shake	shook	it		free	N	Y	N	N	Y	non-
11496	shake	shook	it		free	N	Y	N	N	Y	non-
9583	shake	shaking	the	ball	free	N	Y	N	N	Y	non-
2851	shake	shook	them		free	N	Y	N	N	Y	non-
6122	shake	shook	it		loose	Y	Y	Y	Y	Y	open
9585	shake	shaking	a	paper	open	N	Y	??	N	Y	minimal
13817	shake	shook	me		rigid	U	U	U	U	U	open
20379	shake	shook	me		rigid	U	U	U	U	U	open
12781	shock	shock	me		awake	N	Y	Y	Y	Y	minmal
1708	shock	shocked	them		awake	N	Y	Y	Y	Y	minmal
9602	shoot	shot	a	stag	dead	N	Y	N	N	Y	non-
9610	shoot	shot	a	man	dead	N	Y	N	N	Y	non-
9606	shoot	shoot	gunman		dead	N	Y	N	N	Y	non-
20209	shoot	shot	her		dead	N	Y	N	N	Y	non-
1221	shoot	Shoot	him		dead	N	Y	N	N	Y	non-
3184	shoot	shoot	him		dead	N	Y	N	N	Y	non-
6950	shoot	shoot	him		dead	N	Y	N	N	Y	non-
268	shoot	shot	him		dead	N	Y	N	N	Y	non-
302	shoot	shot	him		dead	N	Y	N	N	Y	non-
903	shoot	shot	him		dead	N	Y	N	N	Y	non-
5875	shoot	shot	him		dead	N	Y	N	N	Y	non-
7354	shoot	shot	him		dead	N	Y	N	N	Y	non-
7357	shoot	shot	him		dead	N	Y	N	N	Y	non-
9151	shoot	shot	him		dead	N	Y	N	N	Y	non-
10801	shoot	shot	him		dead	N	Y	N	N	Y	non-
12276	shoot	shot	him		dead	N	Y	N	N	Y	non-
6697	shoot	shot	it		dead	N	Y	N	N	Y	non-
9605	shoot	Shoot	the	buggers	dead	N	Y	N	N	Y	non-
9603	shoot	shot	the	bomber	dead	N	Y	N	N	Y	non-
9604	shoot	shot	the	bear	dead	N	Y	N	N	Y	non-
9609	shoot	shot	the	bomber	dead	N	Y	N	N	Y	non-
20531	shoot	shot	you		dead	N	Y	N	N	Y	non-

17084	shoot	shoot	it		full	N	Y	??	N	Y	maximal
11426	shoulder	shoulderec	them		open	?	Y	Y	N	Y	minimal
9611	shove	shoved	the	door	open	N	Y	N	N	Y	minimal
9689	slam	slammed	a	drawer	open	N	?	??	N	Y	minimal
9690	slam	slammed	the	door	open	N	?	??	N	Y	minimal
9691	slam	slammed	the	room	silent	U	U	U	U	U	non-
11996	slash	slashing	it		open	N	Y	N	N	Y	minimal
9693	slide	slid	the	chain	free	N	Y	?	N	Y	non-
9692	slide	sliding	the	diary	free	N	Y	?	N	Y	non-
9694	slide	slid	the	door	open	Y	Y	Y	N	Y	minimal
9695	slide	slid	the	window	open	Y	Y	Y	N	Y	minimal
9697	slide	slid	the	door	open	Y	Y	Y	N	Y	minimal
9696	slide	sliding	the	door	open	Y	Y	Y	N	Y	minimal
14843	sling	sling	it		open	N	Y	N	N	Y	minimal
9698	slip	slipped	the	magazine	free	N	Y	N	N	Y	non-
9699	slit	slit	the	envelope	open	Y	Y	Y	N	Y	minimal
9700	slit	slit	the	corpse	open	Y	Y	Y	N	Y	minimal
18458	slit	slit	you		open	Y	Y	Y	N	Y	minimal
9702	smash	smashed	a	piece	open	N	Y	N	N	Y	minimal
9703	smash	smash	the	door	open	N	Y	N	N	Y	minimal
9704	smear	smear	the	mud	clear of	N	N	N	N	Y	non-
16106	smite	smite	him		dead	N	N	N	N	Y	non-
12857	snap	snapping	it		free	N	N	N	N	Y	non-
9708	snap	snap	the	locket	open	N	Y	N	N	Y	minimal
9709	snap	snaps	the	door	open	N	Y	N	N	Y	minimal
13813	snap	snapped	them		open	N	Y	N	N	Y	minimal
9710	snatch	snatching	the	door	open	N	?	N	N	Y	minimal
13340	split	split	it		open	N	Y	N	N	Y	minimal
9762	split	split	the	sky	open	N	Y	N	N	Y	minimal
9766	spoil	spoiled	Champ		rotten	Y	Y	N	Y	Y	maximal
14271	spoil	spoil	him		rotten	Y	Y	N	Y	Y	maximal
14272	spoil	spoil	him		rotten	Y	Y	N	Y	Y	maximal
532	spoil	spoilt	him		rotten	Y	Y	N	Y	Y	maximal
6814	spoil	spoil	me		rotten	Y	Y	N	Y	Y	maximal
9767	spoil	spoiled	the	child	rotten	Y	Y	N	Y	Y	maximal
14422	spoil	spoil	them		rotten	Y	Y	N	Y	Y	maximal
11784	spoil	spoiling	them		rotten	Y	Y	N	Y	Y	maximal
6671	spoil	spoils	them		rotten	Y	Y	N	Y	Y	maximal
4977	spoil	spoil	us		rotten	Y	Y	N	Y	Y	maximal
14561	spoil	spoiled	you		rotten	Y	Y	N	Y	Y	maximal
6062	spoon	spooned	it		full	N	Y	Y	Y	Y	maximal
9771	spoon	spooned	the	ball	wide	Y	N	N	Y	Y	open
19639	spray	sprayed	it		pink	Y	Y	Y	Y	Y	non-
											gradable/
74	squeeze	squeeze	him		dry	N	N	N	N	Y	maximal
11979	squeeze	squeezed	him		dry	N	N	N	N	Y	maximal
9779	squeeze	squeezed	the	economy	dry	N	N	N	N	Y	maximal
9778	squeeze	squeezing	the	puree	dry	N	N	N	N	Y	maximal
20488	stain	stained	me		black	?	Y	??	?	Y	non-
											gradable/

10968	stain	staining	them		brown	Y	Y	?	Y	Y	non-gradable/
11646	stain	stains	it		red or green	N	N	N	N	Y	non-gradable/
7227	startle	startled	me		awake	N	Y	Y	Y	Y	minmal
6385	steam	steam	them		clean	N	Y	?	Y	Y	max/open
9818	steam	steamed	the	letter	open	Y	Y	Y	N	Y	minimal
9816	steam	steaming	the	letter	open	Y	Y	Y	N	Y	minimal
9817	steam	steaming	the	envelope	open	Y	Y	Y	N	Y	minimal
9819	steam	steaming	the	letter	open	Y	Y	Y	N	Y	minimal
12183	steam	steaming	them		open	Y	Y	Y	N	Y	minimal
3221	sting	stings	me		bloodless	N	N	N	N	Y	emphasis
9832	stop	stop	the	ball	dead	N	Y	N	N	Y	non-
9834	stop	stop	the	mallet	dead	N	Y	N	N	Y	non-
9831	stop	stopped	the	Plans	dead	N	Y	N	N	Y	non-
9833	stop	stopped	the	Archdeacon	dead	N	Y	N	N	Y	non-
8712	stop	stop	them		dead	N	Y	N	N	Y	non-
4995	strike	strike	them		blind	N	Y	N	N	Y	maximal
18795	strike	struck	him		dead	N	Y	N	N	Y	non-
1373	strike	strike	me		dead	N	Y	N	N	Y	non-
11480	strike	strike	me		dead	N	Y	N	N	Y	non-
8309	strike	strike	you		dead	N	Y	N	N	Y	non-
11421	strike	strike	you		dead	N	Y	N	N	Y	non-
18807	strip	stripped	it		bare	N	Y	Y	N	Y	maximal
9853	strip	strip	the	country	bare	N	Y	Y	N	Y	maximal
9852	strip	stripped	the	mountains	bare	N	Y	Y	N	Y	maximal
4273	strip	stripping	them		bare	N	Y	Y	N	Y	maximal
5028	strip	stripping	everyone		naked	N	Y	N	N	Y	maximal
8755	strip	stripped	him		naked	N	Y	N	N	Y	maximal
13989	strip	stripped	him		naked	N	Y	N	N	Y	maximal
12262	strip	stripped	me		naked	N	Y	N	N	Y	maximal
9854	strip	stripped	the	victim	naked	N	Y	N	N	Y	maximal
9855	strip	Strips	the	interrogator	naked	N	Y	N	N	Y	maximal
1866	strip	strip	them		naked	N	Y	N	N	Y	maximal
11242	strip	stripped	them		naked	N	Y	N	N	Y	maximal
12871	strip	strip	you		naked	N	Y	N	N	Y	maximal
14966	stuff	stuff	it		full	N	Y	N	N	Y	maximal
17943	stuff	stuffed	it		full	N	Y	N	N	Y	maximal
13353	stuff	stuffed	them		full	N	Y	N	N	Y	maximal
4855	stuff	stuffing	them		full	N	Y	N	N	Y	maximal
6752	stuff	stuffing	them		full	N	Y	N	N	Y	maximal
9869	stun	stuns	the	crowd	rigid	N	Y	N	??	Y	open
12795	suck	sucked	them		blank	U	U	U	U	U	non-
8979	suck	suck	them		clean	N	Y	?	Y	Y	max/open
3147	suck	suck	us		clean	N	Y	?	Y	Y	max/open
9870	suck	suck	a	plant	dry	N	Y	N	N	Y	maximal
10639	suck	sucked	him		dry	N	Y	N	N	Y	maximal
13705	suck	sucked	him		dry	N	Y	N	N	Y	maximal
13706	suck	sucked	him		dry	N	Y	N	N	Y	maximal
2045	suck	sucking	him		dry	N	Y	N	N	Y	maximal
11670	suck	sucks	him		dry	N	Y	N	N	Y	maximal

9873	suck	suck	the	coral	dry	N	Y	N	N	Y	maximal
9871	suck	sucking	the	sport	dry	N	Y	N	N	Y	maximal
9872	suck	sucking	the	prey	dry	N	Y	N	N	Y	maximal
9689	suck	sucked	them		dry	N	Y	N	N	Y	maximal
15831	suck	sucked	us		dry	N	Y	N	N	Y	maximal
13610	suck	sucked	them		empty	U	Y	?	N	Y	maximal
9967	swab	swabbed	the	wash-basin	clean	N	Y	?	Y	Y	max/open
9970	sweep	sweep	the	surface	clean	N	Y	Y	Y	Y	max/open
9969	sweep	swept	the	room	clean	N	Y	Y	Y	Y	max/open
9972	sweep	sweep	the	seas	clear of	N	N	N	N	Y	non-
9971	sweep	sweeping	the	floor	clear of	N	N	N	N	Y	non-
9973	sweep	sweeps	the	track	free of	N	Y	N	N	Y	non-
12532	swing	swing	him		free	N	Y	??	N	Y	non-
9976	swing	swung	the	rake	free of	N	N	N	N	Y	non-
9977	swing	swung	the	gate	open	Y	Y	Y	N	Y	minimal
9978	swing	swung	the	gate	open	Y	Y	Y	N	Y	minimal
9979	swing	swung	the	door	open	Y	Y	Y	N	Y	minimal
9980	swing	swung	the	window	open	Y	Y	Y	N	Y	minimal
9981	swing	swung	the	gates	open	Y	Y	Y	N	Y	minimal
9982	swing	swung	the	door	open	Y	Y	Y	N	Y	minimal
9983	swing	swung	the	door	open	Y	Y	Y	N	Y	minimal
7673	tear	torn	it		free	N	Y	N	N	Y	non-
10093	tear	tearing	the	rifle	free of	N	Y	N	N	Y	non-
10103	tear	tore	a	roll	open	N	Y	Y	N	Y	minimal
10094	tear	tear	armour		open	N	Y	Y	N	Y	minimal
10565	tear	tear	it		open	N	Y	Y	N	Y	minimal
12619	tear	tear	it		open	N	Y	Y	N	Y	minimal
13483	tear	tear	it		open	N	Y	Y	N	Y	minimal
11600	tear	tore	it		open	N	Y	Y	N	Y	minimal
13666	tear	tore	it		open	N	Y	Y	N	Y	minimal
10098	tear	Tear	the	packet	open	N	Y	Y	N	Y	minimal
10097	tear	tearing	the	envelope	open	N	Y	Y	N	Y	minimal
10095	tear	tore	the	envelope	open	N	Y	Y	N	Y	minimal
10096	tear	tore	the	pocket	open	N	Y	Y	N	Y	minimal
10099	tear	tore	the	panel	open	N	Y	Y	N	Y	minimal
10100	tear	tore	the	door	open	N	Y	Y	N	Y	minimal
10101	tear	tore	the	despatch	open	N	Y	Y	N	Y	minimal
10102	tear	tore	the	envelope	open	N	Y	Y	N	Y	minimal
4779	thrash	thrash	thee		senseless	N	Y	N	N	Y	maximal
4802	throw	throw	it		high or	Y	N	Y	Y	N	open
10191	throw	throws	a	door	open	N	Y	N	N	Y	minimal
10555	throw	threw	it		open	N	Y	N	N	Y	minimal
13996	throw	threw	it		open	N	Y	N	N	Y	minimal
17373	throw	threw	it		open	N	Y	N	N	Y	minimal
7241	throw	throw	it		open	N	Y	N	N	Y	minimal
7429	throw	throw	it		open	N	Y	N	N	Y	minimal
11033	throw	Throwing	it		open	N	Y	N	N	Y	minimal
16251	throw	throwing	it		open	N	Y	N	N	Y	minimal
10181	throw	threw	the	subject	open	N	Y	N	N	Y	minimal
10182	throw	threw	the	subject	open	N	Y	N	N	Y	minimal
10185	throw	threw	the	meeting	open	N	Y	N	N	Y	minimal

10186	throw	threw	the	window	open	N	Y	N	N	Y	minimal
10188	throw	threw	the	door	open	N	Y	N	N	Y	minimal
10190	throw	threw	the	door	open	N	Y	N	N	Y	minimal
10194	throw	threw	the	door	open	N	Y	N	N	Y	minimal
10187	throw	throw	the	debate	open	N	Y	N	N	Y	minimal
10184	throw	throwing	the	competition	open	N	Y	N	N	Y	minimal
10189	throw	throwing	the	door	open	N	Y	N	N	Y	minimal
10192	throw	throwing	the	door	open	N	Y	N	N	Y	minimal
10193	throw	throwing	the	way	open	N	Y	N	N	Y	minimal
10183	throw	throws	the	contest	open	N	Y	N	N	Y	minimal
4029	throw	threw	them		open	N	Y	N	N	Y	minimal
10770	throw	threw	them		open	N	Y	N	N	Y	minimal
12684	throw	throw	them		wide	N	N	N	Y	Y	open
10197	thrust	thrust	the	doors	open	N	Y	N	N	Y	minimal
10198	thrust	thrust	the	door	open	N	Y	N	N	Y	minimal
17816	towel	towelling	it		dry	N	N	Y	N	Y	maximal
3177	towel	towel	them		dry	N	N	Y	N	Y	maximal
1464	tread	tread	it		firm	N	N	Y	Y	Y	open
1793	tread	tread	it		firm	N	N	Y	Y	Y	open
7587	tread	tread	it		firm	N	N	Y	Y	Y	open
10234	tug	tugged	a	blanket	free	N	Y	Y	N	Y	non-
11599	tug	tugged	it		free	N	Y	Y	N	Y	non-
18007	tug	tugged	it		free	N	Y	Y	N	Y	non-
10235	tug	tugged	the	gown	free	N	Y	Y	N	Y	non-
10236	tug	tugged	the	leather	free	N	Y	Y	N	Y	non-
10897	tug	tugged	them		loose	Y	Y	Y	N	Y	open
10238	turn	turn	a	stream	anaerobic	?	(Y)	Y	N	Y	non-
10241	turn	turns	shares		bearish	?	N	Y	?	?	open
10243	turn	turn	the	skies	black	Y	Y	Y	Y	Y	non-gradable/
10242	turn	turn	the	skies	black	Y	Y	Y	Y	Y	non-gradable/
870	turn	turns	them		black	Y	Y	Y	Y	Y	non-gradable/
10372	turn	turn	it		blue	Y	Y	Y	Y	Y	non-gradable/
4789	turn	turn	them		blue	Y	Y	Y	Y	Y	non-gradable/
12682	turn	turn	it		brown	Y	Y	Y	Y	Y	non-gradable/
14377	turn	turned	it		brown	Y	Y	Y	Y	Y	non-gradable/
10244	turn	turn	the	beer	cloudy	Y	Y	Y	Y	Y	open
9599	turn	turning	it		cold and heavy	Y	N	Y	Y	Y	open
19391	turn	turn	them		different	U	U	U	U	U	open
17366	turn	turn	everyone		foolish and mad	?	Y	N	N	Y	maximal
8927	turn	turn	it		green	Y	N	Y	Y	Y	non-gradable/
17992	turn	turns	it		green	Y	N	Y	Y	Y	non-gradable/

10245	turn	turns	limewater	milky	Y	Y	Y	Y	Y	open
2624	turn	turned	it	mushy	Y	Y	Y	Y	Y	maximal
10246	turn	turns	people	odd	Y	N	Y	Y	Y	open
12367	turn	turning	it	pale and soft	Y	N	?	Y	?	open
10248	turn	turning	every shadow	pale blue	N	?	N	??	N	non-
10249	turn	turn	the whites	pink	Y	Y	N	Y	Y	non-gradable/
807	turn	turning	it	political	Y	N	Y	Y	Y	open
10250	turn	turn	the afternoon	predictable	U	U	U	U	U	non-gradable/
4874	turn	turning	it	rancid	Y	Y	?	?	Y	maximal
4706	turn	turns	it	red	Y	Y	Y	Y	Y	non-gradable/
10254	turn	turn	the lake	saline	Y	Y	Y	Y	Y	non-
12219	turn	turned	them	short	U	U	U	U	U	open
10255	turn	turned	partnership	sour	Y	N	?	Y	Y	minmal
10256	turn	turn	the water	thick and green	N	N	N	Y	Y	open
12680	turn	turn	it	violet	Y	N	N	N	Y	non-gradable/
7950	turn	turn	them	white	Y	Y	N	Y	Y	non-gradable/
14569	turn	turned	them	white	Y	Y	N	Y	Y	non-gradable/
10285	turn	turned	it	yellow	Y	Y	Y	Y	Y	non-gradable/
10260	twist	twist	reality	askew	Y	N	Y	??	Y	minmal
5915	wash	wash	it	clean	N	Y	Y	Y	Y	max/open
13434	wash	washed	it	clean	N	Y	Y	Y	Y	max/open
10592	wash	Wash	the surface	clean	N	Y	Y	Y	Y	max/open
10593	wash	washed	the podger	clean	N	Y	Y	Y	Y	max/open
1432	wash	wash	them	clean	N	Y	Y	Y	Y	max/open
540	wash	washes	us	clean	N	Y	Y	Y	Y	max/open
9111	wash	wash	them	free of	N	?	N	N	Y	non-
16644	wear	wore	me	numb	Y	Y	N	Y	Y	minimal
6054	wear	wear	them	smooth	N	Y	Y	Y	Y	maximal
7379	wedge	Wedging	it	open	Y	Y	Y	N	N	minimal
9132	whip	whip	you	raw	N	Y	Y	Y	Y	open
13609	whisper	whispered	nothing	awake	N	N	N	N	N	minmal
10680	winch	winching	the ship	free	N	Y	Y	N	Y	non-
15852	wipe	wipe	it	blank	N	Y	N	N	Y	non-
15853	wipe	wipe	it	blank	N	Y	N	N	Y	non-
10691	wipe	wiped	a table	clean	N	Y	Y	Y	Y	max/open
832	wipe	wipe	it	clean	N	Y	Y	Y	Y	max/open
9029	wipe	wipe	it	clean	N	Y	Y	Y	Y	max/open
2153	wipe	wiped	it	clean	N	Y	Y	Y	Y	max/open
7755	wipe	wiped	it	clean	N	Y	Y	Y	Y	max/open
13595	wipe	wiped	it	clean	N	Y	Y	Y	Y	max/open
10681	wipe	wipe	the slate	clean	N	Y	Y	Y	Y	max/open
10683	wipe	wipe	the slate	clean	N	Y	Y	Y	Y	max/open
10684	wipe	wipe	the slate	clean	N	Y	Y	Y	Y	max/open

10686	wipe	wipe	the	slate	clean	N	Y	Y	Y	Y	max/open
10689	wipe	wipe	the	mallet	clean	N	Y	Y	Y	Y	max/open
10693	wipe	wipe	the	slate	clean	N	Y	Y	Y	Y	max/open
10694	wipe	wipe	the	screen	clean	N	Y	Y	Y	Y	max/open
10695	wipe	wipe	the	slate	clean	N	Y	Y	Y	Y	max/open
10696	wipe	wipe	the	bugger	clean	N	Y	Y	Y	Y	max/open
10687	wipe	wiped	the	blade	clean	N	Y	Y	Y	Y	max/open
10688	wipe	wiped	the	slate	clean	N	Y	Y	Y	Y	max/open
10682	wipe	Wiping	the	board	clean	N	Y	Y	Y	Y	max/open
10685	wipe	Wiping	the	Slate	clean	N	Y	Y	Y	Y	max/open
10690	wipe	wiping	the	bowl	clean	N	Y	Y	Y	Y	max/open
10692	wipe	wiping	the	slate	clean	N	Y	Y	Y	Y	max/open
4088	wipe	wipe	them		clean	N	Y	Y	Y	Y	max/open
20008	wipe	wipe	them		clean	N	Y	Y	Y	Y	max/open
20361	wipe	wipe	them		clean	N	Y	Y	Y	Y	max/open
10665	wipe	wiped	them		clear	N	N	N	N	Y	maximal
10697	wipe	wipe	the	screen	clear of	N	N	N	N	Y	non-
10698	wipe	wipe	the	oilskins	dry	N	N	Y	N	Y	maximal
10699	wipe	wiped	the	floor	dry	N	N	Y	N	Y	maximal
14435	wipe	wiped	them		dry	N	N	Y	N	Y	maximal
8751	wipe	wiping	them		dry	N	N	Y	N	Y	maximal
10700	wipe	Wipe	the	slide	free of	N	?	N	N	Y	non-
10701	wipe	wiped	the	floor	moist	Y	N	Y	Y	N	minimal
16082	wobble	wobbled	him		awake	??	Y	Y	?	Y	minmal
16462	work	work	it		free	Y	Y	Y	N	Y	non-
3998	work	worked	it		loose	Y	Y	Y	Y	Y	open
10718	worm	wormed	the	gate	open	Y	Y	Y	N	N	minimal
2462	wrap	wrap	me		snug and warm	N	N	?	Y	?	open
2463	wrap	wrap	me		snug and warm	N	N	?	Y	?	open
10719	wrench	wrench	the	buoy	adrift	N	N	N	N	N	non-
18107	wrench	wrench	him		free	N	Y	Y	N	Y	non-
3588	wrench	wrenched	it		free	N	Y	Y	N	Y	non-
10387	wrench	wrenched	it		free	N	Y	Y	N	Y	non-
10721	wrench	wrench	the	thing	free	N	Y	Y	N	Y	non-
10720	wrench	wrenched	the	ring	free	N	Y	Y	N	Y	non-
14882	wrench	wrenched	it		free of	N	Y	N	N	Y	non-
5999	wrench	wrenched	it		open	N	Y	Y	N	Y	minimal
10722	wrench	wrenched	the	door	open	N	Y	Y	N	Y	minimal
10723	wrench	wrenched	the	bonnet	open	N	Y	Y	N	Y	minimal
10724	wrench	wrenched	the	door	open	N	Y	Y	N	Y	minimal
10725	wrestle	wrestle	the	boat	free	N	Y	Y	N	Y	non-
1335	yank	yanked	it		free	N	Y	Y	N	Y	non-
6773	yank	yanked	it		free	N	Y	Y	N	Y	non-
14873	yank	yank	them		free	N	Y	Y	N	Y	non-
2010	yank	yanked	it		open	Y	Y	Y	N	Y	minimal
14862	yank	yanked	it		open	Y	Y	Y	N	Y	minimal
10738	yank	yanked	the	door	open	Y	Y	Y	N	Y	minimal
10739	yank	yanked	the	door	open	Y	Y	Y	N	Y	minimal
10740	yank	yanked	the	door	open	Y	Y	Y	N	Y	minimal

6642	zap	zapped	you	insensible	N	Y	N	N	Y	non-

Fields

1. Seq No. Sequence No. of V-A pairs
2. Verbinf Verb infinitive
3. Verb Verb
4. Obi Object
5. Ad Result adjective
6. a little Y: Yes; ? Funny; ??: Very funny; N: No; U: Unable to judge
7. half Y: Yes; ? Funny; ??: Very funny; N: No; U: Unable to judge
8. more/err Y: Yes; ? Funny; ??: Very funny; N: No; U: Unable to judge
9. very Y: Yes; ? Funny; ??: Very funny; N: No; U: Unable to judge
10. completely Y: Yes; ? Funny; ??: Very funny; N: No; U: Unable to judge
11. Ad type Aspectual type of adjective

Note that the verbs *drive* , *run* and *send* are classified in a verb class named *AP complement verb* in this paper.

Appendix A8

Adjective Modifier Tests of Unique 275 V-A Pairs Headed by "Normal Verbs"

(Sorted in ascending order of adj and verbinf)

Seq No.	Adj	Verbinf	a little	half	more/er	very	complete -ly	Lex asptype
10719	adrift	wrench	N	N	N	N	N	non-
7668	ajar	nudge	N	N	?	N	?	minimal
8383	ajar	push	N	N	N	N	N	minimal
16427	alert	nudge	??	??	?	Y	Y	maximal/ open-scale
16938	askew	blow	Y	Y	Y	??	Y	minimal
4777	askew	knock	Y	Y	Y	??	Y	minimal
10260	askew	twist	Y	N	Y	??	Y	minimal
11018	awake	drum	??	??	??	??	Y	minimal
4061	awake	frighten	N	Y	??	??	Y	minimal
1258	awake	jerk	N	Y	??	??	Y	minimal
4086	awake	kick	N	Y	??	??	Y	minimal
10505	awake	nudge	Y	Y	Y	??	?	minimal
11424	awake	shake	N	Y	Y	??	Y	minimal
1708	awake	shock	N	Y	Y	Y	Y	minimal
7227	awake	startle	N	Y	Y	Y	Y	minimal
13609	awake	whisper	N	N	N	N	N	minimal
16082	awake	wobble	??	Y	Y	?	Y	minimal
9713	bare	flay	N	Y	Y	N	Y	maximal
4273	bare	strip	N	Y	Y	N	Y	maximal
1232	black	burn	Y	Y	?	Y	Y	non- gradable/
13581	black	colour	?	Y	Y	?	Y	non- gradable/
4794	black	dye	?	Y	Y	?	Y	non- gradable/
7849	black	paint	?	Y	Y	?	Y	non- gradable/
20488	black	stain	?	Y	??	?	Y	non- gradable/
4394	black and blue	beat	?	Y	N	??	Y	non- gradable
12795	blank	suck	U	U	U	U	U	non-
15852	blank	wipe	N	Y	N	N	Y	non-
9764	blind	rob	N	Y	N	N	Y	maximal (emphasis)
4995	blind	strike	N	Y	N	N	Y	maximal (emphasis)
3221	bloodless	sting	N	N	N	N	Y	exception, emphasis
1769	brainless	knock	N	Y	N	N	Y	non-
17308	brown	colour	Y	Y	Y	Y	Y	non- gradable/
20141	brown	paint	Y	Y	Y	Y	Y	non- gradable/

10968	brown	stain	Y	Y	?	Y	Y	non-gradable/
4068	clean	lick	N	Y	Y	Y	Y	maximal/ open-scale
10745	clean	polish	N	?	Y	Y	Y	maximal/ open-scale
9178	clean	rub	N	Y	Y	Y	Y	maximal/ open-scale
9302	clean	scour	N	Y	?	Y	Y	maximal/ open-scale
4867	clean	scrub	N	Y	?	Y	Y	maximal/ open-scale
6385	clean	steam	N	Y	?	Y	Y	maximal/ open-scale
8979	clean	suck	N	Y	?	Y	Y	maximal/ open-scale
9967	clean	swab	N	Y	?	Y	Y	maximal/ open-scale
9969	clean	sweep	N	Y	Y	Y	Y	maximal/ open-scale
540	clean	wash	N	Y	Y	Y	Y	maximal/ open-scale
832	clean	wipe	N	Y	Y	Y	Y	maximal/ open-scale
7858	clean and smooth	pare	N	N	Y	Y	Y	maximal/ open-scale
4275	clean of	lick	N	N	Y	Y	Y	non-gradable
9306	clean of	scrape	N	N	Y	Y	Y	non-gradable
505	clear	blow	N	N	N	N	Y	non-gradable
1271	clear	cut	N	Y	N	N	Y	non-gradable
13815	clear	drag	N	Y	N	N	Y	non-gradable
13257	clear	knock	N	Y	N	N	Y	non-gradable
15552	clear	lift	N	Y	Y	N	Y	non-gradable
10665	clear	wipe	N	N	N	N	Y	maximal (transparent)
5742	clear of	lift	N	N	N	N	Y	non-
8331	clear of	pull	N	N	N	N	Y	non-
8363	clear of	pump	N	N	N	N	Y	non-
9704	clear of	smear	N	N	N	N	Y	non-
9971	clear of	sweep	N	N	N	N	Y	non-
10697	clear of	wipe	N	N	N	N	Y	non-
1585	close	draw	Y	N	Y	Y	N	non-
3806	close	hug	Y	??	Y	Y	N	open-scale (location)
10558	close	press	Y	??	Y	Y	N	open-scale (location)

8332	close	pull	Y	??	Y	Y	N	open-scale (location)
3711	cold	knock	N	Y	N	??	Y	open-scale
5011	cold	shake	?	?	N	N	Y	open-scale
5045	crooked	knock	Y	?	Y	Y	Y	minimal
880	dead	click	N	N	N	N	Y	non-
307	dead	cut	N	N	N	N	Y	non-
19308	dead	flatten	N	Y	N	N	Y	non-
5034	dead	kick	N	N	N	N	Y	non-
2508	dead	kill	N	Y	N	N	Y	non-
14849	dead	mash	N	N	N	N	Y	non-
268	dead	shoot	N	Y	N	N	Y	non-
16106	dead	smite	N	N	N	N	Y	non-
9831	dead	stop	N	Y	N	N	Y	non-
1373	dead	strike	N	Y	N	N	Y	non-
17771	dry	bleed	N	Y	N	N	Y	maximal
503	dry	blot	N	Y	Y	N	Y	maximal
506	dry	blow	N	?	Y	Y	Y	maximal
589	dry	brush	N	N	Y	N	Y	maximal
13938	dry	dab	N	Y	Y	N	Y	maximal
1581	dry	drain	N	?	N	N	Y	maximal
1598	dry	drink	N	Y	N	N	Y	maximal
12598	dry	milk	N	Y	N	N	Y	maximal
1024	dry	pat	N	N	Y	N	Y	maximal
16193	dry	polish	N	N	N	??	Y	maximal
9778	dry	squeeze	N	N	N	N	Y	maximal
2045	dry	suck	N	Y	N	N	Y	maximal
3177	dry	towel	N	N	Y	N	Y	maximal
10699	dry	wipe	N	N	Y	N	Y	maximal
12790	empty	open	U	U	U	U	U	maximal
13610	empty	suck	U	Y	?	N	Y	maximal
610	fine	cut	Y	N	N	Y	N	open-scale
1464	firm	tread	N	N	Y	Y	Y	open-scale
2221	free	break	??	Y	Y	N	Y	non-
590	free	brush	N	N	N	N	Y	non-
1281	free	cut	N	Y	Y	N	Y	non-
1579	free	drag	N	Y	Y	N	Y	non-
10624	free	ease	N	Y	Y	N	Y	non-
2503	free	flap	N	Y	Y	N	Y	non-
8446	free	hurl	N	Y	N	N	Y	non-
4135	free	jerk	N	Y	Y	N	Y	non-
5746	free	lift	N	Y	Y	N	Y	non-
8005	free	power	N	Y	N	N	Y	non-
8072	free	prize	N	Y	N	N	Y	non-
8336	free	pull	N	Y	N	N	Y	non-
8636	free	rattle	Y	Y	Y	N	Y	non-
11515	free of	rinse	N	N	N	N	Y	non-
9165	free	rip	N	Y	Y	N	Y	non-
9583	free	shake	N	Y	N	N	Y	non-
9692	free	slide	N	Y	?	N	Y	non-
9698	free	slip	N	Y	N	N	Y	non-

12857	free	snap	N	N	N	N	Y	non-
9973	free of	sweep	N	Y	N	N	Y	non-
9976	free of	swing	N	N	N	N	Y	non-
7673	free	tear	N	Y	N	N	Y	non-
10234	free	tug	N	Y	Y	N	Y	non-
9111	free of	wash	N	?	N	N	Y	non-
10680	free	winch	N	Y	Y	N	Y	non-
10700	free of	wipe	N	?	N	N	Y	non-
16462	free	work	Y	Y	Y	N	Y	non-
3588	free	wrench	N	Y	Y	N	Y	non-
10725	free	wrestle	N	Y	Y	N	Y	non-
1335	free	yank	N	Y	Y	N	Y	non-
11306	full	fill	N	Y	Y	N	Y	maximal
7847	full	pack	N	Y	Y	N	Y	maximal
4184	full	pump	N	Y	Y	N	Y	maximal
17084	full	shoot	N	Y	??	N	Y	maximal
6062	full	spoon	N	Y	Y	Y	Y	maximal
4855	full	stuff	N	Y	N	N	Y	maximal
8345	good and tight	pull	N	N	N	N	Y	exception
3607	green	paint	Y	Y	Y	Y	Y	non-gradable/
6745	half-full	fill	N	N	N	N	N	maximal
18108	helpless	fling	N	N	N	N	Y	non-
10388	helpless	mash	N	N	N	N	Y	non-
2222	high	lift	Y	N	Y	Y	N	open-scale
7941	high	pile	Y	N	Y	Y	N	open-scale
4802	high or low	throw	Y	N	Y	Y	N	open-scale
5046	insensible	knock	N	Y	N	N	Y	non-
6642	insensible	zap	N	Y	N	N	Y	non-
5327	level	lift	N	N	Y	N	Y	non-
18244	level	pull	N	N	?	N	Y	non-
5651	level	rake	N	?	N	N	Y	non-
495	loose	bite	N	N	N	N	Y	open-scale
6122	loose	shake	Y	Y	Y	Y	Y	open-scale
10897	loose	tug	Y	Y	Y	N	Y	open-scale
3998	loose	work	Y	Y	Y	Y	Y	open-scale
9163	loud and clear	ring	N	N	N	Y	N	open-scale
10701	moist	wipe	Y	N	Y	Y	N	minimal
18803	mute	choke	N	Y	N	N	Y	non-
1866	naked	strip	N	Y	N	N	Y	maximal
891	nice and green	coddle	U	U	U	?	U	maximal
16644	numb	wear	Y	Y	N	Y	Y	minimal
3999	off-balance	knock	Y	Y	Y	N	Y	minimal
8388	off-balance	push	Y	Y	Y	N	Y	minimal
501	open	blast	N	N	N	N	Y	minimal
509	open	blow	N	Y	?	N	Y	minimal
534	open	break	N	Y	Y	N	Y	minimal
623	open	burst	N	Y	N	N	Y	minimal

764	open	carve	N	Y	N	N	Y	minimal
856	open	chuck	N	Y	N	N	Y	minimal
881	open	click	N	Y	N	N	Y	minimal
1193	open	crack	N	Y	N	N	Y	minimal
1196	open	crash	N	N	Y	N	Y	minimal
1283	open	cut	N	Y	Y	N	Y	minimal
1580	open	drag	Y	Y	Y	N	Y	minimal
1653	open	ease	Y	Y	Y	N	Y	minimal
1673	open	edge	Y	Y	Y	N	Y	minimal
1679	open	elbow	Y	Y	Y	N	Y	minimal
11477	open	flatten	N	Y	N	N	Y	minimal
2508	open	flick	N	Y	?	N	Y	minimal
2511	open	fling	N	Y	N	N	Y	minimal
2520	open	flip	N	Y	N	N	Y	minimal
10796	open	fold	N	Y	N	N	Y	minimal
2560	open	force	Y	Y	Y	Y	Y	minimal
8	open	haul	??	Y	Y	N	Y	minimal
4136	open	jerk	?	Y	Y	N	Y	minimal
5035	open	kick	Y	Y	Y	??	Y	minimal
5733	open	lever	Y	Y	Y	N	Y	minimal
5749	open	lift	Y	Y	Y	N	Y	minimal
5808	open	lock	N	Y	N	N	Y	minimal
7669	open	nudge	Y	Y	Y	N	Y	minimal
7848	open	padlock	N	Y	N	N	Y	minimal
11908	open	pin	N	Y	N	N	Y	minimal
8059	open	press	N	??	?	N	Y	minimal
2980	open	prize	??	Y	Y	N	Y	minimal
8191	open	prop	N	Y	Y	N	Y	minimal
20125	open	pry	Y	Y	Y	N	Y	minimal
8346	open	pull	Y	Y	Y	N	Y	minimal
8389	open	push	Y	Y	Y	N	Y	minimal
9166	open	rip	N	Y	N	N	Y	minimal
9585	open	shake	N	Y	??	N	Y	minimal
11426	open	shoulder	?	Y	Y	N	Y	minimal
9611	open	shove	N	Y	N	N	Y	minimal
9689	open	slam	N	?	??	N	Y	minimal
11996	open	slash	N	Y	N	N	Y	minimal
9694	open	slide	Y	Y	Y	N	Y	minimal
14843	open	sling	N	Y	N	N	Y	minimal
9699	open	slit	Y	Y	Y	N	Y	minimal
9702	open	smash	N	Y	N	N	Y	minimal
9708	open	snap	N	Y	N	N	Y	minimal
9710	open	snatch	N	?	N	N	Y	minimal
9762	open	split	N	Y	N	N	Y	minimal
9816	open	steam	Y	Y	Y	N	Y	minimal
9977	open	swing	Y	Y	Y	N	Y	minimal
10094	open	tear	N	Y	Y	N	Y	minimal
4029	open	throw	N	Y	N	N	Y	minimal
10197	open	thrust	N	Y	N	N	Y	minimal
7379	open	wedge	Y	Y	Y	N	N	minimal
10718	open	worm	Y	Y	Y	N	N	minimal

5999	open	wrench	N	Y	Y	N	Y	minimal
2010	open	yank	Y	Y	Y	N	Y	minimal
8440	open wide	push	N	N	N	N	N	exception, originally open-scale
7852	pale Green	paint	N	N	??	N	Y	non-gradable/
17309	pale pink and green	colour	N	N	N	N	N	non-gradable/
19639	pink	spray	Y	Y	Y	Y	Y	non-gradable/
820	raw	chafe	Y	Y	Y	Y	Y	open-scale (=red & painful)
9132	raw	whip	N	Y	Y	Y	Y	open-scale (=red & painful)
18760	ready	clean	N	N	N	N	Y	non-
9048	ready	pack	N	N	N	N	Y	non-
10470	red and green	paint	N	N	N	N	Y	non-gradable/
11646	red or green	stain	N	N	N	N	Y	non-gradable/
6037	rigid	bore	N	Y	N	??	Y	open-scale (emphasis)
2939	rigid	scare	N	Y	N	??	Y	open-scale (emphasis)
13817	rigid	shake	U	U	U	U	U	open-scale (emphasis)
9869	rigid	stun	N	Y	N	??	Y	open-scale (emphasis)
532	rotten	spoil	Y	Y	N	Y	Y	maximal (open-scale as "unplesant"
384	senseless	bash	N	Y	N	N	Y	maximal
5882	senseless	beat	N	Y	N	N	Y	maximal
14599	senseless	club	N	Y	N	N	Y	maximal
3584	senseless	flog	N	Y	N	N	Y	maximal
5047	senseless	knock	N	Y	N	N	Y	maximal
7151	senseless	shag	N	Y	N	N	Y	maximal
4779	senseless	thrash	N	Y	N	N	Y	maximal
4234	shitless	scare	N	Y	N	N	Y	exception, emphasis
1285	short	cut	Y	N	N	Y	N	open-scale
2316	sick	frighten	N	N	N	N	Y	minimal (emphasis)
9691	silent	slam	U	U	U	U	U	non-
11006	silly	feed	N	Y	N	N	Y	open-scale (emphasis)
10642	silly	fuck	N	Y	N	N	Y	open-scale (emphasis)

3629	silly	knock	N	Y	N	N	Y	open-scale (emphasis)
6342	silly	scare	N	Y	N	N	Y	open-scale (emphasis)
10868	sky-high	lift	N	N	N	N	N	non-
2062	smooth	file	N	Y	Y	Y	Y	maximal
9012	smooth	mash	N	N	N	Y	Y	maximal
4389	smooth	rasp	N	Y	Y	Y	Y	maximal
9871	smooth	rub	N	Y	Y	Y	Y	maximal
6054	smooth	wear	N	Y	Y	Y	Y	maximal
2462	snug and warm	wrap	N	N	?	Y	?	open-scale
2605	spitless	frighten	N	Y	N	N	Y	exception, emphais
9013	stone-dead	kill	N	N	N	N	Y	exception, emphais
20615	stupid	bore	?	Y	N	N	Y	open (emphasis)
1264	stupid	scare	?	Y	N	N	Y	open-scale (emphasis)
1681	taut	draw	Y	Y	Y	Y	Y	open-scale
4272	taut	pull	Y	Y	Y	Y	Y	open-scale
20325	thin	cut	N	N	Y	Y	N	open-scale
5048	unconsciou	fling	N	Y	N	N	Y	maximal
969	unconsciou	knock	N	Y	N	N	Y	maximal
8500	white	bleed	U	U	U	U	U	non- gradable/
14820	white	paint	N	N	Y	Y	Y	non- gradable/
7855	white	paper	N	Y	N	Y	Y	non- gradable/
11335	white	scrub	N	N	Y	Y	Y	non- gradable/
7792	wide	open	N	N	Y	Y	N	open-scale
8441	wide	push	N	N	Y	Y	N	open-scale
9771	wide	spoon	Y	N	N	Y	Y	open-scale
12684	wide	throw	N	N	N	Y	Y	open-scale
3357	witless	bore	N	Y	N	N	Y	exception, emphasis
9297	witless	scare	N	Y	N	N	Y	exception, emphasis
17733	yellow	dye	?	N	Y	Y	Y	non- gradable/
3173	yellow	paint	?	N	Y	Y	Y	non- gradable/
2834	yellow, pink, orange and	dye	N	N	N	N	N	non- gradable/ open (color)
19440	yucky	lick	Y	N	Y	Y	Y	open-scale (=sticky)

Fields

1. Seq No. Sequence No.

2.	Adj	Adjective
3.	Verbinf	Infinitive of paired verb
4.	a little	Y: Co-occur; N: Not co-occur; U: Unknown; ?: Strange; ??: Very strange;
5.	half	Y: Co-occur; N: Not co-occur; U: Unknown; ?: Strange; ??: Very strange;
6.	very	Y: Co-occur; N: Not co-occur; U: Unknown; ?: Strange; ??: Very strange;
7.	completely	Y: Co-occur; N: Not co-occur; U: Unknown; ?: Strange; ??: Very strange;
8.	asptype	Lexically encoded aspectual type

Appendix A9

Verb Class and Licensed Types of Adjectives in 321 Unique V-A Pairs

No	Verb class	Subclass	Total by class	1:non-gradable	2:non-gradable/ gradable	3:maximal	4:max/open	5:open-scale	6:minimal	7:emphasis	8: etc
1	AP Complement verbs*		44	7	10	3	2	17	5	0	0
2	Verbs of putting	Funnel verbs	2	0	0	1	0	0	1	0	0
3	Verbs of putting	Verbs of spatial configuration	7	5	0	0	0	1	1	0	0
4	Verbs of putting	Verbs of specified	1	1	0	0	0	0	0	0	0
5	Verbs of putting	Spray/Load	9	3	1	3	0	2	0	0	0
6	Verbs of putting	Butter verbs	1	0	1	0	0	0	0	0	0
8	Verbs of putting	Fill verbs	3	0	0	3	0	0	0	0	0
	SUM by verb class		23	9	2	7	0	3	2	0	0
9	Verbs of	Remove verbs	4	3	0	0	0	0	1	0	0
10	Verbs of removing	Wipe verbs (Manner)	27	9	1	6	9	1	1	0	0
11	Verbs of	Wipe verbs (Inst)	5	2	0	3	0	0	0	0	0
12	Verbs of	Cheat verbs	3	0	0	3	0	0	0	0	0
13	Verbs of	Pit verbs	1	0	0	1	0	0	0	0	0
	SUM by verb class		39	14	1	12	9	1	2	0	0
14	Verbs of sending & carrying	Carry verbs	4	2	0	0	0	0	2	0	0
	SUM by verb class		4	2	0	0	0	0	2	0	0
15	Verbs of exerting force	Push/Pull verbs	41	11	0	0	0	10	17	0	3
16	Hold & Keep verbs		2	0	0	0	0	0	2	0	0
17	Verbs of	Throw verbs	7	2	0	1	0	0	4	0	0
18	Verbs of contact by impact	Hit verbs	25	9	0	5	0	3	7	1	0
19	Verbs of contact by impact	Spank verbs	5	0	0	4	0	1	0	0	0
20	Verbs of contact by impact	Non-agentive verbs	2	1	0	0	0	0	1	0	0
	SUM by verb class		32	10	0	9	0	4	8	1	0
21	Verbs of contact	Touch verb	6	0	0	1	1	1	3	0	0

22	Verbs of cutting	Cut verbs	8	3	0	0	1	3	1	0	0
23	Verbs of cutting	Carve verbs	6	2	0	1	0	0	3	0	0
	SUM by verb class		14	5	0	1	1	3	4	0	0
24	Verbs of combining & attaching	Tape verbs	3	0	0	0	0	0	3	0	0
25	Verbs of separating & disassembling	Split verbs	3	1	0	0	0	0	2	0	0
26	Verbs of coloring		16	0	16	0	0	0	0	0	0
27	Verbs of creation & transformation	Preparing verbs	1	1	0	0	0	0	0	0	0
28	Verbs of creation & transformation	Knead verbs	2	1	0	0	0	1	0	0	0
	SUM by verb class		3	2	0	0	0	1	0	0	0
29	Psych-verbs: Amuse		15	0	0	0	0	6	5	4	0
30	Verbs of social interaction		1	0	0	0	0	1	0	0	0
31	Verbs of communication	Verbs of manner of speaking	1	0	0	0	0	0	1	0	0
32	Verbs of	Eat verbs	1	0	0	1	0	0	0	0	0
33	Verbs of	Chew verbs	1	0	0	0	0	1	0	0	0
34	Verbs of	Feed verbs	1	0	0	0	0	1	0	0	0
	SUM by verb class		3	0	0	1	0	2	0	0	0
35	Verbs of bodily process	Suffocate verbs	1	1	0	0	0	0	0	0	0
36	Verbs of bodily state & damage to the body	Tingle verbs	1	0	0	0	0	0	0	1	0
37	Verbs of grooming & bodily care	Simple verbs of dressing	1	0	0	1	0	0	0	0	0
38	Verb of killing	Poison verbs	2	1	0	1	0	0	0	0	0
39	Verbs of emission	Sound emission verbs	7	3	0	0	0	1	3	0	0

40	Verbs of emission	Substance emission verbs	2	0	1	1	0	0	0	0	0
	SUM by verb class		9	3	1	1	0	1	3	0	0
41	Destroy verbs		2	1	0	1	0	0	0	0	0
42	Verbs of COS	Break verbs	2	1	0	0	0	0	1	0	0
43	Verbs of COS	Bend verbs	1	0	0	0	0	0	1	0	0
44	Verbs of COS	Cooking verbs	3	0	0	1	1	0	1	0	0
45	Verbs of COS	Other alternating verbs	8	2	1	1	0	1	3	0	0
	SUM by verb class		14	3	1	2	1	1	6	0	0
46	Lodge verbs		1	1	0	0	0	0	0	0	0
47	Verbs of existence	Verbs of modes of being involving motion	1	0	0	0	0	0	1	0	0
48	Verbs of body-internal motion		1	1	0	0	0	0	0	0	0
49	Manner of motion verb	Roll verbs	9	4	0	0	0	0	5	0	0
50	Manner of motion verb	Run verbs	1	0	0	0	0	0	1	0	0
	SUM by verb class		10	4	0	0	0	0	6	0	0
51	Weather verb		4	1	0	1	0	0	2	0	0
52	Verbs of removing/Verbs of Ingesting	Clear verbs, Eat verbs	1	0	0	1	0	0	0	0	0
53	Verbs of removing/creatti on & transformation	Wipe verbs, Knead verbs	1	0	0	1	0	0	0	0	0
54	Verbs of removing/ingesti ng		4	1	0	2	1	0	0	0	0
55	Verbs of exerting force/change of possesion	Push/Pull verbs, Obtain verbs	1	0	0	0	0	0	1	0	0
56	Verbs of throwing/exerting force	Throw verbs, Push/Pull verbs	3	0	0	0	0	2	1	0	0

57	Verbs of separating & disassembling/Verbs of COS	Split verbs, Break verbs	3	2	0	0	0	0	1	0	0
58	Verbs of COS/Verbs of emission	Break verbs/Sound verbs	2	0	0	0	0	0	2	0	0
	Total**		319	82	31	46	15	53	83	6	2

*Note that the verbs *drive*, *run* and *send* are classified in a verb class named *AP complement verb* in this paper.
**Note that since two verbs (*fuck* and *shag*) and one result predicate (*open wide*) are not included in the count calculation in this table because they cannot find their appropriate verb class or adjective aspect type. Therefore, the actual count of unique V-A counts is 321, although the this table only includes 319 V-A pairs.

Appendix A10

286 Render-Headed V-A Pairs

No.	Verb	Adj	Token
1	render	liable	23
2	render	useless	10
3	render	impossible	10
4	render	incapable	8
5	render	unusable	6
6	render	unable	6
7	render	suitable	6
8	render	ineffective	6
9	render	impotent	6
10	render	harmless	6
11	render	vulnerable	5
12	render	unenforceable	5
13	render	unmerchantabl	4
14	render	unfit	4
15	render	susceptible	4
16	render	redundant	4
17	render	unsuitable	3
18	render	unsafe	3
19	render	unconscious	3
20	render	sterile	3
21	render	necessary	3
22	render	inoperable	3
23	render	inedible	3
24	render	helpless	3
25	render	unstable	2
26	render	unreliable	2
27	render	unnecessary	2
28	render	speechless	2
29	render	plausible	2
30	render	passive	2
31	render	meaningless	2
32	render	invisible	2
33	render	ineffectual	2
34	render	illegal	2
35	render	free	2
36	render	enforceable	2
37	render	distinctive	2
38	render	difficult	2
39	render	compatible	2
40	render	worthless	1
41	render	wolf-like	1
42	render	water-resistant	1
43	render	valueless	1
44	render	valid	1
45	render	vacuous	1
46	render	useful	1
47	render	unworkable	1
48	render	untouched	1
49	render	unsuccessful	1
50	render	unreviewable	1
51	render	unmanageable	1
52	render	unlawful and invalid	1
53	render	unhappy	1
54	render	ungovernable	1
55	render	unfitted	1
56	render	unfair	1
57	render	unemployable	1
58	render	undrinkable	1
59	render	unconstitutional	1
60	render	unclean	1
61	render	unavailable	1
62	render	unacceptable	1
63	render	tumorigenic	1
64	render	transparent	1
65	render	taxable	1
66	render	surplus	1
67	render	superfluous	1
68	render	successful	1
69	render	subjective	1
70	render	story-like	1
71	render	stable	1
72	render	spotless	1
73	render	significant	1
74	render	serious	1
75	render	self-sufficient	1
76	render	rustproof	1
77	render	rough	1
78	render	resistant	1
79	render	prone	1
80	render	primal	1
81	render	presentable	1
82	render	personal	1
83	render	otiose	1
84	render	operational	1

No.	Verb	Adj	Token
85	render	open	1
86	render	opaque and bureaucratic	1
87	render	obsolete	1
88	render	obscene	1
89	render	null and void	1
90	render	normal	1
91	render	non-infectious	1
92	render	non-functional	1
93	render	negligent	1
94	render	meaningful	1
95	render	mandatory	1
96	render	manageable	1
97	render	light-hearted and care-free	1
98	render	lifeless and artificial	1
99	render	Korean	1
100	render	irrational	1
101	render	inviolate	1
102	render	interesting	1
103	render	inoperative	1
104	render	infertile and incapable	1
105	render	infertile	1
106	render	inexpedient	1
107	render	inert	1
108	render	ineligible	1
109	render	inefficient	1
110	render	inconclusive	1
111	render	incomplete	1
112	render	inappropriate	1
113	render	inadmissible	1
114	render	inadequate	1
115	render	improper	1
116	render	impracticable	1
117	render	important	1
118	render	illegitimate	1
119	render	illegible	1
120	render	ideal	1
121	render	homeless and jobless	1
122	render	homeless	1
123	render	harmonious	1
124	render	guilty	1
125	render	foolhardy	1
126	render	extinct	1
127	render	explicable	1
128	render	essential	1
129	render	envious or jealous	1
130	render	electable	1
131	render	effective	1
132	render	distinct	1
133	render	deserving	1
134	render	dependent	1
135	render	defenceless	1
136	render	defective	1
137	render	dangerous	1
138	render	consistent	1
139	render	conditional	1
140	render	complete	1
141	render	coherent	1
142	render	Christian	1
143	render	capable	1
144	render	brittle	1
145	render	boring	1
146	render	bodiless	1
147	render	bearable, honourable, and even enjoyable	1
148	render	available	1
149	render	attractive or self-evident	1
150	render	attractive	1
151	render	appropriate	1
152	render	ambiguous	1
153	render	admissible	1
154	render	actionable	1
155	render	accurate	1
156	render	accessible	1
157	render	acceptable	1
158	render	able	1

Fields
1. No.: Rank by Token
2. Verb: render
4. Token: Token count

3. Adj: Result adjective

Appendix B1

Japanese Canonical V-V Compounds

(For the meanings of symbols, see the last page of this list.)

Seq No.	Alphabet	Hiragana	V-V compound	Compounding type	V1 type	V2 type	Vt/Vi/Lb	Asp
1947	abakidasu	あばきだす	暴き出す	Dpm	CCS	CCL	TTT	P
1156	abakitateru	あばきたてる	暴き立てる	Act_ext	CCS	CCP	TTT	P/I
2712	abarekomu	あばれこむ	暴れ込む	Mnr	ACT	COL	IEI	#P
1147	abaremawaru	あばれまわる	暴れ回る	Dpm	ACT	COL	III	P
2158	abisekakeru	あびせかける	浴びせ掛ける	Dpm	CCL	CCP	TTT	P
1051	aburidasu	あぶりだす	炙り出す	Mns	TRS	CCL	TTT	P
1396	afuredasu	あふれだす	溢れ出す	Mnr, Sytx	MOM	COL	ITI	P
1356	afurederu	あふれでる	溢れ出る	Mnr, Dpm	MOM	COL	III	P
2456	afureochiru	あふれおちる	溢れ落ちる	Mnr, Cs, Prcd, Dpm	MOM	COL	III	P
1982	agarikomu	あがりこむ	上がり込む	Act_ext	COL	COL	IEI	#P/#R
2160	agedomaru	あげどまる	上げ止まる	#Prcd	CCL	COS	TII	R
2678	akehanasu	あけはなす	開け放す	Rst_ext	CCS	CCS	TTT	#P/R
2630	akeharau	あけはらう	開け払う	Rst_ext	CCS	#CCL	TTT	#P/#R
1589	akehirogeru	あけひろげる	明け広げる	Mns	CCS	CCS	ETT	P
2175	akekureru	あけくれる	明け暮れる	Prcd	COS	COS	EII	S
1949	akewatasu	あけわたす	明け渡す	#MAEANS, #Prcd, #Dpm	CCS	CCL	ETT	P/R
1586	akeyuku	あけゆく	明け行く	Dpm	COS	COL	EII	N
943	akirehateru	あきれはてる	呆れ果てる	Rst_ext	PSY	APR	III	R
2467	akirekaeru	あきれかえる	呆れ返る	Rst_ext	PSY	PST	III	R
1140	akitariru	あきたりる	飽き足りる	Cnd	PSY	EXT	III	S
1946	amidasu	あみだす	編み出す	Mns, Dpm	CCS	CCL	TTT	P
1936	amikomu	あみこむ	編み込む	Dpm	CCS	COL	TET	P
1432	aogitateru	あおぎたてる	扇ぎ立てる	Act_ext	TRS	CCP	TTT	P
1121	aoritateru	あおりたてる	煽り立てる	Act_ext	TRS	CCP	TTT	P
1050	araidasu	あらいだす	洗い出す	Mns	TRS	CCL	TTT	P
1939	araikiyomeru	あらいきよめる	洗い清める	Mns	TRS	CCS	TTT	P
1941	arainagasu	あらいながす	洗い流す	Mns	TRS	CCL	TTT	P
1938	araiotosu	あらいおとす	洗い落とす	Mns	TRS	CCL	TTT	P
1150	araitateru	あらいたてる	洗い立てる	Act_ext	TRS	CCP	TTT	#P
986	arashimawaru	あらしまわる	荒し回る	Dpm	CCS	COL	TIT	P
1950	arehateru	あれはてる	荒れ果てる	Rst_ext	COS	APR	III	R
2192	arekuruu	あれくるう	荒れ狂う	Act_ext	COS	COS	III	P
2547	ariamaru	ありあまる	有り余る	Act_ext	EXT	EXT	III	S
1157	ariau	ありあう	有り合う	Lex, #Rst_ext	EXT	ETC	III	N
975	arukimawaru	あるきまわる	歩き回る	Mnr, Acmp_act	MOM	COL	III	P
1292	arukisaru	あるきさる	歩き去る	Mnr	MOM	APR	III	R
1400	arukisusumu	あるきすすむ	歩き進む	Embd, Dpm	MOM	COL	III	P
1394	arukitsukareru	あるきつかれる	歩き疲れる	Cs	MOM	COS	III	R
2714	asobiakasu	あそびあかす	遊び明かす	Mnr, Mns	ACT	TRS	ITI	#P
2231	asobikurasu	あそびくらす	遊び暮らす	Mnr	ACT	ACT	III	P
2717	asobitsukareru	あそびつかれる	遊び疲れる	Cs	ACT	COS	III	R
1106	atarichirasu	あたりちらす	当たり散らす	Act_ext	ACT	CCS/CCL	ITI	P
1056	atehamaru	あてはまる	当て嵌まる	Mns, Lex	CCL	COL	TII	R
1054	atehameru	あてはめる	当て嵌める	Mns, Lex	CCL	CCL	TTT	#P
1809	atekomu	あてこむ	当て込む	#Act_ext	MNT	COL	TET	P
1052	atekosuru	あてこする	当てこする	Mns, Lex	CCL	TRS	TTI	P
1055	atetsukeru	あてつける	当て付ける	Dpm	CCL	PLC	TTI	P
1443	atsumarikuru	あつまりくる	集まり来る	Mns, #Pair, Dpm	COL	COL	III	I/R
1003	atsumemawaru	あつめまわる	集め回る	Dpm	CCL	COL	TIT	P
1935	awasemotsu	あわせもつ	併せ持つ	Cnd	CCS	TRS	TTT	S
1198	awatefutameku	あわてふためく	慌てふためく	Pair	PSY	PSY	III	P
704	ayumiyoru	あゆみよる	歩み寄る	Mnr	MOM	COL	III	P
1161	azukarishiru	あずかりしる	与り知る	#Pair	ACT	TRS	ITT	N

1058	azukeireru	あずけいれる	預け入れる	Mns, Dpm	TRS	CCL	TTT	P/R
1619	bucchigiru	ぶっちぎる	打っ千切る	Mnr_E	AFF	CCS	TTT	P
201	buchiageru	ぶちあげる	打ち上げる	Mnr_E	AFF	CCL	TTT	P/I
188	buchikomu	ぶちこむ	打ち込む	Mnr_E	AFF	CCL	TET	P/I/S
187	buchikorosu	ぶちころす	打ち殺す	Mnr_E	AFF	CCS	TTT	#P/I
186	buchikowasu	ぶちこわす	打ち壊す	Mnr_E	AFF	CCS	TTT	P
196	buchinomesu	ぶちのめす	打ちのめす	Mnr_E	AFF	CCS	TTT	P
197	buchinuku	ぶちぬく	打ち抜く	Mnr_E	AFF	CCL	TTT	P/I
200	bukkakeru	ぶっかける	打っ掛ける	Mnr_E	AFF	CCP	TTT	P
181	bukkiru	ぶっきる	打っ切る	Mnr_E	AFF	CCS	TTT	P
121	bunnmawasu	ぶんまわす	打ん回す	Mnr_E	AFF	CCL	TTT	P
119	bunnnageru	ぶんなげる	打ん投げる	Mnr_E	AFF	CCL	TTT	P/I
120	bunnnaguru	ぶんなぐる	打ん殴る	Mnr_E	AFF	TRS	TTT	P/I
122	buppanasu	ぶっぱなす	打っ放す	Mnr_E	AFF	CCS	TTT	P/I
179	bussaku	ぶっさく	打っ裂く	Mnr_E	AFF	CCS	TTT	P
124	buttakuru	ぶったくる	打っ手繰る	Mnr_E	AFF	TRS	TTT	P
198	buttaoreru	ぶったおれる	打っ倒れる	Mnr_E	AFF	PST	TII	R
176	buttaosu	ぶったおす	打っ倒す	Mnr_E	AFF	CCP	TTT	#P/I
118	buttataku	ぶったたく	打っ叩く	Mnr_E	AFF	TRS	TTT	P
183	buttobasu	ぶっとばす	打っ飛ばす	Mnr_E	AFF	CCL	TTT	P
184	buttoosu	ぶっとおす	打っ通す	Mnr_E	AFF	CCL	TTI	#P
123	buttsubusu	ぶっつぶす	打っ潰す	Mnr_E	AFF	CCS	TTT	P
185	buttsukeru	ぶっつける	打っ付ける	Mnr_E	AFF	PLC	TTT	#P/I
2621	chidimiagaru	ちぢみあがる	縮み上がる	Rst_ext	COS	COL	III	R
1515	chidimikomu	ちぢみこむ	縮み込む	Mnr	COS	COL	IEI	R
1525	chigiretobu	ちぎれとぶ	千切れ飛ぶ	Mnr	COS	MOM	III	P
1805	chigiritoreru	ちぎりとれる	千切り取れる	Mnr, Cs	CCS	COS	TII	R
1806	chigiritoru	ちぎりとる	千切り取る	Mns	CCS	CCL	TTT	P
2399	chirikakaru	ちりかかる	散り掛かる	Mnr, Sytx	COS/COL	PST	III	P
1065	chirimidareru	ちりみだれる	散り乱れる	Rst_ext	COS/COL	COS	III	R
1512	chirinokoru	ちりのこる	散り残る	Situ	COS/COL	EXT	III	R
1511	chirishiku	ちりしく	散り敷く	Cs, Prcd	COS/COL	CCS	ITI	R
1514	chiritsumoru	ちりつもる	散り積もる	Cs, Prcd	COS/COL	COS	III	P/R
2010	dakiageru	だきあげる	抱き上げる	Mns	TRS	CCL	TTT	#P/R
2011	dakiawaseru	だきあわせる	抱き合わせる	Mnr	TRS	CMB	TTT	P
2014	dakikakaeru	だきかかえる	抱き抱える	Mns	TRS	TRS	TTT	P
2015	dakikomu	だきこむ	抱き込む	Mns	TRS	COL	TET	P
2012	dakiokosu	だきおこす	抱き起こす	Mns	TRS	CCP	TTT	P
2013	dakiorosu	だきおろす	抱き下ろす	Mns	TRS	CCL	TTT	P
1682	dakishimeru	だきしめる	抱き締める	Act_ext	TRS	CCS	TTT	P
2017	dakisukumeru	だきすくめる	抱き竦める	Mns	TRS	CCS	TTT	P
2018	dakitomeru	だきとめる	抱き留める	Mns	TRS	CCS	TTT	P
2019	dakitoru	だきとる	抱き取る	Mns	TRS	CCL	TTT	R
1345	dakitsuku	だきつく	抱き着く	Mnr, Dpm	TRS	COL	TII	P
2020	dakiyoseru	だきよせる	抱き寄せる	Mns	TRS	CCL	TET	P
2233	damarikomu	だまりこむ	黙り込む	Rst_ext	ACT	COL	IEI	#P/#R
544	damashitoru	だましとる	騙し取る	Mns	TRS	CCL	TTT	P
2113	dannjikomu	だんじこむ	談じ込む	Act_ext	TRS	COL	TEI	P
2124	dashinuku	だしぬく	出し抜く	#Dpm, Lex	CCL	CCL	TTT	P
255	dearuku	であるく	出歩く	Mnr	COL	MOM	III	P
1182	deau	であう	出会う	Prcd	COL	ACT	III	#P/#R
1180	dehanareru	ではなれる	出離れる	Dpm	COL	COL	III	R
988	deharau	ではらう	出払う	Rst_ext	COL	#CCL	ITI	R
1183	dekakeru	でかける	出掛ける	Lex	COL	CCP	ITI	R
547	demawaru	でまわる	出回る	Dpm	COL	COL	III	P
1189	demukaeru	でむかえる	出迎える	Mns	COL	TRS	ITT	P
1184	demuku	でむく	出向く	Lex	COL	PST	III	P
1706	desakaru	でさかる	出盛る	Act_ext	COL	COS	III	#P
1090	desorou	でそろう	出揃う	Cs	COL	COS	III	R
1185	detsukiru	でつきる	出尽きる	Cs	COL	COS	III	R
2470	donarichirasu	どなりちらす	怒鳴り散らす	Dpm	ACT	CCS/CCL	ETI	P
2468	donarikomu	どなりこむ	怒鳴り込む	Dpm	ACT	COL	EEI	#P

1248	donaritateru	どなりたてる	怒鳴り立てる	Act_ext	ACT	CCP	ETI	P
1088	donaritsukeru	どなりつける	怒鳴り付ける	Act_ext	ACT	PLC	ETI	P
959	egakidasu	えがきだす	描き出す	Mns, Dpm	TRS	CCL	TTT	P
1930	eguridasu	えぐりだす	抉り出す	Mns	CCS	CCL	TTT	P
1931	eguritoru	えぐりとる	抉り取る	Mns	CCS	CCL	TTT	P
957	erabidasu	えらびだす	選び出す	Mns	TRS	CCL	TTT	P
958	erabitoru	えらびとる	選び取る	Mns	TRS	CCL	TTT	P
952	eridasu	えりだす	選り出す	Mns	TRS	CCL	TTT	P
955	erinuku	えりぬく	選り抜く	Mns	TRS	CCL	TTT	P
956	erisuguru	えりすぐる	選りすぐる	Mns	TRS	TRS	TTT	P
954	eriwakeru	えりわける	選り分ける	Mns	TRS	CCS	TTT	P
1717	fukekomu	ふけこむ	老け込む	Rst_ext	COS	COL	IEI	R
1069	fukewataru	ふけわたる	更け渡る	Rst_ext	COS	COL	III	#R/#S
1475	fukeyuku	ふけゆく	更け行く	Dpm	COS	COL	III	N
2681	fukiagaru	ふきあがる	吹き上がる	Dpm	TRS/WTH	COL	EII	P
2164	fukiageru	ふきあげる	吹き上げる	Mnr	TRS/WTH	CCL	ETE	P
2539	fukiareru	ふきあれる	吹き荒れる	Act_ext	TRS/WTH	COS	EII	P
2183	fukichirasu	ふきちらす	吹き散らす	Mns	TRS/WTH	CCS/CCL	ETT	P
2196	fukichiru	ふきちる	吹き散る	Cs	TRS/WTH	COS/COL	EII	R
2185	fukidasu	ふきだす	吹（噴）き出す	Mnr	TRS/WTH	COL/CCL	ETE	P
1317	fukideru	ふきでる	吹き出る	Mnr	TRS/WTH	COL	EII	P
753	fukiharau	ふきはらう	吹き払う	Mns	TRS/WTH	CCL	ETI	P
2166	fukiireru	ふきいれる	吹き入れる	Mns	TRS/WTH	CCL	ETT	P
2505	fukiiru	ふきいる	吹き入る	Mnr	TRS/WTH	COL	EII	P
2169	fukikaeru	ふきかえる	吹き変(替)える	Mns	TRS/WTH	CCS	ETT	P
2170	fukikakeru	ふきかける	吹き掛ける	Mns	TRS/WTH	CCP	ETT	P
2176	fukikesu	ふきけす	吹き消す	Mns	TRS/WTH	CCS	ETT	P
2194	fukikoboreru	ふきこぼれる	吹き零れる	Mnr	TRS/WTH	MOM	EII	P/R
2177	fukikobosu	ふきこぼす	吹きこぼす	Mnr	TRS/WTH	CCL	ETT	P/R
1787	fukikomu	ふきこむ	拭き込む	Act_ext	TRS	COL	TET	P
2078	fukikomu	ふきこむ	吹き込む	Dpm	TRS/WTH	COL	EEE	P
1030	fukimawaru	ふきまわる	吹き回る	Dpm	TRS/WTH	COL	EII	P
2189	fukinarasu	ふきならす	吹き鳴らす	Mns	TRS/WTH	TRS	ETT	P
2167	fukiorosu	ふきおろす	吹き下ろす	Dpm	TRS/WTH	CCL	ETI	P
2179	fukisamasu	ふきさます	吹き冷ます	Mns	TRS/WTH	CCS	ETT	P
257	fukisaru	ふきさる	拭き去る	Mns, Rst_ext	TRS	APR	TIT	P
1433	fukisusabu	ふきすさぶ	吹き荒ぶ	Act_ext	TRS/WTH	COS	EII	P
2181	fukitaosu	ふきたおす	吹き倒す	Mns	TRS/WTH	CCP	ETT	#P/I
2182	fukitateru	ふきたてる	吹き立てる	Mns	TRS/WTH	CCP	ETT	P
1324	fukitatsu	ふきたつ	吹き立つ	Cs	TRS/WTH	PST	EII	#P
2188	fukitobasu	ふきとばす	吹き飛ばす	Mns	TRS/WTH	CCL	ETT	P
2195	fukitobu	ふきとぶ	吹き飛ぶ	Cs	TRS/WTH	MOM	EII	P/R
2187	fukitoosu	ふきとおす	吹き通す	Dpm, Sytx	TRS/WTH	CCL	ETI	P
300	fukitoru	ふきとる	拭き取る	Mns	TRS	CCL	TTT	P
1103	fukitsukeru	ふきつける	吹き付ける	Mns, Act_ext	TRS/WTH	PLC	ETE	P
1036	fukitsunoru	ふきつのる	吹き募る	Act_ext	TRS/WTH	COS	EII	P
90	fukiwataru	ふきわたる	吹き渡る	Rst_ext	TRS/WTH	COL	EII	P
791	fukiyoseru	ふきよせる	吹き寄せる	Dpm	TRS/WTH	COL	EEI	P
2173	fukkakeru	ふっかける	吹っ掛ける	Mns, Mnr_E, Dpm	TRS/WTH	CCP	ETT	P
2171	fukkireru	ふっきれる	吹っ切れる	Cs, Mnr_E	TRS/WTH	COS	EII	R
2172	fukkiru	ふっきる	吹っ切る	Mns	TRS/WTH	CCS	ETI	R
2416	fukureagaru	ふくれあがる	膨れ上がる	Rst_ext	COS	COL	III	P/R
262	fumiarasu	ふみあらす	踏み荒らす	Mns	TRS	CCS	TTT	P
283	fumichirasu	ふみちらす	踏み散らす	Mns	TRS	CCS/CCL	TTT	P
281	fumidasu	ふみだす	踏み出す	Mns, Dpm, Sytx	TRS	COL/CCL	TTI	#R
263	fumideru	ふみでる	踏み出る	Mns, Dpm	TRS	COL	TII	#R
286	fumihazusu	ふみはずす	踏み外す	#Act_type	TRS	CCL	TTT	#R
267	fumiireru	ふみいれる	踏み入れる	Mns, Dpm	TRS	CCL	TTT	#P
269	fumikaeru	ふみかえる	踏み換える	Mns	TRS	CCS	TTT	P
2249	fumikatamaru	ふみかたまる	踏み固まる	Cs	TRS	COS	TII	R
270	fumikatameru	ふみかためる	踏み固める	Mns	TRS	CCS	TTT	P/I
272	fumikesu	ふみけす	踏み消す	Mns	TRS	CCS	TTT	P

271	fumikiru	ふみきる	踏み切る	Mns, Act_ext	TRS	CCS	TTE	#P/#R
2163	fumikoeru	ふみこえる	踏み越える	Mns, Dpm	TRS	COL	TI#T	P
274	fumikomu	ふみこむ	踏み込む	Mns, Dpm	TRS	COL	TEI	#P/#R
275	fumikorosu	ふみころす	踏み殺す	Mns	TRS	CCS	TTT	#P/I
266	fumikosu	ふみこす	踏み越す	Mns, Dpm	TRS	COL	TI#T	#R
1384	fumikotaeru	ふみこたえる	踏み堪える	Mns	TRS	PSY	TIT	P
288	fuminarasu	ふみならす	踏み均す	Mns	TRS	CCS	TTT	P
289	fuminarasu	ふみならす	踏み鳴らす	Mns	TRS	TRS	TTT	P/I
292	fuminijiru	ふみにじる	踏み躙る	Mns	TRS	TRS	TTT	P
290	fuminuku	ふみぬく	踏み抜く	Mns	TRS	CCL	TTT	#P
276	fumishidaku	ふみしだく	踏みしだく	Mns	TRS	CCS	TNT	P
1657	fumishimeru	ふみしめる	踏み締める	Act_ext	TRS	CCS	TTT	P/I
280	fumitaosu	ふみたおす	踏み倒す	Mns	TRS	CCP	TTT	#P/I/#R
293	fumitateru	ふみたてる	踏み立てる	Mns, Cs	TRS	CCP	TTT	#
279	fumitodomaru	ふみとどまる	踏み止まる	Mns	TRS	EXT	TII	#P/S
285	fumitsubusu	ふみつぶす	踏み潰す	Mns	TRS	CCS	TTT	P
284	fumitsukeru	ふみつける	踏み付ける	Mns	TRS	PLC	TTT	P
287	fumiwakeru	ふみわける	踏み分ける	Mns	TRS	CCS	TTT	P
291	fumiyaburu	ふみやぶる	踏み破る	Mns	TRS	CCS	TTT	#P/I
282	funnbaru	ふんばる	踏ん張る	Mns, Lex	TRS	CCS	TE#T	P
295	funndukeru	ふんづける	踏ん付ける	Mns, Lex	TRS	PLC	TTT	P
1491	funnzorikaeru	ふんぞりかえる	踏ん反り返る	Mnr, Dpm	COS	PST	III	R
135	furearuku	ふれあるく	触れ歩く	Mnr, Acmp_act	TRS	MOM	IIT	P
259	furekomu	ふれこむ	触れ込む	Dpm, Lex	TRS	COL	IEI	P
926	furemawaru	ふれまわる	触れ回る	Mnr, Acmp_act	TRS	COL	IIE	P
1968	furiageru	ふりあげる	振り上げる	Mnr	CCP	CCL	TTT	P
1967	furiaogu	ふりあおぐ	振り仰ぐ	Mnr	CCP	TRS	TTT	P
1969	furiateru	ふりあてる	振り当てる	#Mnr, Lex	CCP	CCL	TTT	P
100	furichiru	ふりちる	降り散る	Mnr, Prcd	WTH	COS/COL	III	R
1980	furidasu	ふりだす	振り出す	Mns, Mns, Lex	CCP	CCL	TTT	P
1988	furihanasu	ふりはなす	振り放す	Mnr, Mns	CCP	CCS	TTT	#P/#I
1989	furiharau	ふりはらう	振り払う	Mnr, Mns	CCP	CCL	TTT	P
1987	furihodoku	ふりほどく	振り解く	Mnr, Mns	CCP	CCS	TTT	P
1975	furikaburu	ふりかぶる	振り被る	Mnr	CCP	TRS	TTT	P
1992	furikaeru	ふりかえる	振り返る	Mnr	CCP	PST	TIT	P
92	furikakaru	ふりかかる	降り掛かる	Mnr	WTH	PST	III	P/R
1973	furikakeru	ふりかける	振り掛ける	Mns	CCP	CCP	TTT	P
1994	furikawaru	ふりかわる	振り替わる	Cs	CCP	COS	TII	R
1974	furikazasu	ふりかざす	振りかざす	Mnr, Mns	CCP	CCP	TTT	#P/#R
1976	furikiru	ふりきる	振り切る	Mns, Mns, Lex	CCP	CCS	TTT	P/#R
98	furikomeru	ふりこめる	降り籠める	Mns	WTH	CCL	ITT	N
1977	furikomu	ふりこむ	振り込む	Dpm, Lex	CCP	COL	TET	P
1517	furikomu	ふりこむ	降り込む	Dpm	WTH	COL	IEI	P
1993	furimaku	ふりまく	振り撒く	Mnr, Mns	CCP	CCL	TTT	P
1990	furimawasu	ふりまわす	振り回す	Dpm	CCP	CCL	TTT	P
1986	furimazeru	ふりまぜる	振り混ぜる	Mns	CCP	CCS	TTT	P
1991	furimidasu	ふりみだす	振り乱す	Mnr, Mns	CCP	CCS	TTT	P
1985	furimukeru	ふりむける	振り向ける	Mnr, Mns, Lex	CCP	CCP	TTT	P
1981	furimuku	ふりむく	振り向く	Mnr, Lex	CCP	PST	TII	P
93	furinokosu	ふりのこす	降り残す	Situ	WTH	CCS	ITI	R
1970	furiokosu	ふりおこす	振り起こす	Mnr, Lex	CCP	CCP	TTT	P
1971	furiotosu	ふりおとす	振り落とす	Mns	CCP	CCL	TTT	P
1978	furishiboru	ふりしぼる	振り絞る	U, Lex	CCP	CCS	TTT	P
89	furishiku	ふりしく	降り敷く	Cs, Prcd	WTH	CCS	ITI	R
1539	furisosogu	ふりそそぐ	降り注ぐ	Act_ext	WTH	CCL	ITI	P
1429	furisusabu	ふりすさぶ	降り荒ぶ	Act_ext	WTH	COS	III	P
1979	furisuteru	ふりすてる	振り捨てる	Mnr	CCP	TRS	TTT	#
1160	furitateru	ふりたてる	振り立てる	Act_ext	CCP	CCP	TTT	P
1983	furitobasu	ふりとばす	振り飛ばす	Mnr, Mns	CCP	CCL	TTT	P
1319	furitsumoru	ふりつもる	降り積もる	Cs, Prcd	WTH	COS	III	P
109	furitsunoru	ふりつのる	降り募る	Act_ext	WTH	COS	III	P
1984	furiwakeru	ふりわける	振り分ける	Mnr, Mns	CCP	CCS	TTT	P

2679	furueagaru	ふるえあがる	震え上がる	Rst_ext	MOD	COL	III	P
1689	furuiokosu	ふるいおこす	奮い起こす	Mns	CCS	CCP	TTT	P
1966	furuiotosu	ふるいおとす	振るい落とす	Mns	CCP	CCL	TTT	P
2743	furuiotosu	ふるいおとす	篩い落とす	Mns	#CCP	CCL	TTT	P
1495	furuitatsu	ふるいたつ	奮い立つ	Act_ext	CCS	PST	TII	#P/#S
2418	furuitsuku	ふるいつく	震い付く	Mnr	ACT	COS	III	#
2744	furuiwakeru	ふるいわける	篩い分ける	Mns	#CCP	CCS	TTT	P
1053	fusagikomu	ふさぎこむ	塞ぎ込む	Rst_ext	PSY	COL	TEI	R
1211	fushiogamu	ふしおがむ	伏し拝む	Mnr	PST	TRS	ETT	P
1691	fuujikomeru	ふうじこめる	封じ込める	Mns, #Dpm	CCS	CCL	TTT	P
1320	ganaritateru	がなりたてる	がなり立てる	Act_ext	TRS	CCP	TTI	P
102	haeagaru	はえあがる	生え上がる	Act_type	APR	COL	III	R
80	haederu	はえでる	生え出る	#Mnr, Cs	APR	COL	III	P/R/S
2239	haekawaru	はえかわる	生え変わる	#Prcd	APR	COS	III	P/R
1485	haesorou	はえそろう	生え揃う	Cs	APR	COS	III	R/S
2611	hageagaru	はげあがる	禿げ上がる	Rst_ext	COS	COL	III	R
1483	hageochiru	はげおちる	剥げ落ちる	Cs	COS	COL	III	R
1719	hagiawaseru	はぎあわせる	接ぎ合わせる	Mns	CCS	CMB	TTT	P
2082	hagitoru	はぎとる	剥ぎ取る	Mns	CCL	CCL	TTT	P
2647	haiagaru	はいあがる	這い上がる	Mnr	MOM	COL	III	P
1312	haidasu	はいだす	這い出す	Mnr	MOM	COL	ITI	P
1306	haideru	はいでる	這い出る	Mnr	MOM	COL	III	P
964	haimawaru	はいまわる	這い回る	Mnr, Acmp_act	MOM	COL	III	P
1250	hainoboru	はいのぼる	這い登る	Mnr	MOM	COL	III	P
1948	hairikomu	はいりこむ	入り込む	Act_ext	COL	COL	IEI	P/R
676	haiyoru	はいよる	這い寄る	Mnr	MOM	COL	III	P
972	haizurimawaru	はいずりまわる	這いずり回る	Mnr, Acmp_act	MOM	COL	III	P
2507	hajiiru	はじいる	恥じ入る	Act_ext	PSY	COL	TII	P
99	hajikechiru	はじけちる	弾け散る	Mnr	MOD	COS/COL	III	#P/#R
95	hajiketobu	はじけとぶ	弾け飛ぶ	Mnr	MOD	MOM	III	#P/#R
379	hajikidasu	はじきだす	弾き出す	Mns	TRS	CCL	TTT	P
383	hakichirasu	はきちらす	吐き散らす	Dpm	TRS	CCS/CCL	TTT	P
386	hakidasu	はきだす	掃き出す	Mns	TRS	CCL	TTT	P
382	hakidasu	はきだす	吐き出す	Mns	TRS	CCL	TTT	P
380	hakifurusu	はきふるす	履き古す	Mns, #Act_type	TRS	CCS	TTT	R
385	hakikiyomeru	はききよめる	掃き清める	Mns	TRS	CCS	TTT	P
384	hakiotosu	はきおとす	掃き落とす	Mns	TRS	CCL	TTT	P/I
381	hakisuteru	はきすてる	吐き捨てる	Mns	TRS	TRS	TTT	P
1721	hakisuteru	はきすてる	履き捨てる	Prcd	TRS	TRS	TTT	R
1722	hakitsubusu	はきつぶす	履き潰す	Mns, Situ, #Act_type	TRS	CCS	TTT	#P
856	hakiyoseru	はきよせる	掃き寄せる	Mns	TRS	CCL	TET	P
2076	hakobiageru	はこびあげる	運び上げる	Mns, Dpm	CCL	CCL	TTT	P
2079	hakobidasu	はこびだす	運び出す	Mns, Dpm	CCL	CCL	TTT	P
2039	hakobikomu	はこびこむ	運び込む	Mns, Dpm	CCL	COL	TET	P
997	hakobimawaru	はこびまわる	運び回る	Dpm	CCL	COL	TIT	P
2426	hakobioriru	はこびおりる	運び降りる	Mnr, Dpm	CCL	COL	TII	P
2081	hakobisaru	はこびさる	運び去る	Mnr, Acmp_act	CCL	APR	TIT	R
1562	hamarikomu	はまりこむ	嵌まり込む	Dpm	COL	COL	IEI	R
2021	hamekomu	はめこむ	嵌め込む	Mns, Dpm	CCL	COL	TET	P
2375	hamidasu	はみだす	食み出す	Mnr	TRS	COL	TTI	R/#S
2376	hamideru	はみでる	食み出る	Mnr	TRS	COL	TII	R/S
2377	hanashikakeru	はなしかける	話し掛ける	Dpm	TRS	CCP	TTI	P
2080	hanashikomu	はなしこむ	話し込む	Act_ext	TRS	COL	TEI	P
1342	haneagaru	はねあがる	跳ね上がる	Mnr	ACT/MOD	COL	III	I
1299	haneageru	はねあげる	跳ね上げる	Mnr	ACT/MOD	CCL	ITT	P
2071	haneageru	はねあげる	撥ね上げる	Mnr	CCL	CCL	ETT	I
1340	hanekaeru	はねかえる	跳ね返る	Mnr	ACT/MOD	COL	III	#R
1296	hanekaesu	はねかえす	跳ね返す	Mnr, Dpm	ACT/MOD	CCL	ITT	I
2206	hanekakaru	はねかかる	撥ね掛かる	Mnr	CCL	PST	EII	I
2072	hanekakeru	はねかける	撥ね掛ける	Mns	CCL	CCP	ETT	P
951	hanemawaru	はねまわる	跳ね回る	Mnr, Dpm	ACT/MOD	COL	III	P

2074	hanenokeru	はねのける	撥ね除ける	Mns	CCL	CCL	ETI	P
1374	hanenoku	はねのく	跳ね退く	Mnr	ACT/MOD	COL	III	#
1295	haneokiru	はねおきる	跳ね起きる	Mnr	ACT/MOD	PST	III	I
1303	hanetobasu	はねとばす	跳ね飛ばす	Mnr	ACT/MOD	CCL	ITT	#I
1080	hanetsukeru	はねつける	撥ね付ける	Act_ext	CCL	PLC	ETT	#
2491	haneugoku	はねうごく	跳ね動く	Mnr	ACT/MOD	ACT/COL	III	P
374	haraikiyomeru	はらいきよめる	祓い清める	Mns	TRS	CCS	TTT	P
375	haraikomu	はらいこむ	払い込む	Mns, Dpm	TRS	COL	TET	P
378	haraimodosu	はらいもどす	払い戻す	Mns	TRS	CCL	TTT	P
377	harainokeru	はらいのける	払い除ける	Mns	TRS	CCL	TTT	P
376	haraisageru	はらいさげる	払い下げる	Mns, #Dpm	TRS	CCL	TTT	#P
2423	hareagaru	はれあがる	晴れ上がる	Rst_ext	COS	COL	III	R
2450	hareagaru	はれあがる	腫れ上がる	Rst_ext	COS	COL	III	R
618	harewataru	はれわたる	晴れ渡る	Rst_ext	COS	COL	III	R
1710	hariageru	はりあげる	張り上げる	Mnr	CCS	CCL	ETT	P
1700	hariawaseru	はりあわせる	張り合わせる	Mns	CCS	CMB	ETT	P
1705	haridasu	はりだす	張り出す	Mnr	CCS	CCP/CCL	ETE	P/S
1712	harideru	はりでる	張り出る	Mnr	CCS	COL	EII	R/S
1714	harikireru	はりきれる	張り切れる	Cs	CCS	COS	EII	R
1702	harikiru	はりきる	張り切る	Lex, #Sytx	CCS	CCS	ETI	P
1778	harikomu	はりこむ	張り込む	#Mns, Dpm	CCS	COL	EEI	P
1708	harimawasu	はりまわす	張り回す	Dpm	CCS	CCL	ETT	P/R
1709	harimegurasu	はりめぐらす	張り巡らす	Mns, #Dpm	CCS	CCL	ETT	P
1713	harisakeru	はりさける	張り裂ける	Cs	CCS	COS	EII	R
1704	haritaosu	はりたおす	張り倒す	Mns	CCS	CCP	ETT	#P/I
1707	haritobasu	はりとばす	張り飛ばす	Mns	CCS	CCL	ETT	#P
1995	haritsukeru	はりつける	貼（張）り付ける	Mns	PLC	PLC	TTT	P
1996	haritsuku	はりつく	貼（張）り付く	Mnr	PLC	COS	TII	R
2719	haritsumeru	はりつめる	張り詰める	Rst_ext	CCS	CCS	ETI	S
1711	hariwatasu	はりわたす	張り渡す	Mns	CCS	CCL	ETT	P
1718	hasamidasu	はさみだす	挟み出す	Mns	TRS	CCL	TTT	#P
1715	hasamiireru	はさみいれる	挟み入れる	Mns	TRS	CCL	TTT	P
1782	hasamikomu	はさみこむ	挟み込む	Mns, Dpm	TRS	COL	TET	P
1716	hasamiutsu	はさみうつ	挟み撃つ	Mns	TRS	TRS	TTT	P
2598	haseatsumaru	はせあつまる	馳せ集まる	Mnr	MOM	COL	EII	#P/R
2232	hasekudaru	はせくだる	馳せ下る	Mnr	MOM	COL	EII	P
878	hasemodosu	はせもどす	馳せ戻る	Mnr	MOM	COL	EIT	P
1281	hasetsukeru	はせつける	馳せ着ける	Mnr	MOM	CCL	ETI	R
1940	hashirikomu	はしりこむ	走り込む	Act_ext	MOM	COL	IEI	P
1310	hashirikutabireru	はしりくたびれる	走りくたびれる	Cs	MOM	COS	III	R
962	hashirimawaru	はしりまわる	走り回る	Mnr, Acmp_act	MOM	COL	III	P
1284	hashirisaru	はしりさる	走り去る	Mnr	MOM	APR	III	R
1309	hashiritsukareru	はしりつかれる	走り疲れる	Cs	MOM	COS	III	R
667	hashiriyoru	はしりよる	走り寄る	Mnr	MOM	COL	III	P
2379	hatarakikakeru	はたらきかける	働き掛ける	Dpm	ACT	CCP	ITT	P
2380	hatarakikutabireru	はたらきくたびれる	働きくたびれる	Cs	ACT	COS	III	R
1181	hayashitateru	はやしたてる	囃し立てる	Act_ext	TRS	CCP	TTT	P
78	heagaru	へあがる	経上がる	#Mns	TRS	COL	III	#P
1529	hebaritsuku	へばりつく	へばり付く	Mnr, Dpm	COS	COS	III	P/S
576	hibikiwataru	ひびきわたる	響き渡る	Rst_ext	PHN	COL	III	#P/#S
2629	hieagaru	ひえあがる	干上がる	Rst_ext	COS	COL	III	R
1480	hiekatamaru	ひえかたまる	冷え固まる	Cs	COS	COS	III	R
1729	hiekomu	ひえこむ	冷え込む	Rst_ext	COS	COL	IEI	P/R
2407	hikarikagayaku	ひかりかがやく	光り輝く	Pair	PHN	PHN	III	P
309	hikiageru	ひきあげる	引き上(揚)げる	Mns, Dpm	TRS	CCL	ETT	P/R
310	hikiateru	ひきあてる	引き当てる	Mns	TRS	CCL	ETT	#P/R
308	hikiau	ひきあう	引き合う	Lex	TRS	ETC	EII	#
311	hikiawaseru	ひきあわせる	引き合わせる	Mns	TRS	CMB	ETT	P
1478	hikichigireru	ひきちぎれる	引き千切れる	Cs	TRS	COS	ETI	R
1699	hikichigiru	ひきちぎる	引き千切る	Mns	TRS	CCS	ETT	P
341	hikidasu	ひきだす	引き出す	Mns, Dpm	TRS	CCL	ETT	P
360	hikihagasu	ひきはがす	引き剥がす	Mns	TRS	CCS	ETT	P

357	hikihagu	ひきはぐ	引き剥ぐ	Mns	TRS	CCL	ETT	P
358	hikihanasu	ひきはなす	引き離す	Mns	TRS	CCL	ETT	P
359	hikihanatsu	ひきはなつ	引き放つ	Prcd, Mns	TRS	CCS	ETT	P
365	hikiharau	ひきはらう	引き払う	Mns, Lex	TRS	CCS	ETT	#R
356	hikihazusu	ひきはずす	引き外す	Mns	TRS	CCL	ETT	P
313	hikiireru	ひきいれる	引き入れる	Mns, Dpm	TRS	CCL	ETT	P
132	hikikaesu	ひきかえす	引き返す	#Mnr, Lex	AFF	CCP	ETI	#P
318	hikikakeru	ひきかける	引き掛ける	Mns, Lex	TRS	CCP	ETT	#P
320	hikikiru	ひききる	引き切る	Mns	TRS	CCS	ETT	P
1697	hikikiru	ひききる	挽き切る	Mns	CCS	CCS	TTT	P
87	hikikomoru	ひきこもる	引き籠もる	Mnr_E	AFF	EXT	EII	P
1527	hikikomu	ひきこむ	引き込む	Mns, Dpm	TRS	COL	EET	P
326	hikikorogasu	ひころがす	引き転がす	Mns	TRS	CCL	ETT	P
304	hikikorosu	ひころす	轢き殺す	Mns	TRS	CCS	TTT	#P/I/#R
321	hikikuraberu	ひくらべる	引き比べる	#Mns, Lex	TRS	TRS	ETT	P
364	hikimawasu	ひきまわす	引き回す	Dpm	TRS	CCL	ETT	P
366	hikimodosu	ひきもどす	引き戻す	Mns	TRS	CCL	ETT	#
369	hikimushiru	ひきむしる	引き毟る	Mnr	TRS	CCS	ETT	P
307	hikinarasu	ひきならす	弾き鳴らす	Mns	TRS	TRS	TTT	P
361	hikinobasu	ひきのばす	引き延ばす	Mns	TRS	CCS	ETT	P
362	hikinokeru	ひきのける	引き退ける	Mns	TRS	CCL	ETT	#
353	hikinuku	ひきぬく	引き抜く	Mns, Dpm	TRS	CCL	ETT	P
319	hikiokosu	ひきおこす	引き起こす	Mns, Lex	TRS	CCP	ETT	P
317	hikiorosu	ひきおろす	引き下ろす	Mns, Dpm	TRS	CCL	ETT	P
315	hikiotosu	ひきおとす	引き落とす	Mns, Dpm	TRS	CCL	ETT	P
367	hikisagaru	ひきさがる	引き下がる	Mnr	TRS	COL	EII	#
330	hikisageru	ひきさげる	引き下げる	Mns, Dpm	TRS	CCL	ETT	#P/#R
329	hikisaku	ひきさく	引き裂く	Mns	TRS	CCS	ETT	P
1446	hikisaru	ひきさる	引き去る	Mns, Dpm	TRS	APR	EIE	R
333	hikishiboru	ひきしぼる	引き絞る	Mns	TRS	CCS	ETT	P
128	hikishimaru	ひきしまる	引き締まる	Mnr_E	AFF	COS	EII	S
334	hikishimeru	ひきしめる	引き締める	Mns	TRS	CCS	ETT	P
335	hikisueru	ひきすえる	引き据える	Mns	TRS	PLC	ETT	P
338	hikitaotaosu	ひきたおたおす	引き倒す	Mns	TRS	CCP	ETT	#P/I
343	hikitateru	ひきたてる	引き立てる	U, Lex	TRS	CCP	ETT	#
1162	hikitatsu	ひきたつ	引き立つ	#Mnr, Lex	TRS	PST	EII	S
363	hikitodomeru	ひきとどめる	引き止める	Mns	TRS	CCS	ETT	P/R
351	hikitomeru	ひきとめる	引き止める	Mns	TRS	CCS	ETT	P/R
352	hikitoru	ひきとる	引き取る	Set	TRS	CCL	ETT	#P
347	hikitsuduku	ひきつづく	引き続く	U, Lex	TRS	ASP	EII	S
346	hikitsugu	ひきつぐ	引き継ぐ	#Mns	TRS	CMB	ETT	P/R
349	hikitsukeru	ひきつける	引き付ける	Mns	TRS	PLC	ETT	P/R
348	hikitsukurou	ひきつくろう	引き繕う	U, Lex	TRS	CCS	ETT	P
1079	hikitsumeru	ひきつめる	引き詰める	Mns	TRS	CCS	ETI	#P
371	hikitsureru	ひきつれる	引き連れる	Mnr	TRS	TRS	ETT	P
372	hikitsureru	ひきつれる	引き攣れる	Mnr	TRS	COS	EII	#P
314	hikiukeru	ひきうける	引き受ける	Set	TRS	TRS	ETT	P
189	hikiutsuru	ひきうつる	引き移る	#Mns, Lex	TRS	COL	EII	#
339	hikiwakeru	ひきわける	引き分ける	U, Lex	TRS	CCS	ETI	P
1698	hikiwaru	ひきわる	挽き割る	Mns	CCS	CCS	TTT	P
2044	hikiwaru	ひきわる	碾き割る	Mns	CCS	CCS	TTT	P
370	hikiwatasu	ひきわたす	引き渡す	Set	TRS	CCL	ETT	P
355	hikiyaburu	ひきやぶる	引き破る	Mns	TRS	CCS	ETT	P
850	hikiyoseru	ひきよせる	引き寄せる	Mns	TRS	CCL	EET	P
2067	hikizuridasu	ひきずりだす	引き摺り出す	Mns	CCL	CCL	TTT	P
2016	hikizurikomu	ひきずりこむ	引き摺り込む	Mns, Dpm	CCL	COL	TET	P
2069	hikizurimawasu	ひきずりまわす	引き摺り回す	Dpm	CCL	CCL	TTT	P
2068	hikizuriotosu	ひきずりおとす	引き摺り落とす	Mns	CCL	CCL	TTT	P
336	hikizuru	ひきずる	引き摺る	Mnr	TRS	TRS	ETT	P
130	hikkaburu	ひっかぶる	引っ被る	Mnr_E	AFF	TRS	ETT	P/S
345	hikkakaru	ひっかかる	引っ掛かる	Mnr	TRS	PST	EII	R
344	hikkakeru	ひっかける	引っ掛ける	Mns, Lex	TRS	CCP	ETT	P

303	hikkakimawasu	ひっかきまわす	引っ掻き回す	Mnr, #Embd	TRS	CCL	TTT	P
131	hikkatsugu	ひっかつぐ	引っ担ぐ	Mnr_E	AFF	TRS	ETT	P
328	hikkomeru	ひっこめる	引っ込める	Mns, Dpm	TRS	CCL	ETT	P
331	hikkomu	ひっこむ	引っ込む	Dpm, Lex	TRS	COL	EEE	P/S
332	hikkonuku	ひっこぬく	引っこ抜く	Mns, Dpm, Lex	TRS	CCL	ETI	P
2736	hikkosu	ひっこす	引っ越す	Mns, Pair, Lex	TRS	COL	EII	P/R
342	hikkukuru	ひっくくる	引っくくる	Mns, Lex	TRS	CCS/CCL	ETT	#
337	hikkurumeru	ひっくるめる	引っくるめる	Mnr	TRS	#CCS	ETT	#
340	hikkurumu	ひっくるむ	引っくるむ	Mnr	TRS	#CCS	ETT	#
2065	hineridasu	ひねりだす	捻り出す	Mns	CCP	CCL	TTT	P
1693	hinerikorosu	ひねりころす	捻り殺す	Mns	CCP	CCS	TTT	P
1694	hineritsubusu	ひねりつぶす	捻り潰す	Mns	CCP	CCS	TTT	P
373	hinnmuku	ひんむく	引ん剥く	Mnr	TRS	CCS	ETT	P
354	hinnnuku	ひんぬく	引ん抜く	Mnr	TRS	CCL	ETT	P
324	hippariageru	ひっぱりあげる	引っ張り上げる	Mns, Dpm	TRS	CCL	ETT	P
323	hipparidasu	ひっぱりだす	引っ張り出す	Mns, Dpm	TRS	CCL	ETT	P
1521	hipparikomu	ひっぱりこむ	引っ張り込む	Mns, Dpm	TRS	COL	TET	P
301	hipparimawasu	ひっぱりまわす	引っ張り回す	Acmp_act	TRS	CCL	TTT	P
322	hipparu	ひっぱる	引っ張る	Mns, Lex	TRS	CCS	EET	P
1287	hirakinaoru	ひらきなおる	開き直る	U, Lex	CCS	COS	EII	P
2062	hiroiageru	ひろいあげる	拾い上げる	Mns	CCL	CCL	TTT	P
2578	hiroiaruku	ひろいあるく	拾い歩く	Mnr, Acmp_act	CCL	MOM	TIT	P
2063	hiroidasu	ひろいだす	拾い出す	Mns	CCL	CCL	TTT	P/I
2749	hishimekiau	ひしめきあう	犇き合う	Act_ext	MOD	MOD#	III	S
327	hissageru	ひっさげる	引っ提げる	Mns	TRS	CCL	ETT	P
129	hissarau	ひっさらう	引っ攫う	Mnr_E	AFF	CCL	ETT	P
127	hittakuru	ひったくる	引っ手繰る	Mnr_E	AFF	TRS	ETT	P
126	hittsuku	ひっつく	引っ付く	Mnr_E	AFF	COS	EII	S
1570	hiwareru	ひわれる	干割れる	Cs	COS	COS	III	R
3095	hiyashikatameru	ひやしかためる	冷やし固める	Mns	TRS	CCS	TTT	P
2193	hoekuruu	ほえくるう	吠え狂う	Act_ext	ACT	COS	III	P
256	hojikuridasu	ほじくりだす	ほじくり出す	Mns	TRS	CCL	TTT	P
1686	homechigiru	ほめちぎる	誉め千切る	Act_ext	TRS	CCS	TTT	P
2369	homesoyasu	ほめそやす	誉めそやす	Pair	TRS	TRS	TTT	P
2368	hometataeru	ほめたたえる	誉め称える	Pair	TRS	TRS	TTT	P
1165	hometateru	ほめたてる	誉め立てる	Act_ext	TRS	CCP	TTT	P
1842	horekomu	ほれこむ	惚れ込む	#Act_ext,	PSY	COL	IEI	R
1676	horiateru	ほりあてる	掘り当てる	Mns	CCS	TRS	TTT	R
1681	horidasu	ほりだす	掘り出す	Mns	CCS	CCL	TTT	P
1733	horikomu	ほりこむ	掘り込む	Mns, Dpm	CCS	COL	TET	P
1730	horikomu	ほりこむ	彫り込む	Mns, Dpm	CCS	COL	TET	P
1685	horimegurasu	ほりめぐらす	掘り回らす	Mns, #Dpm	CCS	CCL	TTT	P
1684	horinuku	ほりぬく	掘り抜く	Mns	CCS	CCL	TTT	P/R
1677	horiokosu	ほりおこす	掘り起こす	Mns	CCS	CCP	TTT	P
1680	horisageru	ほりさげる	掘り下げる	Dpm	CCS	CCL	TTT	P
1126	horitateru	ほりたてる	掘り立てる	Act_ext	CCS	CCP	TTT	P
1683	horitsukeru	ほりつける	彫り付ける	Mns	CCS	PLC	TTT	P
1472	horobiyuku	ほろびゆく	滅び行く	Dpm	COS	COL	III	N
265	hottsukiaruku	ほっつきあるく	ほっつき歩く	Mnr	MOM	MOM	III	P
559	hottsukimawaru	ほっつきまわる	ほっつき回る	Mnr, Acmp_act	MOM	COL	III	P
117	houmurisaru	ほうむりさる	葬り去る	Rst_ext	TRS	APR	TIT	#P
2058	houriageru	ほうりあげる	放り上げる	Mns	CCL	CCL	TTT	P/I
2060	houridasu	ほうりだす	放り出す	Mns	CCL	CCL	TTT	#P
2059	hourikomu	ほうりこむ	放り込む	Mns, Dpm	CCL	COL	TET	P/I
2061	hourinageru	ほうりなげる	放り投げる	Mns	CCL	CCL	TTT	P/I
1037	iateru	いあてる	射当てる	Mns	TRS	TRS	TTT	P
2651	ibiridasu	いびりだす	いびり出す	Mns	TRS	CCL	TTT	P
1048	iburidasu	いぶりだす	燻り出す	Mns	TRS	CCL	TTT	P
1033	idasu	いだす	鋳出す	Mns, Dpm	TRS	CCL	TTT	P
2655	iiarasou	いいあらそう	言い争う	Mns	TRS	ACT	TTI	P
2657	iiarawasu	いいあらわす	言い表す	Mns	TRS	TRS	TTT	P
2654	iiateru	いいあてる	言い当てる	Mns	TRS	TRS	TTT	P

2683	iichirasu	いいちらす	言い散らす	Dpm	TRS	CCS/CCL	TTT	P
2701	iifurusu	いいふるす	言い古す	Mns	TRS	CCS	TTT	#P
545	iihanatsu	いいはなつ	言い放つ	Act_ext	TRS	CCS	TTT	#P
501	iiharu	いいはる	言い張る	Act_ext	TRS	CCS	TET	P
2665	iikaeru	いいかえる	言い換える	Mns	TRS	CCS	TTT	P
2666	iikakeru	いいかける	言い掛ける	Dpm	TRS	CCP	TTT	#P
2687	iikatsu	いいかつ	言い勝つ	Mns, Act_type	TRS	ACT	TII	#
2674	iikesu	いいけす	言い消す	Mns	TRS	CCS	TTT	P
2668	iikikaseru	いいきかせる	言い聞かせる	Mns	TRS	OCS	TTT	P
2669	iikiru	いいきる	言い切る	#Act_ext,	TRS	CCS	TTI	P
2710	iikomeru	いいこめる	言い籠める	Mns	TRS	CCL	TTT	P
2671	iikudasu	いいくだす	言い下す	Mns	TRS	CCL	TTT	P
2217	iikurasu	いいくらす	言い暮らす	Mnr	TRS	ACT	TII	P
2673	iikurumeru	いいくるめる	言いくるめる	Mns	TRS	#CCS	TTT	P
2670	iikusasu	いいくさす	言い腐す	Mns	TRS	CCS	TNT	P
2696	iimagirasu	いいまぎらす	言い紛らす	Mns	TRS	CCS	TTT	P
2702	iimakasu	いいまかす	言い負かす	Mns	TRS	TRS	TTT	#P/#R
2672	iimakeru	いいまける	言い負ける	Situ, #Act_type	TRS	ACT	TII	#P
2695	iimarumeru	いいまるめる	言い丸める	Mns	TRS	CCS	TTT	P
2690	iimawasu	いいまわす	言い回す	Dpm	TRS	CCL	TTT	#
2692	iinarawasu	いいならわす	言い習わす	Mns, Embd	TRS	CCS	TTT	#R
2684	iinasu	いいなす	言いなす	#Mns, #Act_type, Lex	TRS	TRS	TTT	P
2699	iinogareru	いいのがれる	言い逃れる	Mns	TRS	#MOM	TII	#P
2698	iinokeru	いいのける	言い退ける	Mns	TRS	CCL	TTT	#
2694	iinokosu	いいのこす	言い残す	Mns	TRS	CCS	TTT	P
2700	iinukeru	いいぬける	言い抜ける	Mns	TRS	COL	TII	#R
2662	iioku	いいおく	言い置く	#Prcd	TRS	PLC	TTT	#
2660	iiokuru	いいおくる	言い送る	#Dpm	TRS	CCL	TTT	#R
2704	iisoeru	いいそえる	言い添える	Mns	TRS	PLC	TTT	P
1645	iisugosu	いいすごす	言い過ごす	Act_ext	TRS	TRS	TTT	N
2677	iisukumeru	いいすくめる	言い竦める	Mns	TRS	CCS	TTT	P
1582	iisuteru	いいすてる	言い捨てる	Act_ext	TRS	TRS	TTT	#P
1410	iitateru	いいたてる	言い立てる	Act_ext	TRS	CCP	TTT	P
2686	iitsukeru	いいつける	言い付ける	Mns	TRS	PLC	TTI	P
2685	iitsukurou	いいつくろう	言い繕う	Mns	TRS	CCS	TTT	P
1043	iitsunoru	いいつのる	言い募る	Act_ext	TRS	COS	TIT	P
2709	iitsuraneru	いいつらねる	言い連ねる	Mns	TRS	CCP	TTT	P
2703	iitsutaeru	いいつたえる	言い伝える	Mns	TRS	TRS	TTT	#P
2688	iiwakeru	いいわける	言い分ける	Mns	TRS	CCS	TTT	P
2706	iiwatasu	いいわたす	言い渡す	Mns	TRS	CCL	TTT	P
2693	iiyaburu	いいやぶる	言い破る	Mns	TRS	CCS	TTT	#P
709	iiyoru	いいよる	言い寄る	Mnr	TRS	COL	TII	P
1039	ikakeru	いかける	射掛ける	Dpm	TRS	CCP	TTI	P
1031	ikakeru	いかける	鋳掛ける	Dpm, Lex	TRS	CCP	TTT	P
2157	ikekomu	いけこむ	埋け込む	Mns, Dpm	CCL	COL	TET	P
1152	ikikaeru	いきかえる	生き返る	Dpm, Lex	ACT	COL	III	R
1155	ikinagaraeru	いきながらえる	生き長らえる	Cnd	ACT	ACT	INI	S
1154	ikinokoru	いきのこる	生き残る	Cnd	ACT	EXT	III	S
1510	ikiritatsu	いきりたつ	熱り立つ	Act_ext	PSY	PST	III	#S
2501	ikisekikiru	いきせききる	息急き切る	Act_ext	ACT	CCS	ITI	P
1151	ikiwakareru	いきわかれる	生き別れる	Cnd	ACT	COS	III	R
2646	ikoboreru	いこぼれる	居零れる	#Situ	EXT	MOM	III	#P/#R/#S
1633	ikomu	いこむ	射込む	Mns, Dpm	TRS	COL	TET	P
1607	ikomu	いこむ	鋳込む	Mns, Dpm	TRS	COL	TET	P
2650	imikirau	いみきらう	忌み嫌う	Pair	PSY	PSY	TTT	#P
1300	inaoru	いなおる	居直る	#Situ, Lex	EXT	COS	III	#P/#R
1101	inarabu	いならぶ	居並ぶ	Mnr	EXT	PST	III	#S
1146	inokoru	いのこる	居残る	#Situ	EXT	EXT	III	P/#S
1046	inuku	いぬく	射抜く	Mns	TRS	CCL	TTT	P/I
1038	iotosu	いおとす	射落とす	Mns	TRS	CCL	TTT	#P/I
2151	ireageru	いれあげる	入れ揚げる	U, Lex	CCL	CCL	TTI	#P/#R/#S

2153	irekawaru	いれかわる	入れ代わる	Cs	CCL	COS	TII	R
2165	irekomu	いれこむ	入れ込む	#Cs, Act_ext	CCL	COL	TET	#P/#R/#S
2155	iremazeru	いれまぜる	入れ混ぜる	U, #Pair	CCL	CCS	TTT	P
1035	iriawaseru	いりあわせる	煎り合わせる	Mns	TRS	CMB	TTT	P
1431	irikumu	いりくむ	入り組む	#Rst_ext, #Pair, Lex	COL	CMB	ITI	S
1430	irimajiru	いりまじる	入り混じる	#Pair	COL	COS	III	#R/#S
97	irimidareru	いりみだれる	入り乱れる	Act_ext	COL	COS	III	S
1062	iritsukeru	いりつける	煎り付ける	Mns	TRS	PLC	TTT	P
1934	iritsuku	いりつく	煎り付く	Cs	CCS	COS	TII	R
1362	iromekitatsu	いろめきたつ	色めき立つ	Rst_ext	COS	PST	III	#P
1509	isamitatsu	いさみたつ	勇み立つ	Act_ext	PSY	PST	III	P
1041	isukumeru	いすくめる	射竦める	Mns	TRS	CCS	TTT	P
2276	isukumu	いすくむ	居竦む	Mnr	EXT	COS	III	#P/#S
1392	isuwaru	いすわる	居座る	Pair	EXT	PST	III	P
1074	itametsukeru	いためつける	痛め付ける	Act_ext	CCS	PLC	TTT	P
2486	itamiiru	いたみいる	痛み入る	Act_ext	SNS	COL	III	S
1042	itaosu	いたおす	射倒す	Mns	TRS	CCP	TTT	P/I
1120	itateru	いたてる	射立てる	Act_ext	TRS	CCP	TTT	P
982	itekaeru	いてかえる	凍(冱)て返る	Rst_ext	COS	PST	III	R
1583	itetsuku	いてつく	凍て付く	Cs	COS	COS	III	R
1045	itomeru	いとめる	射止める	Mns	TRS	CCS	TTT	P/R
1044	itoosu	いとおす	射通す	Mns	TRS	CCL	TTT	I/R
1034	itsubusu	いつぶす	鋳潰す	Mns	TRS	CCS	TTT	P
1067	itsukeru	いつける	射付ける	Act_ext	TRS	PLC	TTI	#P/I
2199	itsuku	いつく	居着 (付) く	#Situ	EXT	COL	III	#P/#R/#S
1344	jaretsuku	じゃれつく	じゃれ付く	Mnr, Dpm	ACT	COS	III	P
2370	jirekomu	じれこむ	焦れ込む	Act_ext	PSY	COL	IEI	P
1329	kaburitsuku	かぶりつく	齧り付く	Mnr, Dpm	TRS	COS	TII	P/S
2575	kachihokoru	かちほこる	勝ち誇る	Cs	ACT	TRS	ITI	#P
1920	kachikosu	かちこす	勝ち越す	Act_type, #Dpm, #Rst_ext	ACT	COL	III	R
1269	kachinoboru	かちのぼる	勝ち上る	Mns, Cs, Dpm	ACT	COL	III	P
2580	kachinokoru	かちのこる	勝ち残る	Mns, Situ	ACT	EXT	III	#R
2579	kachinuku	かちぬく	勝ち抜く	Mns	ACT	CCL	ITI	P/I
1416	kachisusumu	かちすすむ	勝ち進む	Embd, Dpm	ACT	COL	III	P
2577	kachitoru	かちとる	勝ち取る	Mns	ACT	CCL	ITT	R
1427	kaerizaku	かえりざく	返り咲く	Mnr	COL	COS	III	R/S
1690	kagamikomu	かがみこむ	かがみ込む	Mnr	PST	COL	IEI	P
854	kagayakiwataru	かがやきわたる	輝き渡る	Rst_ext	PHN	COL	III	#P
2586	kagiateru	かぎあてる	嗅ぎ当てる	Mns	TRS	TRS	TTT	P
2589	kagidasu	かぎだす	嗅ぎ出す	Mns	TRS	CCL	TTT	P
2588	kagikomu	かぎこむ	嗅ぎ込む	Mns	TRS	COL	TEI	R
620	kagimawaru	かぎまわる	嗅ぎ回る	Dpm	TRS	COL	TIT	P
2591	kagitoru	かぎとる	嗅ぎ取る	Mns	TRS	CCL	TTT	P
2590	kagitsukeru	かぎつける	嗅ぎ付ける	#Mns, Lex	TRS	PLC	TTT	R
2592	kagiwakeru	かぎわける	嗅ぎ分ける	Mns	TRS	CCS	TTT	P
848	kaiageru	かいあげる	買い上げる	Mns, #Dpm	TRS	CCL	TTT	P
202	kaiaruku	かいあるく	買い歩く	Mnr, Acmp_act	TRS	MOM	TIT	P
2573	kaiasaru	かいあさる	買い漁る	Act_ext	TRS	TRS	TTT	P
860	kaidasu	かいだす	買い出す	#Act_type, Lex	TRS	CCL	TTT	P
851	kaiireru	かいいれる	買い入れる	Mns	TRS	CCL	TTT	P
853	kaikaburu	かいかぶる	買い被る	U, Lex	TRS	TRS	TTT	P
1773	kaikomu	かいこむ	買い込む	Act_ext	TRS	COL	TET	#P/R
1177	kaimasu	かいます	買い増す	Mns	TRS	CCS	TET	P
931	kaimawaru	かいまわる	買い回る	Mnr, Acmp_act	TRS	COL	TIT	P
869	kaimodosu	かいもどす	買い戻す	Mns	TRS	CCL	TTT	P
859	kaimotomeru	かいもとめる	買い求める	Mns	TRS	DES	TTT	P
892	kaimukau	かいむかう	買い向かう	Mns	TRS	PST	TII	P
870	kainarasu	かいならす	飼い馴らす	Mns	TRS	CCS	TTT	P
857	kaisasaeru	かいささえる	買い支える	Mns	TRS	TRS	TTT	P
858	kaishimeru	かいしめる	買い占める	Mns	TRS	TRS	TTT	P

868	kaisoroeru	かいそろえる	買い揃える	Mns	TRS	CCS	TTT	P
1397	kaisusumu	かいすすむ	買い進む	Mns, Dpm	TRS	COL	TIT	P
866	kaitameru	かいためる	買い貯める	Mns	TRS	CCS	TTT	P
867	kaitasu	かいたす	買い足す	Mns	TRS	PLC	TTT	P
1894	kaitataku	かいたたく	買い叩く	Act_ext	TRS	TRS	TTT	P
862	kaitori	かいとり	買い取る	Mns	TRS	CCL	TTT	P/R
861	kaitsukeru	かいつける	買い付ける	#Embd, #Mns,	TRS	PLC	TTT	P
852	kaiukeru	かいうける	買い受ける	Mns	TRS	TRS	TTT	#P/#R
775	kajirichirasu	かじりちらす	齧り散らす	Mns	TRS	CCS/CCL	TTT	P/R
776	kajiritsuku	かじりつく	齧り付く	Mnr, Dpm	TRS	COS	TII	#P/S
846	kakaekomu	かかえこむ	抱え込む	Mns, Dpm	TRS	COL	TET	P
1252	kakariau	かかりあう	掛かり合う	Lex	PST	ETC	III	#P/#R
1253	kakarikiru	かかりきる	掛かり切る	Act_ext	PST	CCS	ITI	P
2648	kakeagaru	かけあがる	駆け上がる	Mnr	MOM	COL	III	P
2028	kakeau	かけあう	掛け合う	Lex, Sytx	CCP	ACT	TIT	P
2029	kakeawaseru	かけあわせる	掛け合わせる	Mns	CCP	CMB	TTT	P
2032	kakedasu	かけだす	掛け出す	Mns	CCP	CCP	TTT	P/R
1373	kakedasu	かけだす	駆け出す	Mnr, Dpm, Sytx	MOM	COL	ITI	#R
2035	kakehanareru	かけはなれる	掛け離れる	Cnd	CCP	COL	TII	S
2034	kakehedateru	かけへだてる	掛け隔てる	Cnd	CCP	CFG	TTI	S
1354	kakeiru	かけいる	駆け入る	Mnr	MOM	COL	III	#P/I
1371	kakekomu	かけこむ	駆け込む	Mnr	MOM	COL	IEI	I
581	kakemawaru	かけまわる	駆け回る	Mnr, Acmp_act	MOM	COL	III	P
891	kakemeguru	かけめぐる	駆け巡る	Mnr, Acmp_act	MOM	COL	III	P
2031	kakemotsu	かけもつ	掛け持つ	Cnd	CCP	TRS	TTT	P
1254	kakenoboru	かけのぼる	駆け登る	Mnr	MOM	COL	III	P
1377	kakenukeru	かけぬける	駆け抜ける	Mns, Dpm	MOM	COL	III	P
2422	kakeoriru	かけおりる	駆け降りる	Mnr	MOM	COL	III	P
1372	kaketsukeru	かけつける	駆け付ける	Mns	MOM	PLC	ITI	P/I
2036	kakewatasu	かけわたす	掛け渡す	Mns	CCP	CCL	TTT	P
1353	kakeyoru	かけよる	駆け寄る	Mnr	MOM	COL	III	P
583	kakezurimawaru	かけずりまわる	駆けずり回る	Mnr, Acmp_act	MOM	COL	III	P
781	kakiageru	かきあげる	掻き上 (揚) げる	Mnr	TRS	CCL	TTT	P
205	kakiageru	かきあげる	舁き上げる	Mns	TRS	CCL	TTT	P
808	kakiarawasu	かきあらわす	書き著す	Mns	TRS	TRS	TTT	P/R
809	kakiarawasu	かきあらわす	書き表す	Mns	TRS	TRS	TTT	P/R
782	kakiatsumeru	かきあつめる	掻き集める	Mns	TRS	CCL	TTT	P
783	kakiawaseru	かきあわせる	掻き合わせる	Mns	TRS	CMB	TTT	P
831	kakichirasu	かきちらす	書き散らす	Dpm	TRS	CCS/CCL	TTT	P/R
824	kakidasu	かきだす	書き出す	Mns	TRS	CCL	TTT	P
793	kakidasu	かきだす	掻き出す	Mns	TRS	CCL	TTT	P
810	kakiireru	かきいれる	書き入れる	Mns	TRS	CCL	TTT	P
784	kakiireru	かきいれる	掻き入れる	Mns	TRS	CCL	TTT	P
790	kakikesu	かきけす	掻き消す	Mnr	TRS	CCS	TTT	P
802	kakikieru	かききえる	掻き消える	Mnr	TRS	APR	TII	R
788	kakikiru	かききる	掻き切る	Mns	TRS	CCS	TTT	P
1591	kakikomu	かきこむ	掻き込む	Mns, Dpm	TRS	COL	TET	P
1592	kakikomu	かきこむ	書き込む	#Mns, Dpm	TRS	COL	TET	P
819	kakikudasu	かきくだす	書き下す	Dpm	TRS	CCL	TTT	P
165	kakikudoku	かきくどく	掻き口説く	Mnr	AFF	TRS	TTT	P
801	kakikumoru	かきくもる	掻き曇る	Mnr	TRS	COS	TII	#P
822	kakikuwaeru	かきくわえる	書き加える	Mns	TRS	PLC	TTT	P
821	kakikuzusu	かきくずす	書き崩す	Mns	TRS	CCS	TTT	P
789	kakikuzusu	かきくずす	掻き崩す	Mns	TRS	CCS	TTT	P
798	kakimawasu	かきまわす	掻き回す	Dpm	TRS	CCL	TTT	P
806	kakimazaru	かきまざる	掻き混ざる	Cs	TRS	COS	TII	R
799	kakimazeru	かきまぜる	掻き混ぜる	Mns	TRS	CCS	TTT	P
805	kakimidareru	かきみだれる	掻き乱れる	Mnr	TRS	COS	TII	R
800	kakimidasu	かきみだす	掻き乱す	Mnr, Mns	TRS	CCS	TTT	P
804	kakimushiru	かきむしる	掻き毟る	Mnr	TRS	CCS	TTT	P
744	kakinaguru	かきなぐる	書き殴る	Act_ext	TRS	TRS	TTT	P
844	kakinaraberu	かきならべる	書き並べる	Mns	TRS	CCP	TTT	P

796	kakinarasu	かきならす	掻き鳴らす	Mns	TRS	TRS	TTT	P
797	kakinokeru	かきのける	掻き退ける	Mns	TRS	CCL	TTT	P
838	kakinokosu	かきのこす	書き残す	Mns	TRS	CCS	TTT	P
580	kakinomesu	かきのめす	書きのめす	Act_ext	TRS	CCS	TTT	P
785	kakiokosu	かきおこす	掻き起こす	Mns	TRS	CCP	TTT	P
815	kakiorosu	かきおろす	書き下ろす	Dpm	TRS	CCL	TTT	P
787	kakiorosu	かきおろす	掻き下ろす	Mns	TRS	CCL	TTT	P
786	kakiotosu	かきおとす	掻き落とす	Mns	TRS	CCL	TTT	P
792	kakisabaku	かきさばく	掻き捌く	Mns	TRS	TRS	TTT	P
820	kakishirusu	かきしるす	書き記す	Mns	TRS	TRS	TTT	P/R
825	kakishitatameru	かきしたためる	書きしたためる	Act_type, Lex	TRS	TRS	TTT	P
841	kakisoeru	かきそえる	書き添える	Mns	TRS	PLC	TTT	P
826	kakisusumeru	かきすすめる	書き進める	#Dpm	TRS	CCL	TTT	P
1579	kakisuteru	かきすてる	書き捨てる	Act_ext, Prcd	TRS	TRS	TTT	P
814	kakitameru	かきためる	書き溜める	#Mns	TRS	CCS	TTT	P
840	kakitasu	かきたす	書き足す	Mns	TRS	PLC	TTT	P
1115	kakitateru	かきたてる	書き立てる	Act_ext	TRS	CCP	TTT	P/I
794	kakitateru	かきたてる	掻き立てる	Mnr, Act_ext	TRS	CCP	TTT	P
839	kakitodomeru	かきとどめる	書き留める	Mns	TRS	CCS	TTT	P/R
835	kakitomeru	かきとめる	書き留める	Mns	TRS	CCS	TTT	P
836	kakitoru	かきとる	書き取る	Mns	TRS	CCL	TTT	P
812	kakitsuduru	かきつづる	書き綴る	Pair	TRS	TRS	TTT	P
832	kakitsukeru	かきつける	書き付ける	Mns	TRS	PLC	TTT	P
163	kakitsukurou	かきつくろう	掻き繕う	Mnr_E	AFF	CCS	TTT	P
845	kakitsuraneru	かきつらねる	書き連ねる	Mns	TRS	CCP	TTT	P
811	kakiutsusu	かきうつす	書き写す	Mns	TRS	TRS	TTT	P
834	kakiwakeru	かきわける	書き分ける	Mns	TRS	CCS	TTT	P
795	kakiwakeru	かきわける	掻き分ける	Mns	TRS	CCS	TTT	P
864	kakiyoseru	かきよせる	掻き寄せる	Mns	TRS	CCL	TET	P
780	kakoikomu	かこいこむ	囲い込む	Mns, Dpm	TRS	COL	TET	P/R
1251	kamaemotsu	かまえもつ	構え持つ	Mnr	PST	TRS	TTT	P
755	kamiawaseru	かみあわせる	噛み合わせる	Mns	TRS	CMB	TTT	#P
757	kamikiru	かみきる	噛み切る	Mns	TRS	CCS	TTT	P
759	kamikonasu	かみこなす	噛みこなす	Mns	TRS	TRS	TTT	#P
760	kamikorosu	かみころす	噛み殺す	Mns	TRS	CCS	TTT	#P/I
758	kamikudaku	かみくだく	噛み砕く	Mns	TRS	CCS	TTT	P
765	kaminarasu	かみならす	噛み鳴らす	Mns	TRS	TRS	TTT	P/I
761	kamishidaku	かみしだく	噛みしだく	Mns	TRS	CCS	TNT	P
1679	kamishimeru	かみしめる	噛み締める	Act_ext	TRS	CCS	TTT	P
763	kamitsubusu	かみつぶす	噛み潰す	Mns	TRS	CCS	TTT	P
1327	kamitsuku	かみつく	噛み付く	Mnr, Dpm	TRS	COS	TII	P
764	kamiwakeru	かみわける	噛み分ける	Mns	TRS	CCS	TTT	P
1922	kamoshidasu	かもしだす	醸し出す	Mnr, Dpm	CCS	CCL	TTT	P
767	kanagurisuteru	かなぐりすてる	かなぐり捨てる	Mnr	TRS	TRS	TTT	P
1134	kanesonaeru	かねそなえる	兼ね備える	Cnd	TRS	TRS	TTT	S
2147	kanngaekomu	かんがえこむ	考え込む	Act_ext	MNT	COL	TEI	P
2570	kanngaetsuku	かんがえつく	考え付く	Act_type	MNT	COS	TIT	R
2479	kannjiiru	かんじいる	感じ入る	Act_ext	SNS	COL	TII	#P
1130	kannjitoru	かんじとる	感じ取る	Mns	SNS	CCL	TTT	#P
194	kapparau	かっぱらう	掻っ払う	Mnr_E	AFF	CCL	TTT	#P
1132	karametoru	からめとる	絡め取る	Mns	CCS	CCL	TTT	P
1863	karamiawaseru	からみあわせる	絡み合わせる	Mns	CMB	CMB	TTT	P
1131	karamitsukeru	からみつける	絡み付ける	Mns	PHN	PLC	ITT	P
1145	karamitsuku	からみつく	絡み付く	Mnr	PHN	COS	III	P/R/S
1540	karehateru	かれはてる	枯れ果てる	Rst_ext	COS	APR	III	R
1575	karenokoru	かれのこる	枯れ残る	Situ	COS	EXT	III	#R
2631	kariageru	かりあげる	刈り上げる	Dpm, Act_ext	CCS	CCL	TTT	P
746	kariageru	かりあげる	借り上げる	Mns, #Dpm	TRS	CCL	TTT	P/R
2145	kariatsumeru	かりあつめる	駆り集める	Mns	CCL	CCL	TTT	P
752	karidasu	かりだす	借り出す	Mns	TRS	CCL	TTT	P/R
745	karidasu	かりだす	狩り出す	Mns	TRS	CCL	TTT	P
1919	kariireru	かりいれる	刈り入れる	Mns	CCS	CCL	TTT	P

747	kariireru	かりいれる	借り入れる	Mns	TRS	CCL	TTT	P
749	karikaeru	かりかえる	借り換える	Mns	TRS	CCS	TTT	P/R
316	karikiru	かりきる	借り切る	Rst_ext	TRS	CCS	TTT	#R
1745	karikomu	かりこむ	刈り込む	Dpm	CCS	COL	TET	P
1896	karikosu	かりこす	借り越す	#Act_typeS, #Dpm, #Rst_ext	TRS	COL	TIT	R
750	karitaosu	かりたおす	借り倒す	Prcd, Act_type	TRS	CCP	TTT	I/#R
2144	karitateru	かりたてる	駆り立てる	Mns	CCL	CCP	TTT	P
1921	karitoru	かりとる	刈り取る	Mns	CCS	CCL	TTT	P
748	kariukeru	かりうける	借り受ける	Mns	TRS	TRS	TTT	P
772	kashidasu	かしだす	貸し出す	Mns	TRS	CCL	TTT	P/R
350	kashikiru	かしきる	貸し切る	Rst_ext	TRS	CCS	TTT	#P/#R
1897	kashikosu	かしこす	貸し越す	#Act_typeS, #Dpm, #Rst_ext	TRS	COL	TIT	R
773	kashitsukeru	かしつける	貸し付ける	Dpm	TRS	PLC	TTT	P
1407	kasoetateru	かそえたてる	数え立てる	Act_ext	TRS	CCP	TTT	P
195	kassarau	かっさらう	掻っ攫う	Mnr_E	AFF	CCL	TTT	P
770	kasumetoru	かすめとる	掠め取る	Mns	TRS	CCL	TTT	P
2581	katariakasu	かたりあかす	語り明かす	Mnr, Mns	TRS	TRS	TT#T	#P
2583	katarifurusu	かたりふるす	語り古す	Mns, #Act_type	TRS	CCS	TTT	#P
2582	kataritsugu	かたりつぐ	語り継ぐ	Mns	TRS	CMB	TTT	P
2584	kataritsutaeru	かたりつたえる	語り伝える	Mns	TRS	TRS	TTT	P
768	katsugiageru	かつぎあげる	担ぎ上げる	Mns	TRS	CCL	TTT	P
769	katsugidasu	かつぎだす	担ぎ出す	Mns	TRS	CCL	TTT	P
1534	kawarihateru	かわりはてる	変わり果てる	Rst_ext	COS	APR	III	R
1571	kawariyuku	かわりゆく	変わり行く	Dpm	COS	COL	III	N
843	kayoitsumeru	かよいつめる	通い詰める	Act_ext	COL	CCS	ITI	P
1114	kazaritateru	かざりたてる	飾り立てる	Act_ext	TRS	CCP	TTT	P
779	kazaritsukeru	かざりつける	飾り付ける	Mns	TRS	PLC	TTT	P
928	kazoreageru	かぞれあげる	数え上げる	Mns, #Embd	TRS	CCL	TTT	P
693	kechirakasu	けちらかす	蹴散らかす	Mns	TRS	CCS	TTT	P
691	kechirasu	けちらす	蹴散らす	Mns	TRS	CCS/CCL	TTT	P/I
689	kedasu	けだす	蹴出す	Mns	TRS	CCL	TTT	P/I
684	keotosu	けおとす	蹴落とす	Mns	TRS	CCL	TTT	I
683	keriageru	けりあげる	蹴り上げる	Mns	TRS	CCL	TTT	P/I
686	kerikomu	けりこむ	蹴り込む	Mns, Dpm	TRS	COL	TET	#P/I
687	kerikowasu	けりこわす	蹴り壊す	Mns	TRS	CCS	TTT	P
685	kerikuzusu	けりくずす	蹴り崩す	Mns	TRS	CCS	TTT	P
688	keritaosu	けりたおす	蹴り倒す	Mns	TRS	CCP	TTT	#P/I
692	keritobasu	けりとばす	蹴り飛ばす	Mns	TRS	CCL	TTT	I
2738	keshisaru	けしさる	消し去る	Rst_ext	CCS	APR	TIT	P
1861	keshitobu	けしとぶ	消し飛ぶ	Mnr	CCS	MOM	TII	R
1860	keshitomeru	けしとめる	消し止める	Mns	CCS	CCS	TTT	P/R
690	ketateru	けたてる	蹴立てる	Mns	TRS	CCP	TTT	P
682	keyaburu	けやぶる	蹴破る	Mns	TRS	CCS	TTT	P
1823	kezuritoru	けずりとる	削り取る	Mns	CCS	CCL	TTT	P
1519	kiehateru	きえはてる	消え果てる	Rst_ext	APR	APR	III	R
2314	kieiru	きえいる	消え入る	Rst_ext	APR	COL	III	R
1567	kienokoru	きえのこる	消え残る	Situ	APR	EXT	III	#R
1474	kiesaru	きえさる	消え去る	Rst_ext, Cs, Dpm	APR	APR	III	R
1566	kieuseru	きえうせる	消え失せる	#Prcd	APR	APR	III	R
1568	kieyuku	きえゆく	消え行く	Dpm	APR	COL	III	N
742	kifurusu	きふるす	着古す	Mns, #Act_type	TRS	CCS	TTT	#P/#R
2537	kikiawaseru	ききあわせる	聞き合わせる	Mns, Embd	TRS	TRS	TTT	P
2553	kikidasu	ききだす	聞き出す	Mns, Dpm	TRS	CCL	TTT	P
413	kikihojiru	ききほじる	聞き穿る	Act_ext	TRS	TRS	TTT	P
2565	kikihoreru	ききほれる	聞き惚れる	Cs	TRS	PSY	TII	P/S
2538	kikiireru	ききいれる	聞き入れる	Mns	TRS	CCL	TTT	P
2517	kikiiru	ききいる	聞き入る	Act_ext	TRS	COL	TII	P
2545	kikikajiru	ききかじる	聞き齧る	Mns	TRS	TRS	TTT	#
1838	kikikomu	ききこむ	聞き込む	Dpm	TRS	COL	TEI	P
615	kikimawaru	ききまわる	聞き回る	Dpm	TRS	COL	TIT	P

2542	kikioboeru	ききおぼえる	聞き覚える	Mns	TRS	MNT	TTT	#R
2540	kikioku	ききおく	聞き置く	Prcd	TRS	PLC	TTT	#P/#R
2549	kikishiru	ききしる	聞き知る	Mns	TRS	TRS	TTT	S
2550	kikisugosu	ककिसुगोसु	聞き過ごす	Situ	TRS	TRS	TTT	#R
2551	kikisuteru	ककिसुतेरु	聞き捨てる	Prcd	TRS	TRS	TTT	P
2562	kikitadasu	ककितदासु	聞き質す	Mns	TRS	TRS	TTT	P
2564	kikitodokeru	ककितोदोकेरु	聞き届ける	#Dpm	TRS	CCL	TTT	#P
2567	kikitogameru	ककितोगमेरु	聞き咎める	Prcd	TRS	TRS	TTT	P
2557	kikitomeru	ककितोमेरु	聞き留める	Mns	TRS	CCS	TTT	#P
2558	kikitoru	ककितोरु	聞き取る	Mns	TRS	CCL	TTT	P
2556	kikitsukeru	ककितसुकेरु	聞き付ける	#Mns	TRS	PLC	TTT	#P/#R
2561	kikitsutaeru	ककितसुतएरु	聞き伝える	Mns	TRS	TRS	TTT	P
2559	kikiwakeru	ककिवाकेरु	聞き分ける	Mns	TRS	CCS	TTT	P
1758	kikomu	きこむ	着込む	Act_ext	TRS	COL	TET	#P
740	kikuzureru	きくずれる	着崩れる	Act_type	TRS	COS	TII	R
735	kikuzusu	きくずす	着崩す	Act_type	TRS	CCS	TTT	P
2180	kimarikiru	きまりきる	決まり切る	Rst_ext	COS	CCS	ITI	#R
1762	kimekomu	きめこむ	決め込む	Act_ext	MNT	COL	TET	#P
1059	kimetsukeru	きめつける	決め付ける	Act_ext	MNT	PLC	TTT	P
1847	kioikomu	きおいこむ	気負い込む	Act_ext	PSY	COL	IEI	P/S
1508	kioitatsu	きおいたつ	気負い立つ	Act_ext	PSY	PST	III	P
1543	kireagaru	きれあがる	切れ上がる	Mnr	COS	COL	III	S
1558	kirekomu	きれこむ	切れ込む	Dpm	COS	COL	IEI	S
1876	kiriageru	きりあげる	切り上げる	Mns	CCS	CCL	TTT	#R
1893	kiridasu	きりだす	切り出す	Mns	CCS	CCL	TTT	P
400	kirifuseru	きりふせる	切り伏せる	Mns	CCS	CCP	TET	P
1907	kirihanasu	きりはなす	切り離す	Mns	CCS	CCL	TTT	P
743	kiriharau	きりはらう	切り払う	Mns	CCS	CCL	TTT	P
1906	kirihazusu	きりはずす	切り外す	Mns	CCS	CCL	TTT	P
1238	kirihiraku	きりひらく	切り開く	Mns	CCS	CCS	TET	P
1908	kirihirogeru	きりひろげる	切り広げる	Mns	CCS	CCS	TTT	P
1904	kirihodoku	きりほどく	切り解く	Mns	CCS	CCS	TTT	P
2401	kirikakaru	きりかかる	切り掛かる	Dpm	CCS	PST	TII	P
1882	kirikawaru	きりかわる	切り替わる	Cs	CCS	COS	TII	R
1883	kirikizamu	きりきざむ	切り刻む	Mns	CCS	CCS	TTT	P
1886	kirikomu	きりこむ	切り込む	Mnr, Dpm	CCS	COL	TEI	P
1887	kirikorosu	きりころす	切り殺す	Mns	CCS	CCS	TTT	#P/I
1885	kirikumu	きりくむ	切り組む	Mns	CCS	CMB	TTT	P
1884	kirikuzusu	きりくずす	切り崩す	Mns	CCS	CCS	TTT	P
1911	kirimawasu	きりまわす	切り回す	Dpm, Lex	CCS	CCL	TTT	P
1892	kirimusubu	きりむすぶ	切り結ぶ	U, Lex	CCS	CMB	TTT	P
1910	kirinukeru	きりぬける	切り抜ける	Mns, Lex	CCS	COL	TII	P
1902	kirinuku	きりぬく	切り抜く	Mns	CCS	CCL	TTT	P
1877	kiriokosu	きりおこす	切り起こす	Mns	CCS	CCP	TTT	P
1878	kiriotosu	きりおとす	切り落とす	Mns	CCS	CCL	TTT	P/I
1889	kirisageru	きりさげる	切り下げる	Mns	CCS	CCL	TTT	P
1898	kirisainamu	きりさいなむ	切り苛む	Mns	CCS	CPS	TTI	#P
1888	kirisaku	きりさく	切り裂く	Mns	CCS	CCS	TTT	P
1912	kirisoroeru	きりそろえる	切り揃える	Mns	CCS	CCS	TTT	P
1890	kirisuteru	きりすてる	切り捨てる	Mns	CCS	TRS	TTT	I
1891	kiritaosu	きりたおす	切り倒す	Mns	CCS	CCP	TTT	P/I
1128	kiritateru	きりたてる	切り立てる	Act_ext	CCS	CCP	TTT	P
1909	kiritatsu	きりたつ	切り立つ	Mnr	CCS	PST	TII	S
1899	kiritoru	きりとる	切り取る	Mns	CCS	CCL	TTT	P
1895	kiritsukeru	きりつける	切り付ける	Dpm	CCS	PLC	TTI	P
1123	kiritsumeru	きりつめる	切り詰める	Mns	CCS	CCS	TTT	P
1901	kiriwakeru	きりわける	切り分ける	Mns	CCS	CCS	TTT	P
1900	kiriwaru	きりわる	切り割る	Mns	CCS	CCS	TTT	P
1903	kiriyaburu	きりやぶる	切り破る	Mns	CCS	CCS	TTT	P
2143	kisekakeru	きせかける	着せ掛ける	Dpm	CCL	CCP	TTT	P
2534	kisoikatsu	きそいかつ	競い勝つ	Mns, #Act_type	TRS	ACT	TII	#P
2533	kisoimakeru	きそいまける	競い負ける	Situ, #Act_type	TRS	ACT	TII	#P/#R

2535	kisoitatsu	きそいたつ	競い立つ	Mnr	TRS	PST	TII	P
738	kisuteru	きすてる	着棄てる	Prcd	TRS	TRS	TTT	#P
741	kitsubusu	きつぶす	着潰す	Mns, #Act_type	TRS	CCS	TTT	#R
1916	kizamikomu	きざみこむ	刻み込む	Mns, Dpm	CCS	COL	TET	P
1917	kizamitsukeru	きざみつける	刻み付ける	Mns	CCS	PLC	TTT	P
2526	kobihetsurau	こびへつらう	媚び諂う	Pair	ACT	ACT	III	P
2455	koboreochiru	こぼれおちる	零れ落ちる	Mnr, Cs, Dpm	MOM	COL	III	P/I/R
669	kodukidasu	こづきだす	小突き出す	Mns	TRS	CCL	TTT	P
1547	kogetsuku	こげつく	焦げ付く	Cs	COS	COS	III	R
674	kogidasu	こぎだす	漕ぎ出す	Mns	TRS	CCL	TTT	P/R
678	koginukeru	こぎぬける	漕ぎ抜ける	Mns	TRS	COL	TII	P/R
675	kogitsukeru	こぎつける	漕ぎ着ける	Mns	TRS	CCL	TTT	#P/#R
677	kogitsuku	こぎつく	漕ぎ着く	Mnr	TRS	COL	TII	R
726	kogiyoseru	こぎよせる	漕ぎ寄せる	Mns	TRS	CCL	TET	P
1546	kogoejinu	こごえじぬ	凍え死ぬ	Cs	COS	COS	III	R
1545	kogoetsuku	こごえつく	凍え付く	Cs	COS	COS	III	R
2528	koinegau	こいねがう	乞い願う	Pair	TRS	MNT	TTT	#P/#S
2527	koishitau	こいしたう	恋い慕う	Pair	PSY	PSY	TTI	#P/#S
2529	koiukeru	こいうける	請い受ける	Mns	TRS	TRS	TTT	#P
673	kojiakeru	こじあける	抉じ開ける	Mns	CCS	CCS	TTT	P
680	kokiorosu	こきおろす	扱き下ろす	Mns	TRS	CCL	TTT	P
679	kokiotosu	こきおとす	扱き落とす	Mns	TRS	CCL	TTT	P
681	kokitsukau	こきつかう	扱き使う	Mnr	TRS	TRS	TTT	P
934	komarihateru	こまりはてる	困り果てる	Rst_ext	PSY	APR	III	#R/#S
589	komarinuku	こまりぬく	困り抜く	Act_ext	PSY	CCL	ITI	S
1422	komiageru	こみあげる	込み上げる	Mnr	COL	CCL	ETI	P
2750	komiau	こみあう	混み合う	Act_ext	COS	MOD#	III	R
1063	komiiru	こみいる	込み入る	Rst_ext	COL	COL	EII	R
1854	koneawaseru	こねあわせる	捏ね合わせる	Mns	CCS	CMB	TTT	P
1544	kooritsuku	こおりつく	凍り付く	Cs	COS	COS	III	R
1556	korikatamaru	こりかたまる	凝り固まる	Mnr	COS	COS	III	R
1368	korogarikomu	ころがりこむ	転がり込む	Mnr	MOM	COL	IEI	P/I/R
2453	korogariochiru	ころがりおちる	転がり落ちる	Mnr	MOM	COL	III	P
1367	korogariotosu	ころがりおとす	転がり落とす	Mnr	MOM	CCL	ITT	P
1610	korogekomu	ころげこむ	転げ込む	Mnr	MOM	COL	IEI	R
2466	korogeochiru	ころげおちる	転げ落ちる	Mnr	MOM	COL	III	P
672	koshitoru	こしとる	漉し取る	Mns	TRS	CCL	TTT	P
671	kosuritsukeru	こすりつける	擦り付ける	Mnr, Mns	TRS	PLC	ETT	P
530	kubarimawaru	くばりまわる	配り回る	Mnr, Acmp_act	TRS	COL	TIT	P
1501	kuchihateru	くちはてる	朽ち果てる	Rst_ext	COS	APR	III	R
1594	kudakechiru	くだけちる	砕け散る	Mnr, Cs	COS	COS/COL	III	R
1526	kudaketobu	くだけとぶ	砕け飛ぶ	Mnr	COS	MOM	III	R
2531	kudokiotosu	くどきおとす	口説き落とす	Mns	TRS	CCL	TTT	P
1280	kugurinukeru	くぐりぬける	潜り抜ける	Mns	COL	COL	IIT	P
711	kuiarasu	くいあらす	食い荒らす	Mns	TRS	CCS	TTT	P
712	kuiawaseru	くいあわせる	食い合わせる	#Mns	TRS	CMB	TTT	P
1874	kuichigiru	くいちぎる	食い千切る	Mns	TRS	CCS	TTT	P
734	kuichirakasu	くいちらかす	食い散らかす	Cs	TRS	CCS	TTT	P/R
723	kuichirasu	くいちらす	食い散らす	Mns	TRS	CCS/CCL	TTT	#P/#R
710	kuiiru	くいいる	食い入る	Mnr	TRS	COL	TII	P
716	kuikajiru	くいかじる	食い齧る	#Act_type, #Pair	TRS	TRS	TTT	P
2353	kuikakaru	くいかかる	食い掛かる	Dpm	TRS	PST	TII	P
718	kuikiru	くいきる	食い切る	Mns	TRS	CCS	TTT	P
719	kuikomu	くいこむ	食い込む	Mnr	TRS	COL	TEI	S
720	kuikorosu	くいころす	食い殺す	Mns	TRS	CCS	TTT	#P
730	kuinobasu	くいのばす	食い延ばす	Act_type	TRS	CCS	TTT	#P/#S
1490	kuisagaru	くいさがる	食い下がる	Mns	TRS	COL	TII	P
721	kuisaku	くいさく	食い裂く	Mns	TRS	CCS	TTT	P
722	kuishibaru	くいしばる	食い縛る	Lex, #Act_ext	TRS	CCS/CCL	TTT	P
732	kuitameru	くいためる	食い溜める	Mns	TRS	CCS	TTT	P
717	kuitaosu	くいたおす	食い倒す	Prcd, Act_type	TRS	CCP	TTI	#P/#I
729	kuitomeru	くいとめる	食い止める	#Mns	TRS	CCS	TTT	P/R

725	kuitsubusu	くいつぶす	食い潰す	Mns	TRS	CCS	TTT	P
733	kuitsuku	くいつく	食い付く	Mnr, Dpm	TRS	COS	TII	P/R
727	kuitsumeru	くいつめる	食い詰める	Act_type, Lex	TRS	CCS	TTI	#P/#R
724	kuitsunagu	くいつなぐ	食いつなぐ	Act_type	TRS	CMB	TTI	#P
731	kuiyaburu	くいやぶる	食い破る	Mns	TRS	CCS	TTT	P
2607	kukuriageru	くくりあげる	括り上げる	Rst_ext	CCS/CCL	CCL	TTT	P
2026	kukuritsukeru	くくりつける	括り付ける	Mns	CCS/CCL	PLC	TTT	P
2041	kukushiageru	くくしあげる	括し上げる	Mns	CCS/CCL	CCL	TTT	P/#R
2027	kukushitsukeru	くくしつける	括し付ける	Mns	CCS/CCL	PLC	TTT	P
2136	kumiageru	くみあげる	汲み上げる	Mns	CCL	CCL	TTT	P
1864	kumiawaseru	くみあわせる	組み合わせる	Mns	CMB	CMB	TTT	P
2139	kumidasu	くみだす	汲み出す	Mns	CCL	CCL	TTT	P
393	kumifuseru	くみふせる	組み伏せる	Mns	CMB	CCP	TET	P
2142	kumihosu	くみほす	汲み干す	Mns	CCL	CCS	TTT	R
2137	kumiireru	くみいれる	汲み入れる	Mns	CCL	CCL	TTT	P
1866	kumiireru	くみいれる	組み入れる	Mns	CMB	CCL	TTT	R
1872	kumikawaru	くみかわる	組み替わる	Cs	CMB	COS	TII	R
1868	kumikomu	くみこむ	組み込む	Mns, Dpm	CMB	COL	TET	P/R
1869	kumishiku	くみしく	組み敷く	Mns	CMB	CCS	TTT	P/R
2138	kumishiru	くみしる	汲み知る	Mns, Lex	CCL	TRS	TTT	#P
1870	kumitateru	くみたてる	組み立てる	Mns	CMB	CCP	TTT	P
2141	kumitoru	くみとる	汲み取る	Mns	CCL	CCL	TTT	P
1332	kumitsuku	くみつく	組み付く	Mnr, Dpm	CMB	COS	TII	P
2140	kumiwakeru	くみわける	汲み分ける	Mns	CCL	CCS	TTT	P
1748	kuraikomu	くらいこむ	喰らい込む	Act_ext	TRS	COL	TEI	R
1326	kuraitsuku	くらいつく	喰らい付く	Mnr, Dpm	TRS	COS	TII	P
1477	kurehateru	くれはてる	暮れ果てる	Rst_ext	COS	APR	III	R
1551	kurenokoru	くれのこる	暮れ残る	Situ	COS	EXT	III	#R
1548	kureyuku	くれゆく	暮れ行く	Dpm	COS	COL	III	N
706	kuriagaru	くりあがる	繰り上がる	Mnr	TRS	COL	TII	R
694	kuriageru	くりあげる	繰り上げる	#Mns	TRS	CCL	TTT	P
695	kuriawaseru	くりあわせる	繰り合わせる	Mns	TRS	CMB	TTT	P
701	kuridasu	くりだす	繰り出す	Mns	TRS	CCL	TTT	P
703	kurihirogeru	くりひろげる	繰り広げる	Mnr, Lex	TRS	CCS	TTT	P
696	kuriireru	くりいれる	繰り入れる	Mns	TRS	CCL	TTT	P
699	kurikomu	くりこむ	繰り込む	Mns, Dpm	TRS	COL	TET	P/R
705	kurikosu	くりこす	繰り越す	Mns, Lex	TRS	COL	TIT	P/I
702	kurinoberu	くりのべる	繰り延べる	Mns	TRS	CCS	TTT	P
1621	kurinuku	くりぬく	刳り貫く	Mns	CCS	CCL	TTT	P
700	kurisageru	くりさげる	繰り下げる	Mns	TRS	CCL	TTT	P
863	kuriyoseru	くりよせる	繰り寄せる	Mns	TRS	CCL	TET	P
1561	kuruizaku	くるいざく	狂い咲く	Mnr	COS	COS	III	P
1852	kuwaekomu	くわえこむ	銜え込む	Dpm	#CCL	COL	TET	P/S
1559	kuzurenokoru	くずれのこる	崩れ残る	Situ	COS	EXT	III	R
2457	kuzureochiru	くずれおちる	崩れ落ちる	Mnr, Cs, Dpm	COS	COL	III	P
1452	kuzuresaru	くずれさる	崩れ去る	Cs, Dpm	COS	APR	III	R
2357	machiakasu	まちあかす	待ち明かす	Mnr, Mns	TRS	TRS	TTT	P
2358	machiawaseru	まちあわせる	待ち合わせる	#Embd	TRS	#TRS	TTI	P
2360	machikamaeru	まちかまえる	待ち構える	Mnr	TRS	PST	TTT	P
2361	machikogareru	まちこがれる	待ち焦がれる	Situ	TRS	PSY	TIT	#P/#S
2202	machikurasu	まちくらす	待ち暮らす	Mnr	TRS	ACT	TIT	P
2364	machikutabireru	まちくたびれる	待ちくたびれる	Cs	TRS	COS	TII	R
2365	machinozomu	まちのぞむ	待ち望む	Pair	TRS	DES	TTT	P
2359	machiukeru	まちうける	待ち受ける	Mnr	TRS	TRS	TTT	P
2362	machiwabiru	まちわびる	待ちわびる	Pair	TRS	PSY	TTT	P
1471	magarikuneru	まがりくねる	曲がりくねる	Pair	COS	MOD	III	S
1661	magekomu	まげこむ	曲げ込む	Mns, Dpm	CCS	COL	TEI	P
1470	magirekomu	まぎれこむ	紛れ込む	Mnr	COS	COL	IEI	P/#R
2642	maiagaru	まいあがる	舞い上がる	Mnr, Dpm	ACT/MOD	COL	III	P/R
1291	maiageru	まいあげる	舞い上げる	Mns	ACT/MOD	CCL	ITT	P
1365	maichiru	まいちる	舞い散る	Mnr	ACT/MOD	COS/COL	III	P/R
1293	maikomu	まいこむ	舞い込む	Mnr	ACT/MOD	COL	IEI	P/R

2191	maikuruu	まいくるう	舞い狂う	Act_ext	ACT/MOD	COS	III	P
1337	maimodoru	まいもどる	舞い戻る	Mnr	MOM	COL	III	R
2435	maiochiru	まいおちる	舞い落ちる	Mnr	ACT/MOD	COL	III	P/R
1370	maioriru	まいおりる	舞い降りる	Mnr	MOM	COL	III	P/I/R
1294	maitatsu	まいたつ	舞い立つ	Mnr	ACT/MOD	PST	III	#P/#R
1414	makaritooru	まかりとおる	罷り通る	Mnr	COL	COL	III	S
1415	makariyuku	まかりゆく	罷り行く	Mnr	COL	COL	III	N
1604	makekomu	まけこむ	負け込む	#Rst_ext	ACT	COL	IEI	#R
1918	makekosu	まけこす	負け越す	Act_type, #Dpm, #Rst_ext	ACT	COL	III	R
1673	makiagaru	まきあがる	巻き上がる	Cs	CCS	COL	EII	P/R
1664	makiageru	まきあげる	巻き上げる	Mns	CCS	CCL	ETT	P
2057	makichirasu	まきちらす	撒き散らす	Mns	CCL	CCS/CCL	TTT	P
1667	makikomu	まきこむ	巻き込む	Dpm	CCS	COL	EET	P/R
1670	makimodosu	まきもどす	巻き戻す	Mns	CCS	CCL	ETT	P
2476	makiokoru	まきおこる	巻き起こる	Mnr	CCS	PHN	EII	P
1665	makiokosu	まきおこす	巻き起こす	Mns	CCS	CCP	ETT	P
1669	makitoru	まきとる	巻き取る	Mns	CCS	CCL	ETT	P
1668	makitsukeru	まきつける	巻き付ける	Mns	CCS	PLC	ETT	P
2056	makitsukeru	まきつける	蒔き付ける	Mns	CCL	PLC	TTT	P
1671	makitsuku	まきつく	巻き付く	Mnr	CCS	COS	EII	R
1663	makuriageru	まくりあげる	捲くり上げる	Mns	CCS	CCL	TTT	P
253	mamorisodateru	まもりそだてる	守り育てる	Pair	TRS	TRS	TTT	P
823	manekiyoseru	まねきよせる	招き寄せる	Mns	TRS	CCL	TET	P
1770	marumekomu	まるめこむ	丸め込む	Mns, Dpm	CCS	COL	TET	P
1330	matoitsuku	まといつく	纏い付く	Mnr	COS	COS	TII	P
2355	matsuriageru	まつりあげる	祭り上げる	Mns	TRS	CCL	TTT	P
1603	matsurikomu	まつりこむ	祭り込む	Dpm	TRS	COL	TET	#R
1338	matsuwaritsuku	まつわりつく	纏わり付く	Mnr, Dpm	ACT	COS	III	P
1659	mazeawaseru	まぜあわせる	混ぜ合わせる	Mns	CCS	CMB	TTT	P
1261	meguriau	めぐりあう	巡り合う	Mns	COL	ACT	III	#
2186	mekashikomu	めかしこむ	めかし込む	Act_ext	ACT	COL	IEI	P/S
246	meshiagaru	めしあがる	召し上がる	#Pair, Lex	TRS	COL	TII	P
243	meshiageru	めしあげる	召し上げる	#Dpm	TRS	CCL	TTT	#P
247	meshidasu	めしだす	召し出す	Mns	TRS	CCL	TTT	#
245	meshikakaeru	めしかかえる	召し抱える	#Mns	TRS	TRS	TTT	P
248	meshitoru	めしとる	召し取る	Mns	TRS	CCL	TTT	#P
251	meshitsukau	めしつかう	召し使う	Cnd	TRS	TRS	TTT	P
250	meshitsureru	めしつれる	召し連れる	Cnd	TRS	TRS	TTT	P
249	meshiyoseru	めしよせる	召し寄せる	Mns	TRS	CCL	TET	P
2283	miageru	みあげる	見上げる	Act_type, Dpm	TRS	CCL	TTT	P
77	miataru	みあたる	見当たる	#Act_type	TRS	#COL	TII	N
2548	michiafureru	みちあふれる	満ち溢れる	Act_ext	COS	MOM	III	P/R
1138	michitariru	みちたりる	満ち足りる	Cnd	COS	EXT	III	S
1487	midaresawagu	みだれさわぐ	乱れ騒ぐ	Pair	COS	ACT	III	P
1304	midaretobu	みだれとぶ	乱れ飛ぶ	Mnr	COS	MOM	III	P
2347	midodokeru	みどどける	見届ける	#Dpm	TRS	CCL	TTT	P
2296	miesuku	みえすく	見え透く	#Act_type, Lex	TRS	PHN	TII	#S
1125	migakitateru	みがきたてる	磨き立てる	Act_ext	CCS	CCP	TTT	P
2340	mihakarau	みはからう	見計らう	Mns	TRS	TRS	TTT	P
2339	mihakaru	みはかる	見計る	Mns	TRS	TRS	TTT	P
2327	mihanasu	みはなす	見放す	#Act_type, Lex	TRS	CCS	TTT	#P/#R
2326	miharasu	みはらす	見晴らす	#Act_ext, #Rst_ext, #Lex	TRS	CCS	TTT	P
2325	miharu	みはる	見張る	Act_ext, Lex	TRS	CCS	TET	P
2338	mihateru	みはてる	見果てる	#Embd, #Rst_ext, Lex	TRS	APR	TIT	N
1244	mihiraku	みひらく	見開く	#Act_type, Lex	TRS	CCS	TET	P
2346	mihoreru	みほれる	見惚れる	Cs	TRS	PSY	TII	#R
2319	miidasu	みいだす	見出す	Act_type	TRS	CCL	TTT	#P
2509	miiru	みいる	見入る	Act_ext	TRS	COL	TII	P
2294	mikaeru	みかえる	見返る	Act_type, Dpm	TRS	PST	TIT	P

2295	mikaesu	みかえす	見返す	Lex, Sytx	TRS	CCL	TTT	#P
2298	mikagiru	みかぎる	見限る	#Mns, Act_type	TRS	TRS	TTT	R
2299	mikakeru	みかける	見掛ける	U, Lex	TRS	CCP	TTT	#P
2301	mikaneru	みかねる	見兼ねる	Lex	TRS	TRS	TTT	#P
2304	mikiru	みきる	見切る	Lex, Sytx,	TRS	CCS	TTT	#
2305	mikiwameru	みきわめる	見極める	Mns	TRS	TRS	TTT	P
1595	mikomu	みこむ	見込む	Dpm, Lex	TRS	COL	TET	#P
2344	mikosu	みこす	見越す	#Mns, #Dpm, Lex	TRS	COL	TIT	P
2297	mikudasu	みくだす	見下す	Act_type, #Dpm	TRS	CCL	TTT	P
2307	mikuraberu	みくらべる	見比べる	Mns	TRS	TRS	TTT	P
2322	mimamoru	みまもる	見守る	Mns, Lex,	TRS	TRS	TTT	P
587	mimawaru	みまわる	見回る	Dpm	TRS	COL	TIT	P
2334	mimawasu	みまわす	見回す	Dpm	TRS	CCL	TTT	P
2321	mimuku	みむく	見向く	#Dpm, Lex	TRS	PST	TII	#P
2333	minaosu	みなおす	見直す	#Embd, #Act_type, Lex	TRS	CCS	TTT	P
2345	minarau	みならう	見習う	Mns	TRS	TRS	TTT	P
2328	minasu	みなす	見なす	#Act_type, Lex	TRS	TRS	TTT	P
2336	minuku	みぬく	見抜く	Mns	TRS	CCL	TTT	#P
2293	mioboeru	みおぼえる	見覚える	Mns	TRS	MNT	TTT	#R
2288	miokuru	みおくる	見送る	Mns, Act_type	TRS	CCL	TTT	P
2291	miorosu	みおろす	見下ろす	Act_type, Dpm	TRS	CCL	TTT	P
2292	miotosu	みおとす	見落とす	Act_type, Embd	TRS	CCL	TTT	R
2310	misadameru	みさだめる	見定める	Mns	TRS	CCS	TTT	P
2309	misageru	みさげる	見下げる	Dpm, Act_type	TRS	CCL	TTT	P
2300	misekakeru	みせかける	見せ掛ける	U, Lex	TRS	CCP	TTI	P
252	misetsukeru	みせつける	見せ付ける	Dpm	TRS	PLC	TTT	P
2352	mishirioku	みしりおく	見知り置く	U, Lex	TRS	PLC	TTT	#R
2311	mishiru	みしる	見知る	#Act_type, #Cs, Lex	TRS	TRS	TTT	#R
2318	misokonau	みそこなう	見損なう	Lex	TRS	TRS	TTT	#R
2303	misoreru	みそれる	見逸れる	#Embd, Lex, #Act_type	TRS	#CCP	TII	#
2312	misueru	みすえる	見据える	#Mns, Act_ext	TRS	PLC	TTT	P
2315	misugosu	みすごす	見過ごす	Situ	TRS	TRS	TTT	#P
2313	misukasu	みすかす	見透かす	#Mns, Act_type	TRS	TRS	TTT	P
2316	misuteru	みすてる	見捨てる	#Set, Lex	TRS	TRS	TTT	#P/#R
2324	mitateru	みたてる	見立てる	#Mns, Lex	TRS	CCP	TTT	P
2348	mitogameru	みとがめる	見咎める	Prcd	TRS	TRS	TTT	P
2332	mitoosu	みとおす	見通す	#Mns, Dpm, Sytx, Act_type	TRS	CCL	TTT	#
2350	mitoru	みとる	看取る	U, Lex	TRS	CCL	TTT	P
2341	mitoru	みとる	見取る	Mns	TRS	CCL	TTT	P
2351	mitsukedasu	みつけだす	見付け出す	Dpm	TRS	CCL	TTT	P
2349	mitsukeru	みつける	見付ける	#Mns, Lex	TRS	PLC	TTT	P
2330	mitsukurou	みつくろう	見繕う	#Mns, Lex	TRS	CCS	TTT	P
849	mitsumeru	みつめる	見詰める	Act_ext	TRS	CCS	TTT	P
1323	mitsumoru	みつもる	見積もる	#Mns, Lex	TRS	COS	TIT	P
2285	miukeru	みうける	見受ける	#Prcd, #Act_type, Lex	TRS	TRS	TTT	N
2286	miushinau	みうしなう	見失う	#Situ, #Act_type	TRS	#CCL	TTT	R
2335	miwakeru	みわける	見分ける	Mns, #Act_type	TRS	CCS	TTT	P
82	miwatasu	みわたす	見渡す	#Act_type	TRS	CCL	TTT	P
2320	miyaburu	みやぶる	見破る	Mns	TRS	CCS	TTT	#P/R
2342	miyaru	みやる	見遣る	Dpm	TRS	CCL	TTT	P
242	mochiagaru	もちあがる	持ち上がる	Cs	TRS	COL	TII	R
221	mochiageru	もちあげる	持ち上げる	Mns	TRS	CCL	TTT	P
125	mochiaruku	もちあるく	持ち歩く	Mnr, Acmp_act	TRS	MOM	TIT	P
235	mochidasu	もちだす	持ち出す	Mns, Dpm	TRS	CCL	TTT	P/R
238	mochifurusu	もちふるす	持ち古す	Mns	TRS	CCS	TTT	#P
240	mochihakobu	もちはこぶ	持ち運ぶ	Mnr	TRS	CCL	TTT	P
222	mochikaeru	もちかえる	持ち帰る	Mnr, Acmp_act	TRS	COL	TIT	R
230	mochikakeru	もちかける	持ち掛ける	Dpm, Lex	TRS	CCP	TTT	P

232	mochikiru	もちきる	持ち切る	Lex, #Sytx	TRS	CCS	TTE	#
234	mochikomu	もちこむ	持ち込む	Dpm	TRS	COL	TET	P/R
1873	mochikosu	もちこす	持ち越す	#Mns, #Dpm, #Rst_ext	TRS	COL	TIT	#R
1383	mochikotaeru	もちこたえる	持ち堪える	#Pair	TRS	PSY	TII	P
233	mochikuzusu	もちくずす	持ち崩す	Act_type, Lex	TRS	CCS	TTE	#R
228	mochimawaru	もちまわる	持ち回る	Mnr, Acmp_act	TRS	COL	TIT	P
237	mochinaosu	もちなおす	持ち直す	Lex, #Sytx	TRS	CCS	TTT	P/R
224	mochisaru	もちさる	持ち去る	Mnr, Acmp_act	TRS	APR	TIT	R
239	mochisoeru	もちそえる	持ち添える	Mns	TRS	PLC	TTT	P
231	mochiyoru	もちよる	持ち寄る	Mnr	TRS	COL	TIT	#R
2711	moeagaru	もえあがる	燃え上がる	Dpm, Act_ext	PHN	COL	III	P
1066	moederu	もえでる	萌え出る	#Mnr	COS	COL	III	R
1233	moehirogaru	もえひろがる	燃え広がる	Mnr	PHN	COS	III	P
1073	moeochiru	もえおちる	燃え落ちる	Cs, Mnr	PHN	COL	III	P/R
1493	moesakaru	もえさかる	燃え盛る	Act_ext	PHN	COS	III	P
1482	moetatsu	もえたつ	燃え立つ	Rst_ext	PHN	PST	III	P
1479	moetatsu	もえたつ	萌え立つ	Rst_ext	COS	PST	III	S
1071	moetsukiru	もえつきる	燃え尽きる	Cs	PHN	COS	III	R
1068	moetsuku	もえつく	燃え付く	#Embd	PHN	COS	III	R
2054	mogihanasu	もぎはなす	もぎ離す	Mns	CCL	CCL	TTT	P
2053	mogitoru	もぎとる	もぎ取る	Mns	CCL	CCL	TTT	P
1413	mogurikomu	もぐりこむ	潜り込む	Mnr	COL	COL	IEI	P/R
1651	momidasu	もみだす	揉み出す	Mns	CCS	CCL	TTT	P
1650	momihogusu	もみほぐす	揉み解す	Mns	CCS	CCS	TTT	P
1648	momikesu	もみけす	揉み消す	Mns	CCS	CCS	TTT	P
1649	momitsubusu	もみつぶす	揉み潰す	Mns	CCS	CCS	TTT	P
219	moraisageru	もらいさげる	貰い下げる	Set	TRS	CCL	TTT	P
218	moraiukeru	もらいうける	貰い受ける	Set	TRS	TRS	TTT	P
1600	moredasu	もれだす	漏れ出す	Mnr, Cs, Sytx	COL	COL	ITI	P
1601	morederu	もれでる	漏れ出る	Mnr, Cs, Dpm	COL	COL	III	P/R
1598	morekiku	もれきく	漏れ聞く	Cnd, #Mnr	COL	TRS	ITT	R
1608	moreochiru	もれおちる	漏れ落ちる	Mnr, Cs, Prcd, Dpm	COL	COL	III	P/R
1965	moriagaru	もりあがる	盛り上がる	Mnr	CCS	COL	TII	P/R
1647	moriageru	もりあげる	盛り上げる	Mns	CCS	CCL	TTT	P
1961	moriawaseru	もりあわせる	盛り合わせる	Mns	CCS	CMB	TTT	P
1962	morikomu	もりこむ	盛り込む	Mns, Dpm	CCS	COL	TET	P/R
254	moritateru	もりたてる	守り立てる	Mns	TRS	CCP	TTT	P
1963	moritsukeru	もりつける	盛り付ける	Mns	CCS	PLC	TTT	P
2393	motarekakaru	もたれかかる	凭れ掛かる	Mnr	PST	PST	III	P
1207	motarekomu	もたれこむ	凭れ込む	Mnr	PST	COL	IEI	P/R
1952	motasekakeru	もたせかける	凭せ掛ける	Mns	CCP	CCP	TTT	P
236	motenasu	もてなす	持て成す	#Mns, Lex	TRS	CCS	TTT	P
2257	motomekuru	もとめくる	求め来る	Purp	DES	COL	TII	#I/R
220	motomeyuku	もとめゆく	求め行く	Dpm	DES	COL	TIT	#
1467	motsurekomu	もつれこむ	縺れ込む	Mnr	COS	COL	IEI	#P
2258	moushiageru	もうしあげる	申し上げる	Dpm	TRS	CCL	TTT	P
2271	moushideru	もうしでる	申し出る	Purp	TRS	COL	TIT	#P
2267	moushihiraku	もうしひらく	申し開く	Mns	TRS	CCS	TET	#P
2262	moushiireru	もうしいれる	申し入れる	Mns, #Act_type	TRS	CCL	TTT	P/R
2265	moushikikaseru	もうしきかせる	申し聞かせる	Mns	TRS	OCS	TTT	P
2126	moushikomu	もうしこむ	申し込む	Dpm, Lex	TRS	COL	TET	P
2275	moushikosu	もうしこす	申し越す	Dpm	TRS	COL	TIT	#R
2260	moushinoberu	もうしのべる	申し述べる	Pair	TRS	TRS	TTT	P
2261	moushiokuru	もうしおくる	申し送る	Dpm	TRS	CCL	TTT	P
2273	moushisoeru	もうしそえる	申し添える	Mns	TRS	PLC	TTT	P
446	moushitateru	もうしたてる	申し立てる	Rst_ext, Lex	TRS	CCP	TTT	P
2269	moushitsugu	もうしつぐ	申し次ぐ	Mns	TRS	TRS	TTI	P
2270	moushitsukeru	もうしつける	申し付ける	Set	TRS	PLC	TTT	P
2272	moushitsutaeru	もうしつたえる	申し伝える	Mns	TRS	TRS	TTT	P
2263	moushiukeru	もうしうける	申し受ける	Set	TRS	TRS	TTT	P

2274	moushiwatasu	もうしわたす	申し渡す	Set	TRS	CCL	TTT	P
2280	mukaeireru	むかえいれる	迎え入れる	Mns, Dpm	TRS	CCL	TTT	#P/#R
2281	mukaeutsu	むかえうつ	迎え撃つ	Mns	TRS	TRS	TTT	P
2055	mukidasu	むきだす	剥き出す	Mns	CCL	CCL	TTT	R
1209	mukinaoru	むきなおる	向き直る	Mns	PST	COS	III	S
2634	mureatsumaru	むれあつまる	群れ集まる	#Mnr, #Pair	MOD	COL	III	P/R
1305	muretobu	むれとぶ	群れ飛ぶ	Mnr	MOD	MOM	III	P
1286	musebinaku	むせびなく	咽び泣く	Mnr	ACT	ACT	IEI	P
368	musekaeru	むせかえる	噎せ返る	Act_ext	ACT	PST	III	P
2045	mushiritoru	むしりとる	毟り取る	Mns	CCL	CCL	TTT	P
1652	musubiawaseru	むすびあわせる	結び合わせる	Mns	CMB	CMB	TTT	P
1653	musubitsukeru	むすびつける	結び付ける	Mns	CMB	PLC	TTT	P
1654	musubitsuku	むすびつく	結び付く	Cs	CMB	COS	TII	R
2430	nadamesukasu	なだめすかす	宥め賺す	Pair	TRS	TRS	TTT	P
1318	nadarekomu	なだれこむ	なだれ込む	Mnr	MOM	COL	IEI	#P/I
416	nadeageru	なであげる	撫で上げる	Mns, Dpm	TRS	CCL	TTT	#P
417	nadeorosu	なでおろす	撫で下ろす	Dpm	TRS	CCL	TTT	#P
418	nadetsukeru	なでつける	撫で付ける	Mns	TRS	PLC	TTT	P
2461	nagameakasu	ながめあかす	眺め明かす	Mnr, Mns	TRS	TRS	TTT	P
2514	nagameiru	ながめいる	眺め入る	Act_ext	TRS	COL	TII	P
2209	nagamekurasu	ながめくらす	眺め暮らす	Mnr	TRS	ACT	TII	P
2463	nagamemawasu	ながめまわす	眺め回す	Dpm	TRS	CCL	TTT	P
2464	nagameyaru	ながめやる	眺め遣る	Dpm	TRS	CCL	TTT	P
278	nagarearuku	ながれあるく	流れ歩く	Mnr	MOM	MOM	III	P
1366	nagarechiru	ながれちる	流れ散る	Mnr	MOM	COS/COL	III	P/R
1308	nagarederu	ながれでる	流れ出る	Mnr	MOM	COL	III	P
2066	nagarekomu	ながれこむ	流れ込む	Mnr, Dpm	CCL	COL	TEI	P
2439	nagareochiru	ながれおちる	流れ落ちる	Mnr	MOM	COL	III	P
1417	nagaresaru	ながれさる	流れ去る	Dpm	MOM	APR	III	R
420	nagaretadayoi	ながれただよい	流れ漂う	Pair	MOM	MOM	III	P
1322	nagaretsukiru	ながれつきる	流れ尽きる	Cs	MOM	COS	III	R
1347	nagaretsuku	ながれつく	流れ着く	Mnr	MOM	COL	III	R
1060	nagarewataru	ながれわたる	流れ渡る	Rst_ext	MOM	COL	III	P
1346	nagareyoru	ながれよる	流れ寄る	Mnr	MOM	COL	III	R
2064	nagashikomu	ながしこむ	流し込む	Mns, Dpm	CCL	COL	TET	P
2096	nagedasu	なげだす	投げ出す	Mns	CCL	CCL	TTT	R
2088	nageireru	なげいれる	投げ入れる	Mns	CCL	CCL	TTT	#P/I
2092	nagekakeru	なげかける	投げ掛ける	Dpm	CCL	CCP	TTT	#P/S
2097	nagekatsu	なげかつ	投げ勝つ	#Situ, #Mns	CCL	ACT	TII	#P/#R
2431	nagekiakasu	なげきあかす	嘆き明かす	Mnr	PSY	TRS	TTI	P
2432	nagekikanashimu	なげきかなしむ	嘆き悲しむ	Pair	PSY	PSY	TTT	P
2205	nagekikurasu	なげきくらす	嘆き暮らす	Mnr	PSY	ACT	TII	P
2093	nagekomu	なげこむ	投げ込む	Mns, Dpm	CCL	COL	TET	P
2091	nageorosu	なげおろす	投げ下ろす	Mns	CCL	CCL	TTT	P
2094	nagesuteru	なげすてる	投げ捨てる	Mns	CCL	TRS	TTT	P/I
2095	nagetaosu	なげたおす	投げ倒す	Mns	CCL	CCP	TTT	#P/I
2099	nagetobasu	なげとばす	投げ飛ばす	Mns	CCL	CCL	TTT	#P/I
2098	nagetsukeru	なげつける	投げ付ける	Dpm	CCL	PLC	TTT	P/I
2090	nageuru	なげうる	投げ売る	Mnr	CCL	TRS	TTT	P
2089	nageutsu	なげうつ	投げ打つ	Mns	CCL	TRS	TTT	P
707	nagiharau	なぎはらう	薙ぎ払う	Mns	CCS	CCL	TTT	P
1622	nagitaosu	なぎたおす	薙ぎ倒す	Mns	CCS	CCP	TTT	#P/I
2306	nagurikakaru	なぐりかかる	殴り掛かる	Dpm	TRS	PST	TII	P
421	nagurikomu	なぐりこむ	殴り込む	Dpm	TRS	COL	TEI	#P/I
422	nagurikorosu	なぐりころす	殴り殺す	Mns	TRS	CCS	TTT	P/I
423	naguritobasu	なぐりとばす	殴り飛ばす	Mns	TRS	CCL	TTT	#P
1047	naguritsukeru	なぐりつける	殴り付ける	Act_ext	TRS	PLC	TTT	P
1765	naimazeru	ないまぜる	綯い交ぜる	Mns, Lex	CMB	CCS	TTT	#
1321	nakaredasu	なかれだす	流れ出す	Mnr, Sytx	MOM	COL	ITI	P
2437	nakiakasu	なきあかす	泣き明かす	Mnr	ACT	TRS	ETI	P
1208	nakifusu	なきふす	泣き伏す	Mnr	ACT	PST	EII	P
2459	nakiharasu	なきはらす	泣き腫らす	Cs	ACT	CCS	ETT	R

2503	nakiiru	なきいる	泣き入る	Act_ext	ACT	COL	EII	#P
2449	nakijakuru	なきじゃくる	泣きじゃくる	Pair	ACT	ACT	ETI	P
2525	nakikaeru	なきかえる	泣き帰る	Mnr	ACT	COL	EII	R
2443	nakikanashimu	なきかなしむ	泣き悲しむ	Pair	ACT	PSY	ETI	P
2447	nakikomu	なきこむ	泣き込む	Mnr	ACT	COL	EEI	#
2208	nakikurasu	なきくらす	泣き暮らす	Mnr	ACT	ACT	EII	P
2197	nakikuruu	なきくるう	泣き狂う	Act_ext	ACT	COS	EII	P
2458	nakikutabireru	なきくたびれる	泣きくたびれる	Cs	ACT	COS	EII	R
2436	nakikutabireru	なきくたびれる	鳴きくたびれる	Cs	ACT	COS	III	R
2452	nakikuzureru	なきくずれる	泣き崩れる	Mnr	ACT	COS	EII	P
2460	nakinureru	なきぬれる	泣き濡れる	Cs	ACT	COS	EII	R
2442	nakiotosu	なきおとす	泣き落とす	Mns	ACT	CCL	ETT	P
2448	nakisakebu	なきさけぶ	泣き叫ぶ	Pair	ACT	ACT	ETI	P
2438	nakishizumu	なきしずむ	泣き沈む	#Pair	ACT	COL	EII	#P/#R
1468	nakisugaru	なきすがる	泣き縋る	Mnr	ACT	PST	EII	P
1231	nakitateru	なきたてる	泣き立てる	Act_ext	ACT	CCP	ETI	P
1213	nakitateru	なきたてる	鳴き立てる	Act_ext	ACT	CCP	ITI	P
1343	nakitsuku	なきつく	泣き付く	Mnr, Dpm	ACT	COS	EII	P
2440	nakiwameku	なきわめく	泣き喚く	Pair	ACT	TRS	ETI	P
2429	nanorideru	なのりでる	名乗り出る	Purp	TRS	COL	TII	#P
1124	narabetateru	ならべたてる	並べ立てる	Mns	CCP	CCP	TTT	P
258	narabiaruku	ならびあるく	並び歩く	Mnr	PST	MOM	III	P
2433	narabioyogu	ならびおよぐ	並び泳ぐ	Mnr	PST	MOM	III	P
1216	narabitatsu	ならびたつ	並び立つ	Mnr	PST	PST	III	P/S
1302	narabitobu	ならびとぶ	並び飛ぶ	Mnr	PST	MOM	III	P
837	narawasu	ならわす	書き習わす	Mns, Embd	TRS	CCS	TTN	#P
1496	nareshitashimu	なれしたしむ	慣れ親しむ	Pair	COS	ACT	III	#R
1498	nariagaru	なりあがる	成り上がる	Dpm, Lex	COS	COL	III	R
1444	narihateru	なりはてる	成り果てる	Rst_ext	COS	APR	III	R
1246	narihibiku	なりひびく	鳴り響く	**Cs**, Mnr, Pair, Rst_ext	PHN	PHN	III	P
1499	narikawaru	なりかわる	成り代わる	#Mns, Lex	COS	COS	III	R
1500	narisagaru	なりさがる	成り下がる	Dpm, Lex	COS	COL	III	R
1503	narisumasu	なりすます	成り済ます	#Rst_ext, Lex	COS	CCS	ITI	#P/#R
1951	naritatsu	なりたつ	成り立つ	Rst_ext, Lex	COS	PST	III	S
79	nariwataru	なりわたる	鳴り渡る	Rst_ext	PHN	COL	III	#P/#S
1497	nariyuku	なりゆく	成り行く	Dpm	COS	COL	III	#
622	nashikuzusu	なしくずす	済し崩す	Lex, #Act_ext	TRS	CCS	TTT	#
1144	nebaritsuku	ねばりつく	粘り着く	Mnr	PHN	COL	III	S
2417	nechigaeru	ねちがえる	寝違える	Cs	ACT	TRS	ITT	R
2424	negaiageru	ねがいあげる	願い上げる	Dpm	DES	CCL	TTI	#
2425	negaideru	ねがいでる	願い出る	Purp	DES	COL	TIT	R
2513	neiru	ねいる	寝入る	Act_ext	ACT	COL	III	P
2508	nejiageru	ねじあげる	捩じ上げる	#Mns, Dpm, Rst_ext	CCP	CCL	TTT	P
1732	nejiakeru	ねじあける	捩じ開ける	Mns	CCP	CCS	TTT	P
1739	nejifuseru	ねじふせる	捩じ伏せる	Mns	CCP	CCP	TET	P/R
1734	nejikiru	ねじきる	捻じ切る	Mns	CCP	CCS	TTT	P
1738	nejimageru	ねじまげる	捩じ曲げる	Mns	CCP	CCS	TTT	P/R
1797	nejirikomu	ねじりこむ	捩り込む	Mns, Dpm	CCP	COL	TET	P
1737	nejiritoru	ねじりとる	捩り取る	Mns	CCP	CCL	TTT	P
1736	nejitsukeru	ねじつける	捩じ付ける	Mns	CCP	PLC	TTT	P
401	nekashitsukeru	ねかしつける	寝かし付ける	#Embd	TRS	PLC	TTT	P
2100	nekomu	ねこむ	寝込む	Act_ext	ACT	COL	IEI	P
1494	nekorobu	ねころぶ	寝転ぶ	Mnr	ACT	PST	III	P
1516	nekorogaru	ねころがる	寝転がる	Mnr	ACT	MOM	III	P
2413	nemidareru	ねみだれる	寝乱れる	Situ	ACT	COS	III	R
2406	nemurikokeru	ねむりこける	眠りこける	Act_ext	ACT	PST	III	P/#S
2101	nemurikomu	ねむりこむ	眠り込む	Act_ext	ACT	COL	IEI	P
2421	neraisadameru	ねらいさだめる	狙い定める	#Mns, #Act_ext	TRS	CCS	TTT	P
1565	neraisumasu	ねらいすます	狙い澄ます	Act_ext	TRS	COS	TET	P
302	neriaruku	ねりあるく	練り歩く	Mnr	CCS	MOM	TII	P

1727	neriawaseru	ねりあわせる	練り合わせる	Mns	CCS	CMB	TTT	P
1728	nerikatameru	ねりかためる	練り固める	Mns	CCS	CCS	TTT	P
584	nerimawaru	ねりまわる	練り回る	Mnr, Dpm	CCS	COL	TII	P
1731	neriyuku	ねりゆく	練り行く	Mnr	CCS	COL	TII	N
2411	neshizumaru	ねしずまる	寝静まる	Situ	ACT	COS	III	R
2410	nesugosu	ねすごす	寝過ごす	Cs, Situ	ACT	TRS	ITI	R
2415	netoru	ねとる	寝取る	Mns	ACT	CCL	ITT	#P
2412	netsuku	ねつく	寝付く	#Embd	ACT	COS	III	R
1759	nidasu	にだす	煮出す	Mns	CCS	CCL	TTT	P
2207	niekaeru	にえかえる	煮え返る	Rst_ext	COS	PST	III	P
1382	nietagiru	にえたぎる	煮えたぎる	Rst_ext	COS	MOD	III	P
1380	nietatsu	にえたつ	煮え立つ	Rst_ext	COS	PST	III	P
1186	nigechiru	にげちる	逃げ散る	Mnr	COL	COS/COL	III	R
1173	nigedasu	にげだす	逃げ出す	Mnr, Sytx	COL	COL	ITI	I/R
1179	nigekaeru	にげかえる	逃げ帰る	Mnr	COL	COL	III	R
2266	nigekakureru	にげかくれる	逃げ隠れる	#Mnr, #Pair,	COL	ACT/COL	III	P
1171	nigekomu	にげこむ	逃げ込む	Dpm	COL	COL	IEI	R
938	nigemawaru	にげまわる	逃げ回る	Dpm	COL	COL	III	P
1168	nigeochiru	にげおちる	逃げ落ちる	Dpm	COL	COL	III	R
1176	nigesaru	にげさる	逃げ去る	Mnr	COL	APR	III	R
1174	nigeuseru	にげうせる	逃げ失せる	#Prcd	COL	APR	III	R
412	nigiriawaseru	にぎりあわせる	握り合わせる	Mns	TRS	CMB	TTT	P
1675	nigirishimeru	にぎりしめる	握り締める	Act_ext	TRS	CCS	TTT	P
414	nigiritsubusu	にぎりつぶす	握り潰す	Mns	TRS	CCS	TTT	P
1313	nijimideru	にじみでる	滲み出る	Mnr	COS	COL	III	P/R
644	nijiriyoru	にじりよる	躙り寄る	Mnr	MOM	COL	III	P
1086	nikayou	にかよう	似通う	#Dpm	ETC	COL	III	S
1755	nikiru	にきる	煮切る	U, Lex	CCS	CCS	TTT	#P
1756	nikoboreru	にこぼれる	煮零れる	Situ	CCS	MOM	TII	P/R
1757	nikobosu	にこぼす	煮零す	Cs, Situ	CCS	CCL	TTT	R
1945	nikomu	にこむ	煮込む	Act_ext	CCS	COL	TEI	P
2371	nioikoboreru	においこぼれる	匂い零れる	Act_ext	SNS	MOM	III	S
2428	niramisueru	にらみすえる	睨み据える	#Mns, #Act_ext	TRS	PLC	TTT	P
1082	niramitsukeru	にらみつける	睨み付ける	Act_ext	TRS	PLC	TTT	P
1763	nishimeru	にしめる	煮染める	Mns	CCS	CCS	TTT	P
1523	nitataseru	にたたせる	煮立たせる	#Rst_ext	CCS	CCP	TTT	P
1760	nitateru	にたてる	煮立てる	Mns	CCS	CCP	TTT	P
1761	nitsukeru	につける	煮付ける	U, Lex	CCS	PLC	TTT	P
1764	nitsumaru	につまる	煮詰まる	Cs	CCS	COS	TII	R
1118	nitsumeru	につめる	煮詰める	Mns	CCS	CCS	TTT	P
1188	nobetateru	のべたてる	述べ立てる	Act_ext	TRS	CCP	TTT	P
2649	nobiagaru	のびあがる	伸び上がる	Dpm	COS	COL	III	P
847	noboritsumeru	のぼりつめる	上り詰める	Act_ext	COL	CCS	ITI	R
2708	noboseagaru	のぼせあがる	逆上せ上がる	Rst_ext	PSY	COL	III	P/R
2279	nokkakaru	のっかかる	乗っ掛かる	Mnr	ACT	PST	III	P/S
1658	nomerikomu	のめりこむ	のめり込む	Mnr	PST	COL	IEI	#P/#S
388	nomiakasu	のみあかす	飲み明かす	Mns	TRS	TRS	TTI	N
172	nomiaruku	のみあるく	飲み歩く	#Dpm, Acmp_act	TRS	MOM	TIT	P
396	nomihosu	のみほす	飲み干す	Mns	TRS	CCS	TTT	P/R
1532	nomikomu	のみこむ	飲み込む	#Mns, Dpm	TRS	COL	TET	P
392	nomikudasu	のみくだす	飲み下す	Mns	TRS	CCL	TTT	P
397	nomimawasu	のみまわす	飲み回す	Dpm	TRS	CCL	TTT	P
391	nomitaosu	のみたおす	飲み倒す	Prcd	TRS	CCP	TTE	I/#R
399	nomitsubureru	のみつぶれる	飲み潰れる	Cs	TRS	COS	TII	R
394	nomitsubusu	のみつぶす	飲み潰す	Mns	TRS	CCS	TTT	P/R
1419	noriagaru	のりあがる	乗り上がる	Dpm	ACT	COL	III	R
2382	noriageru	のりあげる	乗り上げる	Mns	ACT	CCL	ITT	#P/R
2394	noridasu	のりだす	乗り出す	Mnr, Dpm, Sytx	ACT	CCP/CCL	ITI	P
2384	noriireru	のりいれる	乗り入れる	Mnr, Dpm	ACT	CCL	ITE	P
2454	noriiru	のりいる	乗り入る	Mnr	ACT	COL	III	#
2385	norikaeru	のりかえる	乗り換える	Mns	ACT	CCS	ITT	P
2386	norikiru	のりきる	乗り切る	Lex, #Sytx	ACT	CCS	ITI	#P/k#

2174	norikoeru	のりこえる	乗り越える	Mns	ACT	COL	III	P/R
2389	norikomu	のりこむ	乗り込む	Mnr	ACT	COL	IEI	P
2405	norikosu	のりこす	乗り越す	Mnr, #Dpm	ACT	COL	II#T	R
2387	norikumu	のりくむ	乗り組む	U, Lex	ACT	CMB	ITI	#P
590	norimawaru	のりまわる	乗り回る	Dpm	ACT	COL	III	P
2403	norimawasu	のりまわす	乗り回す	Dpm	ACT	CCL	ITT	P
2402	norinarasu	のりならす	乗り馴らす	Mns	ACT	CCS	ITT	P
2390	norishizumeru	のりしずめる	乗り静める	Mns	ACT	CCS	ITT	P
2391	norisugosu	のりすごす	乗り過ごす	Situ	ACT	TRS	ITI	R
2392	norisuteru	のりすてる	乗り捨てる	Prcd	ACT	TRS	ITT	#P
2400	noritsubusu	のりつぶす	乗り潰す	Mns, #Act_type	ACT	CCS	ITT	#
2396	noritsugu	のりつぐ	乗り継ぐ	Mns	ACT	CMB	ITI	P
2398	noritsukeru	のりつける	乗り付ける	Mns	ACT	PLC	ITT	#R
2482	noriutsuru	のりうつる	乗り移る	Mns	ACT	COL	III	P
2381	noroikorosu	のろいころす	呪い殺す	Mns	TRS	CCS	TTT	P
1723	noshiagaru	のしあがる	伸し上がる	Mnr	COL	COL	EII	P
1724	noshiageru	のしあげる	伸し上げる	Mnr	COL	CCL	ETT	#P
173	noshiaruku	のしあるく	伸し歩く	Mnr	MOM	MOM	EII	P
1725	noshikakaru	のしかかる	伸し掛かる	Mnr	PST	PST	EII	P/R
594	notauchimawaru	のたうちまわる	のたうち回る	Dpm	ACT	COL	III	P
2395	nottoru	のっとる	乗っ取る	Mns	ACT	CCL	ITT	R
2154	nozokikomu	のぞきこむ	覗き込む	Dpm	TRS	COL	TEI	P
2408	nozomimiru	のぞみみる	望み見る	Mnr	DES	TRS	TTT	P
2748	nugichirasu	ぬぎちらす	脱ぎ散らす	Mns, Dpm	#CCP	CCS/CCL	TTT	R
2745	nugikaeru	ぬぎかえる	脱ぎ換える	Mns	#CCP	CCS	TTT	P
2747	nugisoroeru	ぬぎそろえる	脱ぎ揃える	Prcd	#CCP	CCS	TTT	P
2746	nugisuteru	ぬぎすてる	脱ぎ捨てる	Mns, #Prcd	#CCP	TRS	TTT	P
241	nuguisaru	ぬぐいさる	拭い去る	Mns, Rst_ext	TRS	APR	TIT	#P/I
2083	nuguitoru	ぬぐいとる	拭い取る	Mns	CCL	CCL	TTT	P
406	nuiawaseru	ぬいあわせる	縫い合わせる	Mns	TRS	CMB	TTT	P
407	nuiireru	ぬいいれる	縫い入れる	Mns	TRS	CCL	TTT	P
1533	nuikomu	ぬいこむ	縫い込む	#Mns, Dpm	TRS	COL	TET	P
410	nuitoru	ぬいとる	縫い取る	Mns	TRS	CCL	TTT	P
411	nuitsukeru	ぬいつける	縫い付ける	Mns	TRS	PLC	TTT	P
1015	nukeagaru	ぬけあがる	抜け上がる	Rst_ext	COL	COL	III	R
1164	nukedasu	ぬけだす	抜け出す	Mnr	COL	COL	ITI	P
1166	nukederu	ぬけでる	抜け出る	Mnr	COL	COL	III	#
1605	nukekawaru	ぬけかわる	抜け変わる	Cs, Prcd	COL	COS	TII	P/R
1167	nukeochiru	ぬけおちる	抜け落ちる	Cs, Prcd, Dpm	COL	COL	III	R
2085	nukidasu	ぬきだす	抜き出す	Mns	CCL	CCL	TTT	P/I
1262	nukideru	ぬきでる	抜き出る	Mnr	COL	COL	TII	S
2087	nukihanatsu	ぬきはなつ	抜き放つ	#Mns, #Act_ext	CCL	CCS	TTT	#P/#R
2084	nukikazasu	ぬきかざす	抜きかざす	Prcd	CCL	CCP	TTT	#P/#R
2086	nukitoru	ぬきとる	抜き取る	Mns	CCL	CCL	TTT	P/R
1513	nuretooru	ぬれとおる	濡れ透る	Mnr, Cs	COS	COL	III	S
1742	nurikakusu	ぬりかくす	塗り隠す	Mns	CCS	CCL	TTT	P
1743	nurikatameru	ぬりかためる	塗り固める	Mns	CCS	CCS	TTT	P
1752	nurikawaru	ぬりかわる	塗り替わる	Cs	CCS	COS	TII	R
1744	nurikesu	ぬりけす	塗り消す	Mns	CCS	CCS	TTT	P
1746	nurikomeru	ぬりこめる	塗り込める	Mns, #Dpm	CCS	CCL	TTT	P
1811	nurikomu	ぬりこむ	塗り込む	Mns, Dpm	CCS	COL	TET	P
1524	nuritakuru	ぬりたくる	塗り手繰る	Act_ext	CCS	TRS	TTT	P
1127	nuritateru	ぬりたてる	塗り立てる	Act_ext	CCS	CCP	TTT	P
1750	nuritsubusu	ぬりつぶす	塗り潰す	Mns	CCS	CCS	TTT	P
1749	nuritsukeru	ぬりつける	塗り付ける	Mns, #Dpm	CCS	PLC	TTT	P
1751	nuriwakeru	ぬりわける	塗り分ける	Mns	CCS	CCS	TTT	P
402	nusumidasu	ぬすみだす	盗み出す	Mns	TRS	CCL	TTT	P
404	nusumimiru	ぬすみみる	盗み見る	Mnr	TRS	TRS	TTT	P
403	nusumitoru	ぬすみとる	盗み取る	Mns	TRS	CCL	TTT	P/R
2720	obieagaru	おびえあがる	怯え上がる	Rst_ext	PSY	COL	III	S
876	obikidasu	おびきだす	誘き出す	Mns	TRS	CCL	TTT	P
875	obikiireru	おびきいれる	誘き入れる	Mns	TRS	CCL	TTT	P

865	obikiyoseru	おびきよせる	誘き寄せる	Mns	TRS	CCL	TET	P
2628	oboreshinu	おぼれしぬ	溺れ死ぬ	Cs	#COS	COS	III	R
1615	ochiau	おちあう	落ち合う	Mns	COL	ACT	III	#P
1616	ochiiru	おちいる	落(陥)ち入る	Cs	COL	COL	III	R
1614	ochikasanaru	おちかさなる	落ち重なる	Prcd	COL	PST	III	R
1617	ochikomu	おちこむ	落ち込む	Cs, Dpm	COL	COL	IEI	#P/#R
855	ochitsukiharau	おちつきはらう	落ち着き払う	Rst_ext	PSY	#CCL	ITI	S
1612	ochitsuku	おちつく	落ち着く	#Prcd	COL	COL	III	R
1613	ochiyuku	おちゆく	落ち行く	Dpm	COL	COL	III	N
2707	odoriagaru	おどりあがる	躍り上がる	Dpm	ACT/MOD	COL	III	P
2277	odorideru	おどりでる	躍り出る	Mnr	ACT/MOD	COL	III	R
2404	odorikakaru	おどりかかる	躍り掛かる	Dpm	ACT/MOD	PST	III	P
2632	odorikomu	おどりこむ	躍り込む	Mnr	ACT	COL	IEI	#P/I
2198	odorikuruu	おどりくるう	踊り狂う	Act_ext	ACT	COS	III	P
621	odorimawaru	おどりまわる	踊り回る	Dpm	ACT	COL	III	P
1137	odorokiakireru	おどろきあきれる	驚き呆れる	Pair	PSY	PSY	III	#R
2522	odorokiiru	おどろきいる	驚き入る	Act_ext	PSY	COL	III	#P/#R
1098	odoshitsukeru	おどしつける	脅し付ける	Act_ext	TRS	PLC	TTT	P
2638	ogamitaosu	おがみたおす	拝み倒す	Mns	TRS	CCP	TTT	P
2506	oiageru	おいあげる	追い上げる	#Mns, Dpm, Rst_ext	COL	CCL	TTT	P
941	oichirasu	おいちらす	追い散らす	Mns	TRS	CCS/CCL	TTT	P
939	oidasu	おいだす	追い出す	Mns	TRS	CCL	TTT	P
947	oihanasu	おいはなす	追い放す	Mns	TRS	CCS	TTT	P
541	oiharau	おいはらう	追い払う	Mns	TRS	CCL	TTT	P
1560	oihateru	おいはてる	老い果てる	Rst_ext	COS	APR	III	R
936	oikaesu	おいかえす	追い返す	Mnr	TRS	CCL	TTT	#P/I
937	oikakeru	おいかける	追い掛ける	Dpm	TRS	CCP	TTT	P
2118	oikomu	おいこむ	老い込む	Rst_ext	COS	COL	IEI	R
1602	oikomu	おいこむ	追い込む	Mns, Dpm	TRS	COL	TET	P
950	oikosu	おいこす	追い越す	Mns	TRS	COL	TIT	P/I
1581	oikuchiru	おいくちる	老い朽ちる	Cs	COS	COS	III	R
946	oimawasu	おいまわす	追い回す	Dpm	TRS	CCL	TTT	P
944	oinuku	おいぬく	追い抜く	Mns	TRS	CCL	TTT	P
935	oiotosu	おいおとす	追い落とす	Mns	TRS	CCL	TTT	I
1473	oishigeru	おいしげる	生い茂る	Pair, Cs, Prcd	APR	PHN	III	R
1451	oisugaru	おいすがる	追い縋る	Mnr	TRS	PST	TII	P
1116	oitateru	おいたてる	追い立てる	Act_ext	TRS	CCP	TTT	P
942	oitsuku	おいつく	追い付く	Cs, Mns, Prcd	TRS	COS	TII	P/R
827	oitsumeru	おいつめる	追い詰める	Act_ext	TRS	CCS	TTT	P/#R
945	oiyaru	おいやる	追い遣る	Mns	TRS	CCL	TTT	P
1255	okiagaru	おきあがる	起き上がる	Dpm	PST	COL	III	R
1256	okikaeru	おきかえる	起き返る	Mns	PST	PST	III	P/R
2037	okikaeru	おきかえる	置き換える	Mns	PLC	CCS	TTT	P
2038	okikawaru	おきかわる	置き換わる	Cs	PLC	COS	TII	R
1257	okinaoru	おきなおる	起き直る	Mns	PST	COS	III	R/S
2040	okisaru	おきさる	置き去る	Prcd	PLC	APR	TIT	R
168	okkabuseru	おっかぶせる	押っ被せる	Mnr_E	AFF	CCP	TTT	P/R
949	okkakeru	おっかける	追っ掛ける	Dpm	TRS	CCP	TTT	P
2148	okuridasu	おくりだす	送り出す	Mns	CCL	CCL	TTT	P
2077	okurikomu	おくりこむ	送り込む	Mns, Dpm	CCL	COL	TET	P
2150	okuritodokeru	おくりとどける	送り届ける	#Dpm	CCL	CCL	TTT	R
2149	okuritsukeru	おくりつける	送り付ける	Dpm	CCL	PLC	TTT	R
2716	omoiagaru	おもいあがる	思い上がる	Act_ext	MNT	COL	TII	R
2622	omoiamaru	おもいあまる	思い余る	#Act_type, Lex	MNT	EXT	TIN	N
2614	omoiataru	おもいあたる	思い当たる	Act_type	MNT	#COL	TII	N
2612	omoidasu	おもいだす	思い出す	Act_type	MNT	CCL	TTT	P
2599	omoiegaku	おもいえがく	思い描く	Act_type	MNT	TRS	TTT	P
2625	omoihakaru	おもいはかる	思い量る	Mns	MNT	MNT	TTT	P
2615	omoiitaru	おもいいたる	思い至る	Act_type	MNT	COL	TII	#R
2602	omoikiru	おもいきる	思い切る	#Act_type, Lex	MNT	CCS	TTT	#R
2595	omoikogareru	おもいこがれる	思い焦がれる	#Situ, #Act_type	MNT	PSY	TII	#P/#S

2367	omoikomu	おもいこむ	思い込む	Act_ext	MNT	COL	TEI	#S
2604	omoikuraberu	おもいくらべる	思い比べる	Mns	MNT	TRS	TTT	P
2626	omoimegurasu	おもいめぐらす	思い巡らす	Dpm	MNT	CCL	TTT	P
2620	omoinayamu	おもいなやむ	思い悩む	Pair, #Act_type	MNT	PSY	TEI	#P/#S
3092	omoinokosu	おもいのこす	思い残す	Act_type	MNT	CCS	TTT	#R
2600	omoiokosu	おもいおこす	思い起こす	#Act_type	MNT	CCP	TTT	P
2608	omoisadameru	おもいさだめる	思い定める	Act_type	MNT	CCS	TTT	R
2609	omoishiraseru	おもいしらせる	思い知らせる	Act_type	MNT	OCS	TTI	P
2610	omoishiru	おもいしる	思い知る	Act_type	MNT	TRS	TTT	#
1623	omoisugosu	おもいすごす	思い過ごす	Act_ext	MNT	TRS	TTI	#P
2613	omoitatsu	おもいたつ	思い立つ	#Act_type, Lex	MNT	PST	TIT	#
2619	omoitodomaru	おもいとどまる	思い止まる	Act_type	MNT	EXT	TIT	#P/#S
2617	omoitsuku	おもいつく	思い付く	Act_type	MNT	COS	TIT	R
960	omoitsumeru	おもいつめる	思い詰める	Act_ext	MNT	CCS	TTI	#P/#S
2597	omoiukaberu	おもいうかべる	思い浮かべる	Act_type	MNT	CCL	TTT	P
2618	omoiukabu	おもいうかぶ	思い浮かぶ	Act_type	MNT	PHN	TII	R
2596	omoiwazurau	おもいわずらう	思い煩う	Pair, #Act_type	MNT	PSY	TTT	#P/#S
2627	omoiyaru	おもいやる	思い遣る	Dpm	MNT	CCL	TTT	#P/#S
2742	ooikabusaru	おおいかぶさる	覆い被さる	Mnr	#CCS	PST	TII	R/S
2741	ooikabuseru	おおいかぶせる	覆い被せる	Mns	#CCS	CCP	TTT	P
2740	ooikabusu	おおいかぶす	覆い被す	Mnr	#CCS	CCP	TTT	P
2739	ooikakusu	おおいかくす	覆い隠す	Mns	#CCS	CCL	TTT	P/R
2639	oosetsukeru	おおせつける	仰せ付ける	Mns	TRS	PLC	TTT	P
1576	orekomu	おれこむ	折れ込む	Cs, Dpm	COS	COL	IEI	R
1577	oremagaru	おれまがる	折れ曲がる	Cs	COS	COS	III	R/S
872	oridasu	おりだす	織り出す	Mns, Dpm	TRS	CCL	TTT	#P/#R
2042	oriiru	おりいる	折り入る	U, Lex	CCS	COL	TII	#
1923	orikaesu	おりかえす	折り返す	Mnr	CCS	CCP	TTT	P/R
1929	orikasanaru	おりかさなる	折り重なる	Mnr	CCS	PST	TII	R
1924	orikasaneru	おりかさねる	折り重ねる	Mns	CCS	CCP	TTT	P
1593	orikomu	おりこむ	織り込む	Mns, Dpm	TRS	COL	TET	P
1928	orikomu	おりこむ	折り込む	Cs, Dpm	CCS	COL	TET	P
1925	orimageru	おりまげる	折り曲げる	Mns	CCS	CCS	TTT	P
873	orimazeru	おりまぜる	織り交ぜる	Mns	TRS	CCS	TTT	#P/#R
874	orinasu	おりなす	織り成す	Mns	TRS	CCS	TTT	S
1927	oritatamu	おりたたむ	折り畳む	Mns	CCS	CCS	TTT	P
81	oritatsu	おりたつ	降り立つ	Prcd	COL	PST	III	P
1926	oritoru	おりとる	折り取る	Mns	CCS	CCL	TTT	P
932	osaekomu	おさえこむ	押さえ込む	Mns	TRS	COL	TET	P
933	osaetsukeru	おさえつける	押さえ付ける	Mns	TRS	PLC	TTT	P
2278	osamarikaeru	おさまりかえる	納まり返る	Rst_ext	COS	PST	III	R
883	oshiageru	おしあげる	押し上げる	Mns	TRS	CCL	TTT	P
882	oshiakeru	おしあける	押し開ける	Mns	TRS	CCS	TTT	P
884	oshiateru	おしあてる	押し当てる	Mnr	TRS	TRS	TTT	P
879	oshiateru	おしあてる	推し当てる	Mns	MNT	TRS	TTT	P
103	oshidamaru	おしだまる	押し黙る	Mnr	TRS	ACT	TII	P
901	oshidasu	おしだす	押し出す	Mns	TRS	CCL	TTT	P
2574	oshiearuku	おしえあるく	教え歩く	Mnr, Acmp_act	TRS	MOM	TIT	P
1599	oshiekomu	おしえこむ	教え込む	Mns	TRS	COL	TET	P
929	oshiemichibiku	おしえみちびく	教え導く	Pair	TRS	TRS	TTT	P
389	oshifuseru	おしふせる	押し伏せる	Mns	TRS	CCP	TET	P
881	oshihakaru	おしはかる	推し量る	Mns	MNT	MNT	TTT	P
167	oshihhanasu	おしっはなす	押っ放す	Mnr_E	AFF	CCS	TTT	P
917	oshihiraku	おしひらく	押し開く	Mns	TRS	CCS	TET	#P
919	oshihirogeru	おしひろげる	押し広げる	Mns	TRS	CCS	TTT	P
885	oshiireru	おしいれる	押し入れる	Mns	TRS	CCL	TTT	P
924	oshiiru	おしいる	押し入る	Mnr	TRS	COL	TII	P
906	oshiitadaku	おしいただく	押し頂く	Mnr	TRS	CCL	TTT	#P/#R
888	oshikakeru	おしかける	押し掛ける	Dpm	TRS	CCP	TTI	#P/I
887	oshikakusu	おしかくす	押し隠す	Mnr	TRS	CCL	TTT	P
889	oshikatameru	おしかためる	押し固める	Mns	TRS	CCS	TTT	P
890	oshikiru	おしきる	押し切る	Mns, Lex, Sytx	TRS	CCS	TTT	#P

893	oshikomeru	おしこめる	押し込める	Mns	TRS	CCL	TTT	P
1597	oshikomu	おしこむ	押し込む	Mns, Dpm	TRS	COL	TET	P
894	oshikorogasu	おしころがす	押し転がす	Mns	TRS	CCL	TTT	P
895	oshikorosu	おしころす	押し殺す	Mns	TRS	CCS	TTT	P
916	oshimageru	おしまげる	押し曲げる	Mns	TRS	CCS	TTT	P
166	oshimawasu	おしまわす	押し回す	Mnr_E	AFF	CCL	TTT	P
923	oshimodosu	おしもどす	押し戻す	Mns	TRS	CCL	TTT	P
910	oshinagasu	おしながす	押し流す	Mns	TRS	CCL	TTT	P
912	oshinarasu	おしならす	押し均す	Mns	TRS	CCS	TTT	P
918	oshinobasu	おしのばす	押し延ばす	Mns	TRS	CCS	TTT	P
914	oshinokeru	おしのける	押し退ける	Mns	TRS	CCL	TTT	P
920	oshinuguu	おしぬぐう	押し拭う	Mns	TRS	CCL	TTT	P
896	oshisageru	おしさげる	押し下げる	Mns	TRS	CCL	TTT	P
897	oshisasaeru？	おしささえる？	押し支える	Mns	TRS	TRS	TTT	P
925	oshisemaru	おしせまる	押し迫る	Mnr	TRS	MOM	TEI	#P
922	oshishizumaru	おししずまる	押し静まる	Mnr	TRS	COS	TII	R
898	oshishizumeru	おししずめる	押し沈める	Mns	TRS	CCL	TTT	P
899	oshishizumeru	おししずめる	押し鎮める	Mns	TRS	CCS	TTT	P/R
880	oshisusumeru	おしすすめる	推し進める	Mns, #Dpm	TRS	CCL	TTT	P
448	oshisusumu	おしすすむ	押し進む	Mnr	TRS	COL	TII	P
900	oshitaosu	おしたおす	押し倒す	Mns	TRS	CCP	TTT	P/I
902	oshitateru	おしたてる	押し立てる	Mnr	TRS	CCP	TTT	P
921	oshitodomeru	おしとどめる	押し止める	Mns	TRS	CCS	TTT	P/R
907	oshitomeru	おしとめる	押し止める	Mns	TRS	CCS	TTT	P/R
904	oshitsubusu	おしつぶす	押し潰す	Mns	TRS	CCS	TTT	P
903	oshitsukeru	おしつける	押し付ける	Mns	TRS	PLC	TTT	P
886	oshitsumaru	おしつまる	押し詰まる	Mnr	TRS	COS	TII	P
905	oshitsumeru	おしつめる	押し詰める	Mns	TRS	CCS	TTT	P
927	oshitsutsumu	おしつつむ	押し包む	Mnr	TRS	CCS	TTT	#P
911	oshiwakeru	おしわける	押し分ける	Mns	TRS	CCS	TTT	P
915	oshiyaburu	おしやぶる	押し破る	Mns	TRS	CCS	TTT	#P/R
913	oshiyaru	おしやる	押し遣る	Mns	TRS	CCL	TTT	P
766	oshiyoseru	おしよせる	押し寄せる	#Mnr, #Dpm	TRS	COL	TEI	P
509	osoikakaru	おそいかかる	襲い掛かる	Dpm	TRS	PST	TII	P
2485	osoreiru	おそれいる	恐れ入る	Act_ext	PSY	COL	TII	#P/#S
1139	osoreononoku	おそれおののく	恐れ戦く	Pair	PSY	PSY	TII	#P
2146	otoshiireru	おとしいれる	落とし入れる	Mns	CCL	CCL	TTT	P
973	oyogimawaru	およぎまわる	泳ぎ回る	Mnr, Acmp_act	MOM	COL	III	P
1385	oyogitsukareru	およぎつかれる	泳ぎ疲れる	Cs	MOM	COS	III	R
637	oyogiwataru	およぎわたる	泳ぎ渡る	Mns	MOM	COL	III	P
978	saekaeru	さえかえる	冴え返る	Rst_ext	COS	PST	III	R
774	saewataru	さえわたる	冴え渡る	Rst_ext	COS	COL	III	S
665	sagashiateru	さがしあてる	探し当てる	Mns	TRS	TRS	TTT	R
668	sagashidasu	さがしだす	探し出す	Mns	TRS	CCL	TTT	R
930	sagashimawaru	さがしまわる	探し回る	Mnr, Acmp_act	TRS	COL	TIT	P
666	sagashiyuku	さがしゆく	探し行く	Dpm	TRS	COL	TIT	N
2133	sagedomaru	さげどまる	下げ止まる	#Prcd	CCL	COS	TII	R
2134	sagewatasu	さげわたす	下げ渡す	#方向, U	CCL	CCL	TTT	P
663	saguriateru	さぐりあてる	探り当てる	Mns	TRS	TRS	TTT	R
664	saguridasu	さぐりだす	探り出す	Mns, Dpm	TRS	CCL	TTT	P
2434	sakaraioyogu	さからいおよぐ	逆らい泳ぐ	Mnr	ACT	MOM	III	P
1091	sakebimawaru	さけびまわる	叫び回る	Dpm	TRS	COL	TII	P
2566	sakiafureru	さきあふれる	咲き溢れる	Act_ext	COS	MOM	III	P/R
424	sakihokoru	さきほこる	咲き誇る	Rst_ext	COS	TRS	ITI	#P
2374	sakikoboreru	さきこぼれる	咲き零れる	Rst_ext	COS	MOM	III	#P
2420	sakikuruu	さきくるう	咲き狂う	Act_ext	COS	COS	III	#P
461	sakimidareru	さきみだれる	咲き乱れる	Rst_ext	COS	COS	III	#P
1117	sakiniou	さきにおう	咲き匂う	Pair	COS	SNS	III	#S
1119	sakinokoru	さきのこる	咲き残る	Situ	COS	EXT	III	R
3091	sakiokureru	さきおくれる	咲き遅れる	#Embd	COS	COS	III	#R
2004	sakisorou	さきそろう	咲き揃う	Rst_ext	COS	COS	III	P/R
771	sakiwataru	さきわたる	咲き渡る	Rst_ext	COS	COL	III	S

642	sarakedasu	さらけだす	さらけ出す	Mnr	TRS	CCL	TTT	R
1489	sasakuretatsu	ささくれたつ	ささくれ立つ	Mnr	COS	PST	III	R
2043	sashiageru	さしあげる	差し上げる	Mnr	CCP	CCL	ETT	P
2735	sashiataru	さしあたる	差し当たる	Mnr_E	AFF	#ACT	EII	N
652	sashiateru	さしあてる	差し当てる	Mns, Mnr	CCP	CCL	ETT	P
661	sashidasu	さしだす	差し出す	Mnr	CCP	CCL	ETT	R
2728	sashideru	さしでる	差し出る	Mnr_E	AFF	COL	EII	P
2726	sashihasamu	さしはさむ	差し挟む	Mnr	CCL	TRS	ETT	P
653	sashiireru	さしいれる	差し入れる	Mnr, Dpm	CCP	CCL	ETT	P
111	sashiiru	さしいる	差し入る	Mnr	COL	COL	EII	P
656	sashikaeru	さしかえる	差し替える	Mns, Mnr	CCL	CCS	ETT	P
655	sashikaesu	さしかえす	差し返す	Mnr	CCP	CCL	ETT	P
1276	sashikakaru	さしかかる	差し掛かる	Mnr	CCP	PST	EII	P
658	sashikakeru	さしかける	差し掛ける	Mnr	CCP	CCP	ETT	P
657	sashikakusu	さしかくす	差し隠す	Mnr	CCP	CCL	ETT	P
2733	sashikatameru	さしかためる	差し固める	Mnr_E	AFF	CCS	ETT	P/R
2732	sashikawaru	さしかわる	差し替わる	Mnr_E	CCL	COS	EII	R
659	sashikazasu	さしかざす	差しかざす	Mnr	CCP	CCP	ETT	P
1518	sashikomu	さしこむ	差し込む	Dpm	CCP/COL	COL	EEE	P
646	sashikorosu	さしころす	刺し殺す	Mns	TRS	CCS	TTT	#P/I
2731	sashikuru	さしくる	差し繰る	Mnr_E	AFF	TRS	ETT	#
1278	sashimaneku	さしまねく	差し招く	Mns	CCP	TRS	ETI	P
2725	sashimawasu	さしまわす	差し回す	Mnr	CCP	CCL	ETT	P
2723	sashimodosu	さしもどす	差し戻す	#Mnr	CCP	CCL	ETT	#P/#R
2724	sashimukeru	さしむける	差し向ける	Mnr	CCP	CCP	ETI	P
662	sashinoberu	さしのべる	差し伸べる	Mnr	CCP	CCS	ETT	P/R
1274	sashioku	さしおく	差し置く	Mnr_E	AFF	PLC	ETT	#
654	sashiorosu	さしおろす	差し下ろす	Mns, Mnr	CCP	CCL	ETT	P
2734	sashiosaeru	さしおさえる	差し押さえる	Mnr_E	AFF	TRS	ETT	P
2730	sashisawaru	さしさわる	差し障る	Mnr_E	AFF	ETC	EII	N
2737	sashisemaru	さしせまる	差し迫る	Mnr_E	AFF	MOM	EEI	P
1275	sashishimesu	さししめす	指し示す	Mns	TRS	ACT	ETT	P
660	sashisoeru	さしそえる	差し添える	Mns, Mnr	CCP	PLC	ETI	P
1277	sashitateru	さしたてる	差し立てる	Mnr_E	CCP	CCP	ETT	P
648	sashitomeru	さしとめる	刺し止める	Mns	TRS	CCS	TTT	P/R
2727	sashitomeru	さしとめる	差し止める	Mnr_E	AFF	CCS	ETT	P
647	sashitoosu	さしとおす	刺し通す	Mns	TRS	CCL	TTT	#P
2729	sashitsukaeru	さしつかえる	差し支える	Mnr_E	CCP	TRS	ETI	P
649	sashitsuranuku	さしつらぬく	刺し貫く	Mns	TRS	CCL	TTT	#P
2722	sashiwatasu	さしわたす	差し渡す	Mnr	CCP	CCL	ETT	P
645	sasoidasu	さそいだす	誘い出す	Mns	TRS	CCL	TTT	P
1588	sasoikomu	さそいこむ	誘い込む	#Mns, Dpm	TRS	COL	TET	P
106	satorisumasu	さとりすます	悟り澄ます	Rst_ext	TRS	COS	TET	P
1307	sawagitateru	さわぎたてる	騒ぎ立てる	Act_ext	ACT	CCP	ITT	P
2499	sebichitoru	せびちとる	せびり取る	Mns	TRS	CCL	TTT	P
2504	sekiageru	せきあげる	咳き上げる	Dpm	ACT	CCL	ITI	P
2516	sekiiru	せきいる	咳き入る	Act_ext	ACT	COL	III	P
2128	sekikomu	せきこむ	咳き込む	Act_ext	ACT	COL	IEI	P
2343	sekikomu	せきこむ	急き込む	Act_ext	PSY	COL	EEI	P
1285	sekitateru	せきたてる	急き立てる	Act_ext	PSY	CCP	ETT	P
1520	sekitatsu	せきたつ	急き立つ	Act_ext	PSY	PST	EII	P
1834	sekitomeru	せきとめる	堰き止める	Mns	CCS	CCS	TTT	P/R
101	semarikuru	せまりくる	迫り来る	Mnr, Dpm	MOM	COL	EII	P
592	semehorobosu	せめほろぼす	攻め滅ぼす	Mns	TRS	CCS	TTT	#P/R
2493	semeiru	せめいる	攻め入る	Mns, Dpm	TRS	COL	TII	P
505	semekakaru	せめかかる	攻め掛かる	Dpm	TRS	PST	TII	P
585	semekakeru	せめかける	攻め掛ける	Dpm	TRS	CCP	TTI	P
577	semekakeru	せめかける	責め掛ける	Dpm	TRS	CCP	TTI	P
1564	semekomu	せめこむ	攻め込む	Dpm	TRS	COL	TEI	P
579	semekorosu	せめころす	責め殺す	Mns	TRS	CCS	TTT	P
1267	semenoboru	せめのぼる	攻め上る	#Purp, Dpm	TRS	COL	TII	P
582	semeotosu	せめおとす	攻め落とす	Mns	TRS	CCL	TTT	P

578	semesainamu	せめさいなむ	責め苛む	Pair	TRS	CPS	TTT	P
1110	semetateru	せめたてる	攻め立てる	Act_ext	TRS	CCP	TTT	P
1109	semetateru	せめたてる	責め立てる	Act_ext	TRS	CCP	TTT	P
591	semetoru	せめとる	攻め取る	Mns	TRS	CCL	TTT	R
1049	semetsukeru	せめつける	攻め付ける	Act_ext	TRS	PLC	TTT	P
1089	semetsukeru	せめつける	責め付ける	Act_ext	TRS	PLC	TTT	P
476	semeyoru	せめよる	攻め寄る	Mnr	TRS	COL	TII	P
715	semeyoseru	せめよせる	攻め寄せる	Dpm	TRS	COL	TEI	P
575	sennjidasu	せんじだす	煎じ出す	Mns	TRS	CCL	TTT	P
1083	sennjitsumeru	せんじつめる	煎じ詰める	Mns	TRS	CCS	TTT	P
2025	seoikomu	せおいこむ	背負い込む	Act_ext	CCP	COL	TET	P
1357	seriageru	せりあげる	迫り上げる	Mnr	MOM	CCL	ETT	P
2495	seriageru	せりあげる	競り上げる	Mns	TRS	CCL	ETT	P
1358	seridasu	せりだす	迫り出す	Mnr	MOM	PST/COL	ETE	S
2497	serikatsu	せりかつ	競り勝つ	Mns, #Act_type	TRS	ACT	EII	#P
2496	seriotosu	せりおとす	競り落とす	Mns	TRS	CCL	ETT	P/R
2510	shaberichirasu	しゃべりちらす	喋り散らす	Dpm	TRS	CCS/CCL	TTT	P
1081	shaberimawaru	しゃべりまわる	喋り回る	Dpm	TRS	COL	TIT	P
2511	shaberitsukareru	しゃべりつかれる	喋り疲れる	Cs	TRS	COS	TII	R
1325	shaburitsuku	しゃぶりつく	しゃぶり付く	Mnr, Dpm	TRS	COS	TII	P
1672	shagamikomu	しゃがみこむ	しゃがみ込む	Mnr	PST	COL	IEI	P
2512	shakuriageru	しゃくりあげる	しゃくり上げる	Dpm	ACT	CCL	ITI	P
2356	sharekomu	しゃれこむ	洒落込む	Act_ext	ACT	COL	IEI	P
593	shiageru	しあげる	仕上げる	#Embd	TRS	CCL	TTT	P
2605	shibariageru	しばりあげる	縛り上げる	Rst_ext	CCS/CCL	CCL	TTT	P
1850	shibaritsukeru	しばりつける	縛り付ける	Mns	CCS/CCL	PLC	TTT	P
2603	shiboriageru	しぼりあげる	絞り上げる	Rst_ext	CCS	CCL	TTT	P
1845	shiboridasu	しぼりだす	搾り出す	Mns	CCS	CCL	TTT	P
1735	shiborikomu	しぼりこむ	絞り込む	Dpm	CCS	COL	TET	P
1848	shiboritoru	しぼりとる	絞り取る	Mns	CCS	CCL	TTT	P
604	shidasu	しだす	仕出す	Dpm, Lex	TRS	CCL	TTT	#P
2518	shikarichirasu	しかりちらす	叱り散らす	Dpm	TRS	CCS/CCL	TTT	P
2520	shikaritobasu	しかりとばす	叱り飛ばす	Mns	TRS	CCL	TTT	P
1095	shikaritsukeru	しかりつける	叱り付ける	Act_ext	TRS	PLC	TTT	P
600	shikiru	しきる	仕切る	Lex	TRS	CCS	TTT	P
1122	shikitsumeru	しきつめる	敷き詰める	Rst_ext	CCS	CCS	TTT	P/R
465	shikomu	しこむ	仕込む	Dpm, Lex	TRS	COL	TET	P
1484	shimaikomu	しまいこむ	仕舞い込む	Dpm	CCL	COL	IET	#P/R
2585	shimeageru	しめあげる	締め上げる	Rst_ext	CCS	CCL	TTT	P
1841	shimedasu	しめだす	締め出す	Mns	CCS	CCL	TTT	R
1839	shimekiru	しめきる	締め切る	Lex, #Sytx	CCS	CCS	TTT	R
1844	shimekorosu	しめころす	絞め殺す	Mns	CCS	CCS	TTT	P
1840	shimekukuru	しめくくる	締めくくる	Mns	CCS	CCS/CCL	TTT	P
1078	shimetsukeru	しめつける	締め付ける	Act_ext	CCS	PLC	TTT	P
1528	shimidasu	しみだす	染み出す	Mnr, Cs, Sytx	COS	COL	ITI	P
1315	shimideru	しみでる	染み出る	Mnr, Cs	COS	COL	III	P
1530	shimiiru	しみいる	染み入る	Mnr, Dpm	CCS	COL	III	P/R
1703	shimikomu	しみこむ	染み込む	Mnr	COS	COL	IEI	P
443	shimitooru	しみとおる	染み透る	Mnr, Cs	COS	COL	III	#P/R/S
1531	shimitsukeru	しみつける	染み付ける	Mns	COS	PLC	ITT	#
1541	shimitsuku	しみつく	染み付く	Mnr	COS	COS	III	R
1388	shimiwataru	しみわたる	染み渡る	Rst_ext	COS	COL	III	R
603	shimukeru	しむける	仕向ける	Lex	TRS	CCP	TTT	P
2363	shinadarekakaru	しなだれかかる	撓垂れ掛かる	Mnr	PST	PST	III	P/S
1476	shinihateru	しにはてる	死に果てる	Rst_ext	COS	APR	III	R
1538	shinikawaru	しにかわる	死に変わる	Cs, Prcd	COS	COS	III	N
3090	shiniokureru	しにおくれる	死に遅れる	#Embd	COS	COS	III	#R
1537	shinitaeru	しにたえる	死に絶える	Cs	COS	APR	III	R
1536	shiniwakareru	しにわかれる	死に分かれる	Cs	COS	COS	III	R
1535	shiniyuku	しにゆく	死に行く	Dpm	COS	COL	III	N
629	shinobiau	しのびあう	忍び逢う	Mnr	TRS	ACT	TII	P
2515	shinobiiru	しのびいる	忍び入る	Mnr	TRS	COL	TII	P

2159	shinobikomu	しのびこむ	忍び込む	Mnr	TRS	COL	TEI	P
1283	shinobinaku	しのびなく	忍び泣く	Mnr	PSY	ACT	TEI	P
708	shinobiyoru	しのびよる	忍び寄る	Mnr	TRS	COL	TII	P
2268	shiorekaeru	しおれかえる	萎れ返る	Rst_ext	COS	PST	III	R
525	shirabemawaru	しらべまわる	調べ回る	Mnr, Acmp_act	TRS	COL	TIT	P
2178	shirekiru	しれきる	知れ切る	Rst_ext	COS	CCS	ITI	#R
1113	shirewataru	しれわたる	知れ渡る	Rst_ext	COS	COL	III	R
588	shirinuku	しりぬく	知り抜く	Act_ext	TRS	CCL	TTT	S
2465	shitatariochiru	したたりおちる	したたり落ちる	Mnr	COL	COL	III	P/I
605	shitateru	したてる	仕立てる	Lex	TRS	CCP	TTT	P
609	shitomeru	しとめる	仕留める	#Mns, Lex	TRS	CCS	TTT	P/R
2229	shizumarikaeru	しずまりかえる	静まり返る	Rst_ext	COS	PST	III	R
1609	shizumikomu	しずみこむ	沈み込む	Mnr	COL	COL	IEI	P/R
325	shogekaeru	しょげかえる	悄気返る	Rst_ext	PSY	PST	III	#P/#S
1692	shogekomu	しょげこむ	悄気込む	Rst_ext	PSY	COL	IEI	#P/#S
1832	sogiotosu	そぎおとす	削ぎ落とす	Mns	CCS	CCL	TTT	P
1833	sogitoru	そぎとる	削ぎ取る	Mns	CCS	CCL	TTT	P
1829	somedasu	そめだす	染め出す	Mns	CCS	CCL	TTT	P
1827	somekaeru	そめかえる	染め変える	Mns, #Embd	CCS	CCS	TTT	P
1875	somekomu	そめこむ	染め込む	Mns, Dpm	CCS	COL	TEI	P
1843	somenuku	そめぬく	染め抜く	Mns	CCS	CCL	TTT	P
1830	sometsukeru	そめつける	染め付ける	Mns	CCS	PLC	TTT	P
1831	somewakeru	そめわける	染め分ける	#Mns	CCS	CCS	TTT	P
574	sonaetsukeru	そなえつける	備え付ける	Mns	TRS	PLC	TTT	P
1504	sorikaeru	そりかえる	反り返る	Mnr, Dpm	COS	PST	III	R
1905	sorikomu	そりこむ	剃り込む	Dpm	#CCS	COL	TET	P/R
1555	sorimagaru	そりまがる	反り曲がる	Mnr	COS	COS	III	S
2104	soriotosu	そりおとす	剃り落とす	Mns	CCL	CCL	TTT	P/R
2070	sosogikomu	そそぎこむ	注ぎ込む	Mns, Dpm	CCL	COL	TET	P
1364	suberikomu	すべりこむ	滑り込む	Mnr	MOM	COL	IEI	#P
2451	suberiochiru	すべりおちる	滑り落ちる	Mnr	MOM	COL	III	P
2419	suberioriru	すべりおりる	滑り降りる	Mnr	MOM	COL	III	P
1363	suberiotosu	すべりおとす	滑り落とす	#Mnr, Cs	MOM	CCL	ITT	P
2023	sueoku	すえおく	据え置く	#Cnd	PLC	PLC	TTT	P
2024	suetsukeru	すえつける	据え付ける	Mns	CCP	PLC	TTT	P
1331	sugaritsuku	すがりつく	縋り付く	Mnr, Dpm	PST	COS	III	P
1259	sugisaru	すぎさる	過ぎ去る	Mnr	COL	APR	III	R
1271	sugiyuku	すぎゆく	過ぎ行く	Dpm	COL	COL	III	N
635	suiagaru	すいあがる	吸い上がる	Cs	TRS	COL	TII	P
628	suiageru	すいあげる	吸い上げる	#Mns, Dpm	TRS	CCL	TTT	P
630	suidasu	すいだす	吸い出す	Mns	TRS	CCL	TTT	P
1587	suikomu	すいこむ	吸い込む	Dpm	TRS	COL	TET	P
632	suitoru	すいとる	吸い取る	Mns	TRS	CCL	TTT	P
631	suitsukeru	すいつける	吸い付ける	Mns	TRS	PLC	TTT	P/R
633	suitsuku	すいつく	吸い付く	Mnr	TRS	COS	TII	P/R/S
634	suiyoseru	すいよせる	吸い寄せる	Mns	TRS	CCL	TET	P
627	sukashimiru	すかしみる	透かし見る	Mns	TRS	TRS	TTT	P
1837	sukikaesu	すきかえす	鋤き返す	Mns, Embd	CCS	CCP	TTT	P
1585	sukikomu	すきこむ	漉き込む	Mns	TRS	COL	TET	P
1112	sukikonomu	すきこのむ	好き好む	Pair	PSY	PSY	TTT	S
1836	sukiokosu	すきおこす	鋤き起こす	Mns	CCS	CCP	TTT	P
778	sukitooru	すきとおる	透き通る	#Cs, #Mnr, #Act_ext	PHN	COL	III	S
1111	sukitoosu	すきとおす	透き通す	Mns	PHN	CCL	ITT	#
2132	sukitoru	すきとる	剥き取る	Mns	CCL	CCL	TTT	P
2130	sukuiageru	すくいあげる	掬い上げる	Mns	CCL	CCL	TTT	P
623	sukuiageru	すくいあげる	救い上げる	Act_type, #Dpm	TRS	CCL	TTT	P
624	sukuidasu	すくいだす	救い出す	Mns, Dpm	TRS	CCL	TTT	P
2131	sukuitoru	すくいとる	掬い取る	Mns	CCL	CCL	TTT	P
2697	sukumiagaru	すくみあがる	竦み上がる	Rst_ext	COS	COL	III	R
1104	sumiarasu	すみあらす	住み荒らす	Mns	EXT	CCS	ITT	P
1108	sumikawaru	すみかわる	住み替わる	#Act_type	EXT	COS	III	R

1846	sumikomu	すみこむ	住み込む	#Purp, #Act_ext, #Dpm	EXT	COL	IEI	#P/#R
1107	sumitsuku	すみつく	住み着く	#Situ, #Prcd	EXT	COL	III	P
751	sumiwataru	すみわたる	澄み渡る	Rst_ext	COS	COL	III	R
208	suridasu	すりだす	磨り出す	Mns, Dpm	TRS	CCL	TTT	P
1835	suriherasu	すりへらす	擦り減らす	Cs	TRS	CCS	ETT	P
1522	suriheru	すりへる	擦り減る	Cs	TRS	COS	EII	P/R
599	surikawaru	すりかわる	摺り替わる	Cs	TRS	COS	TII	R
616	surikireru	すりきれる	擦り切れる	Cs	TRS	COS	EII	R/S
601	surikiru	すりきる	擦り切る	Mns	TRS	CCS	ETT	P
1572	surikomu	すりこむ	擦り込む	Mns	TRS	COL	EET	P
1573	surikomu	すりこむ	刷り込む	Mns, Dpm	TRS	COL	TET	P
610	surimigaku	すりみがく	摩り磨く	Mns	TRS	CCS	ETT	P
613	surimukeru	すりむける	擦り剥ける	Cs	TRS	COS	EII	R
614	surimuku	すりむく	擦り剥く	Cs	TRS	CCS	ETT	R
612	surinukeru	すりぬける	擦り抜ける	Mnr	TRS	COL	EII	P/#R
606	suritsubusu	すりつぶす	磨り潰す	Mns	TRS	CCS	TTT	P
607	suritsukeru	すりつける	擦り付ける	Mns	TRS	PLC	ETT	P
611	suriyoru	すりよる	擦り寄る	Mnr	TRS	COL	EII	P
1272	susumiyuku	ススみゆく	進み行く	Mnr, #Pair	COL	COL	III	N
619	susuriageru	ススりあげる	啜り上げる	#Mns, Dpm	TRS	CCL	TTT	P
1584	susurikomu	ススりこむ	啜り込む	Mns, Dpm	TRS	COL	TET	P
1282	susurinaku	ススりなく	啜り泣く	Mnr	TRS	ACT	TEI	P
617	suteoku	すておく	捨て置く	Prcd	TRS	PLC	TTT	R
298	sutesaru	すてさる	捨て去る	Rst_ext	TRS	APR	TIT	R
1913	suwarikomu	すわりこむ	座り込む	Act_ext	PST	COL	IEI	P
1102	suwaritsukareru	すわりつかれる	座り疲れる	Cs	PST	COS	III	R
1807	tabaneawaseru	たばねあわせる	束ね合わせる	Mns	CMB	CMB	TTT	P
2571	tabeasaru	たべあさる	食べ漁る	Act_ext	TRS	TRS	TTT	P
551	tabechirakasu	たべちらかす	食べ散らかす	Cs	TRS	CCS	TTT	P/R
550	tabechirasu	たべちらす	食べ散らす	Cs	TRS	CCS/CCL	TTT	P/R
518	tabemawaru	たべまわる	食べ回る	Mnr, Acmp_act	TRS	COL	TIT	P
1395	tabesusumu	たべすすむ	食べ進む	Mns, Dpm	TRS	COL	TIT	P
2636	tachiagaru	たちあがる	立ち上がる	Dpm	PST	COL	III	#P/R
1223	tachiakasu	たちあかす	立ち明かす	Mnr, Mns	PST	TRS	ITI	P
1240	tachiarawareru	たちあらわれる	立ち現れる	#Mnr	PST	COS	III	R
2718	tachiau	たちあう	立ち会う	#Mnr	PST	ACT	III	P
2715	tachiau	たちあう	立ち合う	Lex	PST	ACT	III	P
1301	tachidomaru	たちどまる	立ち止まる	#Act_type	AFF	COS	III	P
1224	tachifusagaru	たちふさがる	立ち塞がる	#Pair, #Act_ext	PST	COS	III	P
1225	tachihadakaru	たちはだかる	立ちはだかる	#Pair, #Act_ext	PST	PST	INI	P/S
437	tachihataraku	たちはたらく	立ち働く	Mnr	AFF	ACT	III	P
2488	tachiiru	たちいる	立ち入る	Act_ext	PST	COL	III	#P/R
1196	tachiitaru	たちいたる	立ち至る	#Mnr, Lex	AFF	COL	III	R
1241	tachikareru	たちかれる	立ち枯れる	Mnr	PST	COS	III	R
1814	tachikiru	たちきる	断ち切る	Mns	CCS	CCS	TTT	P/R
1195	tachikoeru	たちこえる	立ち越える	#Act_type	AFF	COL	III	#P/R
1245	tachikomeru	たちこめる	立ち籠める	Mnr	PST	CCL	ITI	R
548	tachimawaru	たちまわる	立ち回る	Mnr_E, Acmp_act	AFF	COL	III	P
1193	tachimodosu	たちもどす	立ち戻る	#Act_type	AFF	COL	III	R
909	tachimukau	たちむかう	立ち向かう	Mnr	PST	PST	III	P
1237	tachinaoru	たちなおる	立ち直る	Mns	PST	COS	III	R
1221	tachinarabu	たちならぶ	立ち並ぶ	Mnr	PST	PST	III	#P/S
1268	tachinoboru	たちのぼる	立ち上る	Mnr, #Dpm	PST	COL	III	P
1235	tachinoku	たちのく	立ち退く	#Mns, #Prcd, Lex	PST	COL	III	P/R
1200	tachiokureru	たちおくれる	立ち遅れる	Cnd	AFF	COS	III	#R
1816	tachiotosu	たちおとす	裁ち落とす	Mns	CCS	CCL	TTT	P/I
1199	tachisaru	たちさる	立ち去る	Prcd	PST	APR	III	R
1486	tachisawagu	たちさわぐ	立ち騒ぐ	Cs, Mnr	PST/AFF	ACT	III	P
1201	tachisukumu	たちすくむ	立ち竦む	Mnr	PST	COS	III	#P
1204	tachitsuduku	たちつづく	立ち続く	Mnr	PST	ASP	III	P
1242	tachitsukareru	たちつかれる	立ち疲れる	Cs	PST	COS	III	R

1191	tachiwakareru	たちわかれる	立ち分かれる	#Act_type	AFF	COS	III	#
1815	tachiwaru	たちわる	断ち割る	Mns	CCS	CCS	TTT	P
1192	tachiyoru	たちよる	立ち寄る	#Act_type	AFF	COL	III	P
1228	tachiyuku	たちゆく	立ち行く	Dpm	PST	COL	III	N
1270	tadoritsuku	たどりつく	辿り着く	Mnr	COL	COL	III	R
1449	taehateru	たえはてる	絶え果てる	Rst_ext	APR	APR	III	R
2308	taeiru	たえいる	絶え入る	Rst_ext	APR	COL	III	R
1099	taeshinobu	たえしのぶ	堪え忍ぶ	Pair	PSY	PSY	ITT	P
2446	tagiriochiru	たぎりおちる	たぎり落ちる	Mnr	MOD	COL	III	P/I
2125	taguriageru	たぐりあげる	手繰り上げる	Mns	TRS	CCL	TTT	P
472	taguridasu	たぐりだす	手繰り出す	Mns	TRS	CCL	TTT	P
2073	tagurikomu	たぐりこむ	手繰り込む	Mns	TRS	COL	TET	P
871	taguriyoseru	たぐりよせる	手繰り寄せる	Mns	TRS	CCL	TET	P
2190	takerikuruu	たけりくるう	猛り狂う	Act_ext	ACT	COS	III	P
209	takikomeru	たきこめる	薫き込める	Mns, Dpm	TRS	CCL	TTT	#S
1822	takikomu	たきこむ	炊き込む	Mns	CCS	COL	TET	P
210	takishimeru	たきしめる	薫き染める	Mns	TRS	CCS	TTT	P
572	takitsukeru	たきつける	焚き付ける	#Embd	TRS	PLC	TTT	P
2487	tamarikaneru	たまりかねる	堪り兼ねる	Lex, #Sytx	ACT	TRS	ITI	#P/#S
1747	tamekomu	ためこむ	溜め込む	Act_ext	CCS	COL	TET	P
2127	tanomikomu	たのみこむ	頼み込む	Act_ext	DES	COL	TET	P
1206	taorefusu	たおれふす	倒れ臥す	Prcd	PST	PST	III	#P/#S
1222	taorekakaru	たおれかかる	倒れ掛かる	Mnr, Sytx	PST	PST	III	R
1554	tarashikomu	たらしこむ	誑し込む	#Rst_ext, #Embd	TRS	COL	TET	P
1219	tarekomeru	たれこめる	垂れ籠める	Mnr	PST	CCL	ITI	S
1218	tarekomu	たれこむ	垂れ込む	Mnr	PST	COL	IEI	R
1239	taremagaru	たれまがる	垂れ曲がる	Mnr	PST	COS	III	S
1220	tarenagasu	たれながす	垂れ流す	Mnr	PST	CCL	ITT	P
1243	taresagaru	たれさがる	垂れ下がる	Mnr	PST	COL	III	R
571	tasukedasu	たすけだす	助け出す	#Mns, Dpm	TRS	CCL	TTT	P
2489	tatakaitoru	たたかいとる	闘い取る	Mns	ACT	CCL	ITT	#P
562	tatakidasu	たたきだす	叩き出す	Mns	TRS	CCL	TTT	#P
387	tatakifuseru	たたきふせる	叩き伏せる	Mns	TRS	CCP	TET	P
558	tatakikesu	たたきけす	叩き消す	Mns	TRS	CCS	TTT	P
557	tatakikiru	たたききる	叩き切る	Mns	TRS	CCS	TTT	P
1563	tatakikomu	たたきこむ	叩き込む	Mns, Dpm	TRS	COL	TET	P
560	tatakikorosu	たたきころす	叩き殺す	Mns	TRS	CCS	TTT	P
561	tatakikowasu	たたきこわす	叩き壊す	Mns	TRS	CCS	TTT	P
566	tatakinaosu	たたきなおす	叩き直す	Mns, Sytx	TRS	CCS	TTT	P
567	tatakinobasu	たたきのばす	叩き延ばす	Mns	TRS	CCS	TTT	P
762	tatakinomesu	たたきのめす	叩きのめす	Mns	TRS	CCS	TTT	P
555	tatakiokosu	たたきおこす	叩き起こす	Mns	TRS	CCP	TTT	P
556	tatakiotosu	たたきおとす	叩き落とす	Mns	TRS	CCL	TTT	P/I
564	tatakitsubusu	たたきつぶす	叩き潰す	Mns	TRS	CCS	TTT	P
563	tatakitsukeru	たたきつける	叩き付ける	Dpm	TRS	PLC	TTT	P/I
554	tatakiuru	たたきうる	叩き売る	Mnr	TRS	TRS	TTT	P
565	tatakiwaru	たたきわる	叩き割る	Mns	TRS	CCS	TTT	P/I
1818	tatamikakeru	たたみかける	畳み掛ける	Dpm	CCS	CCP	TTT	P
1871	tatamikomu	たたみこむ	畳み込む	Mns, Dpm	CCS	COL	TET	P
1230	tatekakeru	たてかける	立て掛ける	Mns	CPS	CCP	TTT	P
1813	tatekawaru	たてかわる	建て替わる	Cs	CCS	COS	TII	R
2003	tatekiru	たてきる	立て切る	Mns	CCP	CCS	TTT	#P/R
2009	tatekomeru	たてこめる	立て籠める	Mnr	CCP	CCL	TTE	R
2005	tatekomeru	たてこめる	立て込める	#Mns	CCP	CCL	TTT	P
94	tatekomoru	たてこもる	立て籠もる	Mns	PST	EXT	TII	P
1569	tatekomu	たてこむ	建て込む	#Rst_ext	CCS	COL	TEI	S
1578	tatekomu	たてこむ	立て込む	U	CCP	COL	TEI	R
1178	tatemasu	たてます	建て増す	Mns	CCS	CCS	TET	P
2006	tatenaosu	たてなおす	立て直す	Mns, Sytx	CCP	CCS	TTT	P
1812	tatenaraberu	たてならべる	建て並べる	Mns	CCS	CCP	TTT	P
2008	tatenaraberu	たてならべる	立て並べる	Mns	CCP	CCP	TTT	P/R
2007	tatetsuduku	たてつづく	立て続く	Mnr	CCP	ASP	TII	P

1810	tatetsukeru	たてつける	建て付ける	Mns	CCS	PLC	TTT	P
2587	tazunearuku	たずねあるく	尋ね歩く	Mnr, Acmp_act	TRS	MOM	TIT	P
2490	tazuneateru	たずねあてる	尋ね当てる	Mns	TRS	TRS	TTT	R
2492	tazunedasu	たずねだす	尋ね出す	Mns	TRS	CCL	TTT	P
570	tazunekuru	たずねくる	訪ね来る	Purp	TRS	COL	TII	R
602	tazunemawaru	たずねまわる	尋ね回る	Dpm	TRS	COL	TIT	P
2494	tazuneyuku	たずねゆく	尋ね行く	Mnr	TRS	COL	TIT	N
569	tazuneyuku	たずねゆく	訪ね行く	Dpm	TRS	COL	TIT	N
471	terashidasu	てらしだす	照らし出す	Mns	TRS	CCL	TTT	#P
1094	terihaeru	てりはえる	照り映える	Cs	PHN	PHN	III	#P
1093	terikaesu	てりかえす	照り返す	Dpm	PHN	CCL	ITT	#P/#S
2409	terikagayaku	てりかがやく	照り輝く	Pair	PHN	PHN	III	P
1077	teritsukeru	てりつける	照り付ける	Act_ext	PHN	PLC	ITI	#P
641	teriwataru	てりわたる	照り渡る	Rst_ext	MOD	COL	III	#P/#S
1348	tobiagaru	とびあがる	飛び上がる	Mnr, Dpm	MOM	COL	III	#P/I
294	tobiaruku	とびあるく	飛び歩く	Mnr	MOM	MOM	III	P
1336	tobichirasu	とびちらす	飛び散らす	Mnr	MOM	CCS/CCL	ITT	P
1398	tobichiru	とびちる	飛び散る	Mnr	MOM	COS/COL	III	R
1333	tobidasu	とびだす	飛び出す	Mnr	MOM	COL	ITI	I/R/S
1289	tobideru	とびでる	飛び出る	Mnr	MOM	COL	III	R/S
1378	tobihanareru	とびはなれる	飛び離れる	Mnr	MOM	COL	III	#
1328	tobihaneru	とびはねる	飛び跳ねる	Mnr	MOM	ACT/MOD	III	P
1351	tobiiru	とびいる	飛び入る	Mnr	MOM	COL	III	#
1350	tobikaeru	とびかえる	飛び返る	Mnr	MOM	COL	III	#
2397	tobikakaru	とびかかる	飛び掛かる	Dpm	MOM	PST	III	P
1335	tobikoeru	とびこえる	飛び越える	Mns, Dpm	MOM	COL	III	#P/I/R
1334	tobikomu	とびこむ	飛び込む	Mnr	MOM	COL	IEI	I/#R
1341	tobikosu	とびこす	飛び越す	Mns	MOM	COL	III	P/I
568	tobimawaru	とびまわる	飛び回る	Mnr, Acmp_act	MOM	COL	III	P
1379	tobinoku	とびのく	飛び退く	Mnr	MOM	COL	III	#
1311	tobinukeru	とびぬける	飛び抜ける	Mnr	MOM	COL	III	R/S
1298	tobiokiru	とびおきる	飛び起きる	Mnr	MOM	PST	III	I
1376	tobioriru	とびおりる	飛び降りる	Mnr	MOM	COL	III	I/#R
1288	tobisaru	とびさる	飛び去る	Mnr	MOM	APR	III	R
1297	tobitatsu	とびたつ	飛び立つ	Mnr	MOM	PST	III	P/I
1352	tobitobinoru	とびとびのる	飛び乗る	Mnr	MOM	ACT	III	#P
1349	tobitsuku	とびつく	飛び付く	Mnr	MOM	COS	III	P
1339	tobiutsuru	とびうつる	飛び移る	Mns	MOM	COL	III	P
468	todokederu	とどけでる	届け出る	Purp	CCL	COL	TIT	R
1774	togidasu	とぎだす	研ぎ出す	Mns	CCS	CCL	TTT	P
1542	togisumasu	とぎすます	研ぎ澄ます	Act_ext	CCS	COS	TET	P
2480	toidadasu	といだだす	問い質す	Mns	TRS	TRS	TTT	P
2478	toikakeru	といかける	問い掛ける	Dpm	TRS	CCP	TTT	P
940	toitsumeru	といつめる	問い詰める	Act_ext	TRS	CCS	TTT	P
1769	tojiawaseru	とじあわせる	綴じ合わせる	Mns	CMB	CMB	TTT	P
1767	tojikomeru	とじこめる	閉じ込める	Mns	CCS	CCL	TTT	P/R
96	tojikomoru	とじこもる	閉じ籠もる	Mns	CCS	EXT	TII	P
1819	tojikomu	とじこむ	綴じ込む	Mns, Dpm	CMB	COL	TET	P
1771	tojitsukeru	とじつける	綴じ付ける	Mns	CMB	PLC	TTT	P
1314	tokederu	とけでる	溶け出る	Mnr, Cs, Dpm	COS	COL	III	P/R
1506	tokekomu	とけこむ	溶け込む	Cs	COS	COL	IEI	R
1505	tokenokoru	とけのこる	溶け残る	Situ	COS	EXT	III	R
1775	tokiakasu	ときあかす	解き明かす	Mns	CCS	CCS	TTT	P
2471	tokiakasu	ときあかす	説き明かす	Mns	TRS	CCS	TTT	P/R
1205	tokifuseru	ときふせる	説き伏せる	Mns	TRS	CCP	TET	P
1777	tokihanasu	ときはなす	解き放す	Mns	CCS	CCS	TTT	P
1776	tokihogusu	ときほぐす	解き解す	Mns	CCS	CCS	TTT	P
2473	tokikikaseru	とききかせる	説き聞かせる	Mns	TRS	OCS	TTT	P
2474	tokisatosu	ときさとす	説き諭す	Mns	TRS	TRS	TTT	P
2475	tokiwakeru	ときわける	説き分ける	Mns	TRS	CCS	TTT	P
455	tokkakaru	とっかかる	取っ掛かる	Act_type, Lex	AFF	PST	TII	#P

2210	tomarikomu	とまりこむ	泊まり込む	#Purp, #Act_ext, #Dpm	EXT	COL	IEI	P
1766	tomeoku	とめおく	留め置く	Mns	CCS	PLC	TTT	P
1265	toorikakaru	とおりかかる	通り掛かる	#Dpm	COL	PST	III	P
1266	toorikosu	とおりこす	通り越す	#Mnr, Dpm	COL	COL	III	R
1273	toorinukeru	とおりぬける	通り抜ける	Mns	COL	COL	III	P
1264	toorisugaru	とおりすがる	通り縋る	U, Lex	COL	ACT	III	#
1435	toorisugiru	とおりすぎる	通り過ぎる	#Mnr, Dpm	COL	COL	III	P
427	toriageru	とりあげる	取り上げる	Mns, #Dpm, Lex	CCL	CCL	TTT	P
161	toriatsukau	とりあつかう	取り扱う	Act_type, Lex	AFF	CCL	TTT	P
428	toriatsumeru	とりあつめる	取り集める	Mns	CCL	CCL	TTT	P
429	toriawaseru	とりあわせる	取り合わせる	Mns	CCL	CMB	TTT	#P
133	torichirakaru	とりちらかる	取り散らかる	Mnr_E	AFF	COS	TII	R
147	torichirakasu	とりちらかす	取り散らかす	Mnr_E	AFF	CCS	TTT	R
146	torichirasu	とりちらす	取り散らす	Mnr_E	AFF	CCS/CCL	TTT	#
148	toridadasu	とりだだす	取り糺す	Mnr_E	AFF	CCL	TTT	P
450	toridasu	とりだす	取り出す	Mns	CCL	CCL	TTT	P
459	torihakaru	とりはかる	取り計らう	Act_type, Lex	AFF	CCL	TTT	P
137	torihakobu	とりはこぶ	取り運ぶ	Mnr_E	AFF	CCL	TTT	P
143	torihanasu	とりはなす	取り放す	Mnr_E	AFF	CCS	TTT	#
536	toriharau	とりはらう	取り払う	Mns	CCL	CCL	TTT	P/R
460	torihazusu	とりはずす	取り外す	Mns	CCL	CCL	TTT	P
204	torihirogeru	とりひろげる	取り広げる	Mnr_E	CCL/AFF	CCS	TTT	#P
430	toriireru	とりいれる	取り入れる	Mns	CCL	CCL	TTT	P/R
425	toriiru	とりいる	取り入る	Mns, Dpm, Lex	CCL	COL	TII	P
160	toriisogu	とりいそぐ	取り急ぐ	Mnr_E	AFF	ACT	TII	N
436	torikaeru	とりかえる	取り替える	Mns	CCL	CCS	TTT	P
435	torikaesu	とりかえす	取り返す	#Dpm	CCL	CCL	TTT	P/R
2323	torikakaru	とりかかる	取り掛かる	Act_type, Lex	AFF	PST	TII	P
159	torikakomu	とりかこむ	取り囲む	Mnr_E	AFF	CFG	TTT	P/S
3097	torikatadukeru	とりかたづける	取り片付く	Mnr_E	AFF	COS	TII	#R
158	torikatadukeru	とりかたづける	取り片付ける	Mnr_E	AFF	CCS	TTT	P
157	torikatameru	とりかためる	取り固める	Mnr_E	AFF	CCS	TTT	P
441	torikesu	とりけす	取り消す	Lex	AFF	CCS	TTT	P
156	torikimeru	とりきめる	取り決める	Mnr_E	AFF	MNT	TTT	P/R
192	torikobosu	とりこぼす	取りこぼす	Situ	AFF	CCL	TTT	R
467	torikomeru	とりこめる	取り籠める	#Prcd	CCL	CCL	TTT	#
1550	torikomu	とりこむ	取り込む	Mns	CCL	COL	TET	P
444	torikorosu	とりころす	取り殺す	Mns	CCL	CCS	TTT	I
136	torikosu	とりこす	取り越す	Mnr_E	AFF	COL	TIT	#P
155	torikowasu	とりこわす	取り壊す	Act_type, Lex	AFF	CCS	TTT	P
440	torikumu	とりくむ	取り組む	Mns	CCL	CMB	TTI	P
439	torikuzusu	とりくずす	取り崩す	Mns	CCL	CCS	TTT	P
142	torimagireru	とりまぎれる	取り紛れる	Mnr_E	AFF	COS	TII	#
504	torimaku	とりまく	取り巻く	Mnr_E	AFF	CCS	TET	P/S
140	torimatomeru	とりまとめる	取りまとめる	Mnr_E	AFF	CCS	TTT	P
462	torimawasu	とりまわす	取り回す	Mns	CCL	CCL	TTT	P
141	torimazeru	とりまぜる	取り混ぜる	Mnr_E	AFF	CCS	TTT	#P
138	torimidareru	とりみだれる	取り乱れる	Mnr_E	AFF	COS	TII	S
139	torimidasu	とりみだす	取り乱す	Mnr_E	AFF	CCS	TTI	#P/#S
463	torimodosu	とりもどす	取り戻す	Mns	CCL	CCL	TTT	P/R
191	torimotsu	とりもつ	取り持つ	Mns, Lex	AFF	CCL	TTT	#P
134	torimusubu	とりむすぶ	取り結ぶ	Mnr_E	AFF	CMB	TTT	#P
457	torinasu	とりなす	取り成す	Mns, Lex	CCL	CCS	TTT	P
190	torinigasu	とりにがす	取り逃がす	Situ	AFF	CCL	TTT	R
458	torinokeru	とりのける	取り除ける	Mns	CCL	CCL	TTT	P
466	torinozoku	とりのぞく	取り除く	Mns	CCL	CCS	TTT	P
2161	toriokonau	とりおこなう	執り行う	Act_type	AFF	TRS	TTT	P
431	torioku	とりおく	取り置く	#Prcd	CCL	PLC	TTT	P
434	toriorosu	とりおろす	取り下ろす	Mns	CCL	CCL	TTT	P
432	toriosaeru	とりおさえる	取り押さえる	Mns	CCL	CCL	TTT	P
433	toriosameru	とりおさめる	取り納める	Act_type, Lex	AFF	CCL	TTT	#P

193	toriotosu	とりおとす	取り落とす	Situ	AFF	CCL	TTT	#
154	torisabaku	とりさばく	取り捌く	Act_type, Lex	AFF	CCL	TTT	P
445	torisageru	とりさげる	取り下げる	Act_type, Lex	AFF	CCL	TTT	R
297	torisaru	とりさる	取り去る	Mns, Rst_ext	CCL	APR	TIT	R
153	torishikiru	とりしきる	取り仕切る	Act_type, Lex	AFF	CCL	TTT	P
1469	torishimaru	とりしまる	取り締まる	Act_type, Lex	AFF	COS	TIT	P
152	torishiraberu	とりしらべる	取り調べる	Mnr_E	AFF	CCL	TTT	P
447	torishizumeru	とりしずめる	取り静める	Act_type, Lex	AFF	CCS	TTT	P
149	torisoroeru	とりそろえる	取り揃える	Mnr_E	AFF	CCS	TTT	R
150	torisorou	とりそろう	取り揃う	Mnr_E	AFF	COS	TIT	R
1437	torisugaru	とりすがる	取り縋る	Mnr	CCL	PST	TII	P
151	torisumasu	とりすます	取り澄ます	Mnr_E	AFF	COS	TEI	P
449	torisuteru	とりすてる	取り捨てる	Prcd	CCL	CCL	TTT	#P
451	toritateru	とりたてる	取り立てる	Act_ext, Lex	CCL	CCP	TTT	P
456	toritomeru	とりとめる	取り留める	Mns	CCL	CCS	TTT	#P
144	toritsubusu	とりつぶす	取り潰す	Act_type, Lex	AFF	CCS	TTT	#
452	toritsugu	とりつぐ	取り次ぐ	Prcd, Lex	CCL	CCL	TTT	P
453	toritsukeru	とりつける	取り付ける	#Prcd	CCL	PLC	TTT	P
426	toritsuku	とりつく	取り付(憑)く	Mnr	CCL	COS	TII	#P/#R
145	toritsukurou	とりつくろう	取り繕う	Mnr_E	AFF	CCS	TTT	P
464	toriwakeru	とりわける	取り分ける	Mns	CCL	CCS	TTT	P
203	toriyameru	とりやめる	取り止める	Mnr_E	CCL/AFF	CCS	TTT	N
803	toriyoseru	とりよせる	取り寄せる	Mnr_E	CCL/AFF	CCL	TET	P
454	tottsuku	とっつく	取っ付く	Mnr_E	AFF	COS	TII	#
1795	tsuduriawaseru	つづりあわせる	綴り合わせる	Mns	CCS	CMB	TTT	P
1076	tsugemawaru	つげまわる	告げ回る	Dpm	TRS	COL	TIT	P
2484	tsugeshiraseru	つげしらせる	告げ知らせる	Mns	TRS	TRS	TTT	P
1803	tsugiawaseru	つぎあわせる	継ぎ合わせる	Mns	CMB	CMB	TTT	P
2075	tsugikomu	つぎこむ	注ぎ込む	Mns, Dpm	CCL	COL	TET	P
1804	tsugitasu	つぎたす	継ぎ足す	Mns	CMB	PLC	TTT	P
2120	tsugitasu	つぎたす	注ぎ足す	Mns	CCL	PLC	TTT	P
540	tsukaifurusu	つかいふるす	使い古す	Mns, #Act_type	TRS	CCS	TTT	P/R
1070	tsukaihatasu	つかいはたす	使い果たす	#Embd	TRS	CCS	TTT	R
1481	tsukaikomu	つかいこむ	使い込む	#Dpm, Lex	TRS	COL	TET	P
539	tsukaimawasu	つかいまわす	使い回す	Dpm	TRS	CCL	TTT	P
537	tsukaitsubusu	つかいつぶす	使い潰す	Mns, #Act_type	TRS	CCS	TTT	#P
538	tsukaiwakeru	つかいわける	使い分ける	Mns	TRS	CCS	TTT	P
533	tsukamidasu	つかみだす	掴み出す	Mns	TRS	CCL	TTT	P
2331	tsukamikakaru	つかみかかる	掴み掛かる	Dpm	TRS	PST	TII	P
531	tsukamikorosu	つかみころす	掴み殺す	Mns	TRS	CCS	TTT	#P
532	tsukamitaosu	つかみたおす	掴み倒す	Mns	TRS	CCP	TTT	#P/I
534	tsukamitoru	つかみとる	掴み取る	Mns	TRS	CCL	TTT	P
1448	tsukarehateru	つかれはてる	疲れ果てる	Rst_ext	COS	APR	III	R
2110	tsukeagaru	つけあがる	付け上がる	U, Lex	PLC	COL	TII	R
2108	tsukeawaseru	つけあわせる	付け合わせる	Mns	PLC	CMB	TTT	P
2107	tsukeiru	つけいる	付け入る	Mns	PLC	COL	TII	P
2112	tsukekomu	つけこむ	付け込む	Dpm, Lex	PLC	COL	TEI	R
2162	tsukekomu	つけこむ	漬け込む	Act_ext	CCL	COL	TET	P
2111	tsukekuwaeru	つけくわえる	付け加える	Mns	PLC	PLC	TTT	P
2117	tsukekuwawaru	つけくわわる	付け加わる	Cs	PLC	COS	TII	R
586	tsukemawaru	つけまわる	付け回る	Dpm	PLC	COL	TII	P
2114	tsukemawasu	つけまわす	付け回す	Dpm	PLC	CCL	TTT	P
2115	tsukenerau	つけねらう	付け狙う	Mnr, Mns	PLC	TRS	TTT	P
2116	tsuketasu	つけたす	付け足す	Mns	PLC	PLC	TTT	P
526	tsukiagaru	つきあがる	突き上がる	Mnr	TRS	COL	TII	S
486	tsukiageru	つきあげる	突き上げる	Mns	TRS	CCL	TTT	P/I
524	tsukiataru	つきあたる	突き当たる	Mnr	TRS	#COL	TII	P
487	tsukiateru	つきあてる	突き当てる	Mnr	TRS	CCL	TTT	P
488	tsukiawaseru	つきあわせる	突き合わせる	Mnr	TRS	CMB	TTT	P
499	tsukidasu	つきだす	突き出す	Mns	TRS	CCL	TTE	P/S
519	tsukideru	つきでる	突き出る	Mnr	TRS	COL	TII	S
520	tsukihanasu	つきはなす	突き放す	Mns	TRS	CCS	TTT	#P

1447	tsukihateru	つきはてる	尽き果てる	Rst_ext	COS	APR	III	R
489	tsukiireru	つきいれる	突き入れる	Mnr	TRS	CCL	TTT	P/I
523	tsukiiru	つきいる	突き入る	Mnr	TRS	COL	TII	P/I
492	tsukikaesu	つきかえす	突き返す	Mnr	TRS	CCL	TTT	P
493	tsukikiru	つききる	突き切る	Mns	TRS	CCS	TTI	P
495	tsukikorogasu	つころがす	突き転がす	Mns	TRS	CCL	TTT	P
496	tsukikorosu	つころす	突き殺す	Mns	TRS	CCS	TTT	P/I
494	tsukikuzusu	つくずす	突き崩す	Mns	TRS	CCS	TTT	P
1175	tsukimatou	つきまとう	付き纏う	Mnr	COS	COS	IEI	P
484	tsukimazeru	つきまぜる	搗き交ぜる	Mns	TRS	CCS	TTT	P
522	tsukimodosu	つきもどす	突き戻す	Mns	TRS	CCL	TTT	P
515	tsukinokeru	つきのける	突き退ける	Mns	TRS	CCL	TTT	P
517	tsukinukeru	つきぬける	突き抜ける	Mnr	TRS	COL	TII	R/S
512	tsukinuku	つきぬく	突き抜く	Mns	TRS	CCL	TTT	P
491	tsukiotosu	つきおとす	突き落とす	Mns	TRS	CCL	TTT	I
521	tsukisasaru	つきささる	突き刺さる	Mnr	TRS	COL	TII	R
497	tsukisasu	つきさす	突き刺す	Mnr	TRS	TRS	TTT	#P/I
1590	tsukishitagau	つきしたがう	付き従う	Pair	COS	ACT	III	P
1391	tsukisou	つきそう	付き添う	#Mnr, #Pair	COS	PST	III	P
1393	tsukisusumu	つきすすむ	突き進む	Mnr	TRS	COL	TII	P
498	tsukitaosu	つきたおす	突き倒す	Mns	TRS	CCP	TTT	#P/I
1456	tsukitateru	つきたてる	突き立てる	Mnr, Act_ext	TRS	CCP	TTT	P
528	tsukitatsu	つきたつ	突き立つ	Cs	TRS	PST	TII	S
508	tsukitobasu	つきとばす	突き飛ばす	Mns	TRS	CCL	TTT	I
510	tsukitomeru	つきとめる	突き止める	Mns	TRS	CCS	TTT	R
527	tsukitooru	つきとおる	突き通る	Mnr	TRS	COL	TII	R/S
506	tsukitoosu	つきとおす	突き通す	Mns	TRS	CCL	TTT	#P
502	tsukitsukeru	つきつける	突き付ける	Mnr	TRS	PLC	TTT	P
807	tsukitsumeru	つきつめる	突き詰める	Act_ext	TRS	CCS	TTI	P
490	tsukiugokasu	つきうごかす	突き動かす	Mnr, Mns	TRS	CCL	TTT	P
529	tsukiugoku	つきうごく	突き動く	Mnr	TRS	ACT/COL	TII	P
516	tsukiyaburu	つきやぶる	突き破る	Mns	TRS	CCS	TTT	#P/R
2329	tsukkakaru	つっかかる	突っ掛かる	Mnr	TRS	PST	TII	P
514	tsukkakeru	つっかける	突っ掛ける	Mnr	TRS	CCP	TTT	P
1553	tsukkomu	つっこむ	突っ込む	Mnr	TRS	COL	TET	P/R
511	tsukkurumeru	つっくるめる	突っくるめる	Mnr	TRS	#CCS	TTT	P
513	tsukkurumu	つっくるむ	突っくるむ	Mnr	TRS	#CCS	TTT	P
1799	tsukuriawaseru	つくりあわせる	作り合わせる	Prcd	CCS	CMB	TTT	#P
1801	tsukuridasu	つくりだす	作り出す	Dpm	CCS	CCL	TTT	P
1802	tsukuritsukeru	つくりつける	作り付ける	Mns	CCS	PLC	TTT	P
1791	tsumamidasu	つまみだす	摘まみ出す	Mns	CCS	CCL	TTT	P
1784	tsumamitoru	つまみとる	摘み取る	Mns	CCS	CCL	TTT	P
1779	tsumeawaseru	つめあわせる	詰め合わせる	Mns	CCS	CMB	TTT	P
1781	tsumekakeru	つめかける	詰め掛ける	Dpm	CCS	CCP	TTI	P/I
1828	tsumekomu	つめこむ	詰め込む	Mns, Dpm	CCS	COL	TET	P
481	tsumeyoru	つめよる	詰め寄る	Mnr	CCS	COL	TII	P
1783	tsumeyoseru	つめよせる	詰め寄せる	Dpm	CCS	COL	TEI	P/I
1785	tsumiageru	つみあげる	積み上げる	Dpm	CCS	CCL	TTT	P/R
1788	tsumidasu	つみだす	積み出す	Mns	CCS	CCL	TTT	P
1790	tsumikasanaru	つみかさなる	積み重なる	Mnr	CCS	PST	TII	R/S
1786	tsumikasaneru	つみかさねる	積み重ねる	Mns	CCS	CCP	TTT	P
1849	tsumikomu	つみこむ	積み込む	Mns, Dpm	CCS	COL	TET	P
1789	tsumitateru	つみたてる	積み立てる	Mns	CCS	CCP	TTT	P
1792	tsumitoru	つみとる	摘み取る	Mns	CCS	CCL	TTT	P
1507	tsumoritsumoru	つもりつもる	積もり積もる	Pair	COS	COS	III	R
1793	tsunagiawaseru	つなぎあわせる	繋ぎ合わせる	Mns	CMB	CMB	TTT	P
1794	tsunagitomeru	つなぎとめる	繋ぎ止める	Mns	CMB	CCS	TTT	P/R
503	tsupparu	つっぱる	突っ張る	Mnr_E	TRS	CCS	TEE	P
1247	tsuppashiru	つっぱしる	突っ走る	Mnr_E	TRS	MOM	TII	P
2543	tsurearuku	つれあるく	連れ歩く	Mnr, Acmp_act	TRS	MOM	TIT	P
478	tsuredasu	つれだす	連れ出す	Mns	TRS	CCL	TTT	P
473	tsurekaeru	つれかえる	連れ帰る	Mnr, Acmp_act	TRS	COL	TIT	R

477	tsurekomu	つれこむ	連れ込む	Mns, Dpm	TRS	COL	TEI	R
480	tsuremodosu	つれもどす	連れ戻す	Mns	TRS	CCL	TTT	R
474	tsuresaru	つれさる	連れ去る	#Mnr, Acmp_act	TRS	APR	TIT	R
479	tsuresou	つれそう	連れ添う	U, Lex	TRS	PST	TII	P
469	tsureyuku	つれゆく	連れ行く	Mnr, Acmp_act	TRS	COL	TIT	N
2001	tsuriagaru	つりあがる	吊り上がる	Cs	CCP	COL	TII	P/R
1998	tsuriageru	つりあげる	吊り上げる	Mns	CCP	CCL	TTT	P/#R
2102	tsuriageru	つりあげる	釣（吊）り上げる	Mns	CCL	CCL	TTT	P/#R
2106	tsuridasu	つりだす	釣り出す	Mns	CCL	CCL	TTT	P
2105	tsurikomu	つりこむ	釣り込む	Mns, Dpm	CCL	COL	TET	P
2103	tsuriotosu	つりおとす	釣り落とす	Situ	CCL	CCL	TTT	R
2000	tsurisagaru	つりさがる	吊り下がる	Mnr	CCP	COL	TII	S
1999	tsurisageru	つりさげる	吊り下げる	Mns	CCP	CCL	TTT	P/R
1997	tsurushiageru	つるしあげる	吊るし上げる	Mns	CCP	CCL	TTT	P/#R
483	tsutaekiku	つたえきく	伝え聞く	Cnd	TRS	TRS	TTT	#R
639	tsutaiwataru	つたいわたる	伝い渡る	Mns	COL	COL	III	R
500	tsutsukidasu	つつきだす	突き出す	Mns	TRS	CCL	TTT	P
1796	tsutsumikakusu	つつみかくす	包み隠す	Mns	CCS	CCL	TTT	#P/R
1859	tsutsumikomu	つつみこむ	包み込む	Mns	CCS	COL	TET	P
507	tsuttatsu	つったつ	突っ立つ	Mnr	TRS	PST	TII	P/S
162	tsuttsuku	つっつく	突っ突く	Mnr_E	AFF	TRS	TTT	P/I
299	ubaisaru	うばいさる	奪い去る	Mns, Rst_ext	TRS	APR	TIT	R
983	ubaitoru	うばいとる	奪い取る	Mns	TRS	CCL	TTT	P/R
1017	uchiagaru	うちあがる	打ち上がる	Cs	TRS	COL	TII	P/I/R
994	uchiageru	うちあげる	打ち上げる	Mns	TRS	CCL	TTT	P/I
993	uchiakeru	うちあける	打ち明ける	Mnr_E	AFF	CCS	TET	P
995	uchiateru	うちあてる	打ち当てる	Mnr	TRS	CCL	TTT	I
1008	uchidasu	うちだす	打ち出す	Mns	TRS	CCL	TTT	P
1212	uchifusu	うちふす	打ち臥す	Mnr_E	AFF	PST	TIN	P
549	uchiharau	うちはらう	打ち払う	Mns	TRS	CCL	TTT	#P
1075	uchihatasu	うちはたす	討ち果たす	Mns	TRS	CCS	TTT	R
1236	uchihiraku	うちひらく	打ち開く	Mnr_E	AFF	CCS	TET	P
992	uchihorobosu	うちほろぼす	討ち滅ぼす	Mns	TRS	CCS	TTT	P/R
2500	uchiiru	うちいる	討ち入る	Dpm	TRS	COL	TII	P
2354	uchikakaru	うちかかる	打ち掛かる	Dpm	TRS	PST	TII	P
999	uchikakeru	うちかける	打ち掛ける	Mns	TRS	CCP	TTT	P
182	uchikatsu	うちかつ	打ち勝つ	Mnr_E, #Prcd	AFF	ACT	TII	#R
180	uchikesu	うちけす	打ち消す	Mnr_E	AFF	CCS	TTT	P
199	uchikiru	うちきる	打ち切る	Mns, Mnr_E	AFF	CCS	TTT	R
1002	uchikomu	うちこむ	打ち込む	Mns, Dpm	TRS	COL	TET	P
1004	uchikorosu	うちころす	打ち殺す	Mns	TRS	CCS	TTT	#P/I
1005	uchikowasu	うちこわす	打ち壊す	Mns	TRS	CCS	TTT	P
1001	uchikudaku	うちくだく	打ち砕く	Mns	TRS	CCS	TTT	P
1000	uchikuzusu	うちくずす	打ち崩す	Mns	TRS	CCS	TTT	P
171	uchimagireru	うちまぎれる	打ち紛れる	Mnr_E	AFF	COS	TII	#P
991	uchimakasu	うちまかす	打ち負かす	Mns	TRS	TRS	TTT	#R
1012	uchinarasu	うちならす	打ち鳴らす	Mns	TRS	TRS	TTT	P
1014	uchinomesu	うちのめす	打ちのめす	Mns	TRS	CCS	TTT	P
1013	uchinuku	うちぬく	打ち抜く	Mns	TRS	CCL	TTT	P
998	uchiotosu	うちおとす	打ち落とす	Mns	TRS	CCL	TTT	I
178	uchishizumu	うちしずむ	打ち沈む	Mnr_E	AFF	COL	TII	S
169	uchisorou	うちそろう	打ち揃う	Mnr_E	AFF	COS	TII	R
1006	uchisueru	うちすえる	打ち据える	Mns	TRS	PLC	TTT	P
177	uchisuteru	うちすてる	打ち捨てる	Mnr_E	AFF	TRS	TTT	R
1007	uchitaosu	うちたおす	打ち倒す	Mns	TRS	CCP	TTT	P/I
175	uchitateru	うちたてる	打ち立てる	Mnr_E, Lex, Rst_ext	AFF	CCP	TTT	P/R
170	uchitokeru	うちとける	打ち解ける	Mnr_E	AFF	COS	TII	R
1011	uchitomeru	うちとめる	打ち止める	Mns	TRS	CCS	TTT	P/R
987	uchitoru	うちとる	討ち取る	Mns	TRS	CCL	TTT	R
174	uchitsuduku	うちつづく	打ち続く	Mnr_E	AFF	ASP	TII	P
1010	uchitsukeru	うちつける	打ち付ける	Mns	TRS	PLC	TTT	P

1016	uchiwaru	うちわる	打ち割る	Mns	TRS	CCS	TTT	P
990	uchiyaburu	うちやぶる	打ち破る	Mns	TRS	CCS	TTT	#P/R
777	uchiyoseru	うちよせる	打ち寄せる	Mnr	TRS	COL	TEI	P/I
1606	uekomu	うえこむ	植え込む	Mns, Dpm	CCL	COL	TET	P
2644	uetsukeru	うえつける	植え付ける	Mns	CCL	PLC	TTT	P
1032	ugokimawaru	うごきまわる	動き回る	Dpm	ACT/COL	COL	III	P
1390	ukabiagaru	うかびあがる	浮かび上がる	Dpm	PHN	COL	III	R
2643	ukagaishiru	うかがいしる	窺い知る	Mns	TRS	TRS	TTT	#P
229	ukarearuku	うかれあるく	浮かれ歩く	Mnr	PSY	MOM	III	P
1072	ukarederu	うかれでる	浮かれ出る	Mnr	PSY	COL	III	#R
1359	ukaretatsu	うかれたつ	浮かれ立つ	Act_ext	PSY	PST	III	#P/#S
1018	ukeau	うけあう	請け合う	Lex	TRS	ETC	TIT	P
1020	ukedasu	うけだす	請け出す	Mns	TRS	CCL	TTT	P
1021	ukeireru	うけいれる	受け入れる	Mns	TRS	CCL	TTT	#P
1028	ukemodosu	うけもどす	受け戻す	Mns	TRS	CCL	TTT	P/#R
1023	ukemotsu	うけもつ	受け持つ	#Set, Lex	TRS	TRS	TTT	#P
1019	ukeou	うけおう	請け負う	Mns	TRS	TRS	TTT	P
1026	uketomeru	うけとめる	受け止める	Mns, Lex	TRS	CCS	TTT	P
1027	uketoru	うけとる	受け取る	Set	TRS	CCL	TTT	P/R
1024	uketsugu	うけつぐ	受け継ぐ	#Mns	TRS	CMB	TTT	R
1025	uketsukeru	うけつける	受け付ける	#Set, Lex	TRS	PLC	TTT	P
1029	ukewatasu	うけわたす	受け渡す	Set	TRS	CCL	TTT	P
1386	ukiagaru	うきあがる	浮き上がる	Dpm	MOM	COL	III	P/R
1387	ukidasu	うきだす	浮き出す	Mnr	PHN	COL	ITI	R
1290	ukideru	うきでる	浮き出る	Mnr	PHN	COL	III	R
1360	ukitatsu	うきたつ	浮き立つ	Rst_ext	PHN	PST	III	#P/#S
116	umarekawaru	うまれかわる	生まれ変わる	#Prcd	APR	COS	III	R
112	umareochiru	うまれおちる	生まれ落ちる	Dpm	APR	COL	III	I/R
114	umaresodatsu	うまれそだつ	生まれ育つ	Prcd	APR	COS	III	P
1932	umeawaseru	うめあわせる	埋め合わせる	U, Lex	CCS	CMB	TTT	P
1933	umetateru	うめたてる	埋め立てる	U, Lex	CCS	CCP	TTT	P
979	umidasu	うみだす	生み出す	Mns, Dpm	TRS	CCL	TTT	P
980	umiotosu	うみおとす	産み落とす	Prcd, Dpm	TRS	CCL	TTT	#P/I/R
1142	umitsukareru	うみつかれる	倦み疲れる	Pair	PSY	COS	III	R
981	umitsukeru	うみつける	産み付ける	Mns	TRS	PLC	TTT	P
1141	urenokoru	うれのこる	売れ残る	Situ	ETC	EXT	III	R/S
225	uriaruku	うりあるく	売り歩く	Mnr, Acmp_act	TRS	MOM	TIT	P
968	uridasu	うりだす	売り出す	Dpm, Sytx	TRS	CCL	TTT	P
543	uriharau	うりはらう	売り払う	Mns	TRS	CCL	TTT	P
552	urihataku	うりはたく	売り叩く	Act_ext	TRS	TRS	TTT	P
966	urikomu	うりこむ	売り込む	Dpm	TRS	COL	TET	P
965	urikuzusu	うりくずす	売り崩す	Mns	TRS	CCS	TTT	P
542	urimawaru	うりまわる	売り回る	Mnr, Acmp_act	TRS	COL	TIT	P
908	urimukau	うりむかう	売り向かう	Mns	TRS	PST	TIT	P
969	urisabaku	うりさばく	売り捌く	Mns	TRS	TRS	TTT	P
967	urisageru	うりさげる	売り下げる	Mns	TRS	CCL	TTT	P
277	uritataku	うりたたく	売り叩く	Act_ext	TRS	TRS	TTT	P
974	uritobasu	うりとばす	売り飛ばす	Mns	TRS	CCL	TTT	#P/I
971	uritsukeru	うりつける	売り付ける	Dpm	TRS	PLC	TTT	P
977	uriwatasu	うりわたす	売り渡す	Mns, Dpm	TRS	CCL	TTT	P
2653	utaiageru	うたいあげる	歌い上げる	Act_ext	TRS	CCL	TTT	P
1133	utaimawaru	うたいまわる	歌い回る	Dpm	TRS	COL	TIT	P
2240	utsurikawaru	うつりかわる	移り変わる	#Pair	COL	COS	III	P
1428	utsuriyuku	うつりゆく	移り行く	Dpm	COL	COL	III	N
985	utsushidasu	うつしだす	映し出す	Mns, Dpm	TRS	CCL	TTT	P
984	utsushitoru	うつしとる	写し取る	Mns	TRS	CCL	TTT	P
2498	wabiiru	わびいる	詫び入る	Act_ext	TRS	COL	TII	#P
1632	wakehedateru	わけへだてる	分け隔てる	Pair	CCS	CFG	TTT	S
2502	wakeiru	わけいる	分け入る	Mnr	CCS	COL	TII	P
2652	wakiagaru	わきあがる	湧き上がる	Dpm	APR	COL	III	P
1596	wakidasu	わきだす	湧き出す	Mnr, Sytx	APR	COL	ITI	P
1316	wakideru	わきでる	湧き出る	Mnr	APR	COL	III	P

948	wakikaeru	わきかえる	沸き返る	Rst_ext	COS	PST	III	R
2469	wakiokoru	わきおこる	湧き起こる	Mnr	APR	PHN	III	P
1369	wakitatsu	わきたつ	湧き立つ	Rst_ext	APR	PST	III	P
1375	wakitatsu	わきたつ	沸き立つ	Rst_ext	COS	PST	III	P
1163	wamekitateru	わめきたてる	喚き立てる	Act_ext	TRS	CCP	TTT	P
2204	waraikokeru	わらいこける	笑いこける	Cs	TRS	PST	EII	P
1502	waraikorogeru	わらいころげる	笑い転げる	Mnr	TRS	MOM	EII	P
2203	waraikuzureru	わらいくずれる	笑い崩れる	Mnr	TRS	COS	EII	R
2201	waraitobasu	わらいとばす	笑い飛ばす	Mns	TRS	CCL	ETT	P
2184	warekaeru	われかえる	割れ返る	Rst_ext	COS	PST	III	#R
1624	wariateru	わりあてる	割り当てる	Mns	CCS	CCL	TTT	P/R
3093	waribiku	わりびく	割り引く	Cnd	CCS	TRS	TET	P
1628	waridasu	わりだす	割り出す	Mns	CCS	CCL	TTT	P
1631	warifuru	わりふる	割り振る	Prcd	CCS	CCP	TTT	P
1629	wariiru	わりいる	割り入る	Mns	CCS	COL	TII	P
1625	warikiru	わりきる	割り切る	Lex, #Sytx	CCS	CCS	TTT	#P
1627	warikomu	わりこむ	割り込む	Mns	CCS	COL	TEI	P
1626	warimodosu	わりもどす	割り戻す	Cnd	CCS	CCL	TTT	P
1630	waritsukeru	わりつける	割り付ける	Mns	CCS	PLC	TTT	P
312	wasuresaru	わすれさる	忘れ去る	Rst_ext	MNT	APR	TIT	R
260	watariaruku	わたりあるく	渡り歩く	Mnr	COL	MOM	III	P
1258	watariau	わたりあう	渡り合う	Lex, #Sytx	COL	ACT	III	P
1234	yakehirogaru	やけひろがる	焼け広がる	Mnr	COS	COS	III	P
1465	yakekogeru	やけこげる	焼け焦げる	Cs	COS	COS	III	R
1460	yakenokoru	やけのこる	焼け残る	Situ	COS	EXT	III	R
1466	yakeochiru	やけおちる	焼け落ちる	Cs, Mnr	COS	COL	III	#P/R
1464	yakeshinu	やけしぬ	焼け死ぬ	Cs	COS	COS	III	R
1463	yaketadareru	やけただれる	焼け爛れる	Cs	COS	COS	III	R
1462	yaketsuku	やけつく	焼け付く	Cs	COS	COS	III	R
1459	yakeuseru	やけうせる	焼け失せる	Cs	COS	APR	III	R
737	yakiharau	やきはらう	焼き払う	Mns	TRS	CCL	TTT	P
1640	yakikatameru	やきかためる	焼き固める	Mns	TRS	CCS	TTT	P
1641	yakikiru	やききる	焼き切る	Mns	TRS	CCS	TTT	P
3094	yakikogasu	やきこがす	焼き焦がす	Mns	TRS	TRS	TTT	P
1642	yakikorosu	やきころす	焼き殺す	Mns	TRS	CCS	TTT	P
1643	yakisuteru	やきすてる	焼き捨てる	Mns	TRS	TRS	TTT	P
1644	yakitsukeru	やきつける	焼き付ける	Mns	TRS	PLC	TTT	P
1646	yakitsuku	やきつく	焼き付く	Cs	TRS	COS	TII	R
1064	yamihoukeru	やみほうける	病み耄る	Cs	COS	COS	III	R
2255	yarikomeru	やりこめる	遣り込める	Mns, Dpm, Lex	TRS	CCL	TTT	P
2256	yarinokeru	やりのける	遣り退ける	#Mns, #Prcd, Lex	TRS	CCL	TTT	#P/#R
2052	yarisugosu	やりすごす	遣り過ごす	Mns	CCL	TRS	TTT	P
1458	yasehosoru	やせほそる	痩せ細る	Pair	COS	COS	III	R
2378	yasekokeru	やせこける	痩せこける	Rst_ext	COS	PST	III	R
1457	yaseotoroeru	やせおとろえる	痩せ衰える	Pair	COS	COS	III	R
217	yatoiireru	やといいれる	雇い入れる	Mns, Dpm	TRS	CCL	TTT	P/R
2640	yobiageru	よびあげる	呼び上げる	Act_ext	TRS	CCL	TTT	P
2250	yobiatsumeru	よびあつめる	呼び集める	Mns	TRS	CCL	TTT	P
2243	yobidasu	よびだす	呼び出す	Mns	TRS	CCL	TTT	P
2234	yobiireru	よびいれる	呼び入れる	Mns	TRS	CCL	TTT	P
2236	yobikaesu	よびかえす	呼び返す	Mns, Sytx	TRS	CCL	TTT	P
2237	yobikakeru	よびかける	呼び掛ける	Dpm	TRS	CCP	TTI	P
2119	yobikomu	よびこむ	呼び込む	Mns, Dpm	TRS	COL	TET	P
1040	yobimawaru	よびまわる	呼び回る	Dpm	TRS	COL	TIT	P
2248	yobimodosu	よびもどす	呼び戻す	Mns	TRS	CCL	TTT	P
2247	yobinarawasu	よびならわす	呼び習わす	Mns, Embd	TRS	CCS	TTT	#P
2235	yobiokosu	よびおこす	呼び起こす	Mns	TRS	CCP	TTT	P
2242	yobisamasu	よびさます	呼び覚ます	Mns	TRS	CCS	TTT	P
2244	yobitateru	よびたてる	呼び立てる	U, Lex	TRS	CCP	TTT	P
2246	yobitomeru	よびとめる	呼び止める	Mns	TRS	CCS	TTT	P/R
2245	yobitsukeru	よびつける	呼び付ける	Mns, #Act_ext	TRS	PLC	TTT	P
877	yobiyoseru	よびよせる	呼び寄せる	Mns	TRS	CCL	TET	P

1455	yoitsubureru	よいつぶれる	酔い潰れる	Cs	COS	COS	III	R
1454	yoitsubusu	よいつぶす	酔い潰す	#Mns, #Cs	COS	CCS	ITT	#P
1249	yojinoboru	よじのぼる	攀じ登る	Mnr	TRS	COL	III	P
1552	yojiremagaru	よじれまがる	よじれ曲がる	Mnr	COS	COS	III	S
1190	yokosu	よこす	寄越す	Dpm, Lex	COL	COL	IIT	R
2637	yomiageru	よみあげる	読み上げる	Act_ext	TRS	CCL	TTT	P
2576	yomiasaru	よみあさる	読み漁る	Act_ext	TRS	TRS	TTT	P
2211	yomiawaseru	よみあわせる	読み合わせる	Mns, Embd	TRS	TRS	TTT	P
2230	yomikomu	よみこむ	詠み込む	Mns, Dpm	TRS	COL	TET	#P
2216	yomikudasu	よみくだす	読み下す	Dpm	TRS	CCL	TTT	P
2213	yomioboeru	よみおぼえる	読み覚える	Mns	TRS	MNT	TTT	P/R
2220	yomisugosu	よみすごす	読み過ごす	Situ	TRS	TRS	TTT	#R
2221	yomisusumeru	よみすすめる	読み進める	#Dpm	TRS	CCL	TTT	P
1406	yomisusumu	よみすすむ	読み進む	Dpm	TRS	COL	TIT	P
1580	yomisuteru	よみすてる	詠み捨てる	Act_ext	TRS	TRS	TTT	#
2222	yomisuteru	よみすてる	読み捨てる	Prcd	TRS	TRS	TTT	#
2227	yomitoru	よみとる	読み取る	Mns	TRS	CCL	TTT	P
2228	yomitsukareru	よみつかれる	読み疲れる	Cs	TRS	COS	TIT	R
2224	yomiyaburu	よみやぶる	読み破る	Mns, Lex	TRS	CCS	TTT	#R
1423	yopparau	よっぱらう	酔っ払う	Rst_ext	COS	#CCL	ITI	R
2633	yoriatsumaru	よりあつまる	寄り集まる	Mnr	COL	COL	III	R
2751	yoriau	よりあう	寄り合う	Lex	COL	COL	III	P
1634	yoriawaseru	よりあわせる	縒り合わせる	Mns	CCS	CMB	TTT	P
953	yoridasu	よりだす	選り出す	Mns	TRS	CCL	TTT	P
2366	yorikakaru	よりかかる	寄り掛かる	Mnr	PST	PST	III	P
1202	yorikiru	よりきる	寄り切る	Lex, Sytx	PST	CCS	ITT	#P
1389	yorisou	よりそう	寄り添う	Mnr	PST	PST	III	P
1461	yorisugaru	よりすがる	寄り縋る	Mnr	PST	PST	III	P
212	yorisuguru	よりすぐる	選りすぐる	Mns	TRS	TRS	TTT	P
1203	yoritaosu	よりたおす	寄り倒す	Mns	PST	CCP	ITT	#I
1399	yoritsuku	よりつく	寄り付く	Mnr	PST	COS	III	#
213	yoriwakeru	よりわける	選り分ける	Mns	TRS	CCS	TTT	P
2536	yorokobiisamu	よろこびいさむ	喜び勇む	Pair	PSY	PSY	TII	P
2049	yoseatsumeru	よせあつめる	寄せ集める	Mns	CCL	CCL	TTT	P
2046	yoseawaseru	よせあわせる	寄せ合わせる	Mns	CCL	CMB	TTT	P
2047	yosekakeru	よせかける	寄せ掛ける	Mns	CCL	CCP	TTT	P
1401	yosekuru	よせくる	寄せ来る	Mnr, Dpm	COL	COL	TIE	P/I
2048	yosetsukeru	よせつける	寄せ付ける	#Dpm, Lex	CCL	PLC	TTT	#
1426	yowarihateru	よわりはてる	弱り果てる	Rst_ext	COS	APR	III	R
2022	yowarikomu	よわりこむ	弱り込む	Rst_ext	COS	COL	IEI	R
1450	yowariyuku	よわりゆく	弱り行く	Dpm	COS	COL	III	N
216	yudekobosu	ゆでこぼす	茹でこぼす	Prcd, Situ	TRS	CCL	TTT	P/R
1636	yuiageru	ゆいあげる	結い上げる	Mns	CCS	CCL	TTT	P/R
1637	yuitsukeru	ゆいつける	結い付ける	Mns	CCS	PLC	TTT	P
1436	yukiataru	ゆきあたる	行き当たる	Prcd	COL	#COL	III	#P
1405	yukiau	ゆきあう	行き合う	Embd	COL	ACT	III	#
1403	yukidumaru	ゆきづまる	行き詰まる	Prcd	COL	COS	III	#P/#R
2241	yukikayou	ゆきかよう	行き通う	#Dpm	COL	COL	III	P
1439	yukikureru	ゆきくれる	行き暮れる	Situ	COL	COS	III	#
1440	yukisaru	ゆきさる	行き去る	Dpm	COL	APR	III	R
1411	yukisugiru	ゆきすぎる	行き過ぎる	Dpm, Sytx	COL	COL	III	R
1404	yukitatsu	ゆきたつ	行き立つ	#Pair	COL	PST	III	#
1409	yukitodoku	ゆきとどく	行き届く	Dpm, Lex	COL	COL	III	#R
1441	yukitsuku	ゆきつく	行き着く	Prcd	COL	COL	III	R
829	yukitsumeru	ゆきつめる	行き詰める	Act_ext	COL	CCS	ITI	#R
1408	yukiwakareru	ゆきわかれる	行き分かれる	Situ	COL	COS	III	#R
1061	yukiwataru	ゆきわたる	行き渡る	Rst_ext	COL	COL	III	R
2483	yureugoku	ゆれうごく	揺れ動く	Mnr	MOD	ACT/COL	III	P
1953	yuriageru	ゆりあげる	揺り上げる	Mns	CCP	CCL	TTT	P
1955	yuriokosu	ゆりおこす	揺り起こす	Mns	CCP	CCP	TTT	P
1956	yuriotosu	ゆりおとす	揺り落とす	Mns	CCP	CCL	TTT	P
1954	yuriugokasu	ゆりうごかす	揺り動かす	Mnr, Mns	CCP	CCL	TTT	P

1960	yusaburiotosu	ゆさぶりおとす	揺さぶり落とす	Mns	CCP	CCL	TTT	P
1958	yusuriageru	ゆすりあげる	揺すり上げる	Mns	CCP	CCL	TTT	P
1959	yusuritoru	ゆすりとる	強請り取る	Mns	CCP	CCL	TTT	P
1635	yuwaitsukeru	ゆわいつける	結わい付ける	Mns	CCS	PLC	TTT	P
2050	yuzuriukeru	ゆずりうける	譲り受ける	Set	CCL	TRS	TTT	P
2051	yuzuriwatasu	ゆずりわたす	譲り渡す	Set	CCL	CCL	TTT	P
1100	zonnjiageru	ぞんじあげる	存じ上げる	Lex	TRS	CCL	TTT	S
1768	zurekomu	ずれこむ	ずれ込む	Mnr	COL	COL	IEI	#P/S
1361	zuriagaru	ずりあがる	ずり上がる	Cs	MOM	COL	III	R
1611	zuriochiru	ずりおちる	ずり落ちる	Mnr	COL	COL	III	P/R
1381	zurisagaru	ずりさがる	ずり下がる	Mnr	MOM	COL	III	R

Fields

1. Seq No.: Sequential No. of data records
2. Alphabet: Alphabetic transcription
3. Hiragana: Japanese hiragana alphabets
4. V-V compound: V-V compounds
   Note that a parenthesized character is an allograph of the preceding character.
5. Compounding type: Types of compounding patterns
   - Acmp_act: Accompanying activity
   - Act_ext: Activity extent compound
   - Act_type: Activity type compound
   - Cnd: Condition compound
   - Cs: Cause compound
   - DPM: Compounds with directional/path motion
   - Embd: Embedded compound
   - Lex: Lexicalized compound
   - Mnr: Manner compound
   - Mnr_E: Manner compound (with emphatic V1)
   - Mns: Means compound
   - Pair: Pair compound
   - Prcd: Preceding activity compound
   - Purp: Purpose compound
   - Rst_ext: Result extent
   - Set: Setting compound
   - Situ: Situation compound
   - Sytx: Syntactical compound
   - U: Unclassifiable
6. V1 type: Semantic type of V1
   - ACT: Agentive verbs
   - AFF: Affix
   - APR: Verbs of appearance and disappearance
   - ASP: Aspectual verbs
   - CCL: Verbs of causative change of location
   - CCP: Verbs of causative change of posture/orientation
   - CCS: Causative change of state
   - CGF: Verbs of spatial configuration
   - CMB: Verbs of combining
   - COL: Verbs of change of location
   - COS: Verbs of change of state
   - CPS: Verbs of causative change of psychological state
   - DES: Desire verbs
   - ETC: Unclassifiable
   - EXT: Verbs of existence
   - MNT: Mental activity verbs
   - MOD: Verbs of specific mode of being
   - MOM: Verbs of manner of motion
   - OCS: Other causative events
   - PHN: Phenomenon verbs
   - PLC: Verbs of setting and placing
   - PST: Verbs of posture/orientation

	PSY:	Psych-verbs
	SNS:	Sensation verbs
	TRS:	Non-causative transitive verbs
	WTH:	Weather verbs

7. V2 type: Semantic type of V2; Symbols are the same as V1 type.

8. Vt/Vi/Lb: Transitive/Intransitive/Labile distinction; The properties are given in order of is V1, V2 and compound. If a particular compound is represented by the symbol "TIT," it reads: V1 is transitive; V2 is intransitive; the entire compound is transitive.

T: transitive
I: intransitive
Lb: labile

9. Asp: Types of readings when the compound is put in the *-te iru* form.

P: progressive
R: result state
I: iterative
#: questionable

Appendix B2

List of 238 Embedding Compounds

Seq No.	Alphabet	Hiragana	Compound	Trs/Intrs
1	asobihoukeru	あそびほうける	遊び呆ける	III
2	amiagaru	あみあがる	編み上がる	TII
3	amiageru	あみあげる	編み上げる	TTT
4	araiageru	あらいあげる	洗い上げる	TTT
5	ariawaseru	ありあわせる	有り合わせる	ITI
6	aritsuku	ありつく	有り付く	III
7	iawaseru	いあわせる	居合わせる	ITI
8	iiaratameru	いいあらためる	言い改める	TTT
9	iiawaseru	いいあわせる	言い合わせる	TTT
10	iiotosu	いいおとす	言い落とす	TTT
11	iioyobu	いいおよぶ	言い及ぶ	TII
12	iikawasu	いいかわす	言い交わす	TTT
13	iikonasu	いいこなす	言いこなす	TTT
14	iisasu	いいさす	言い止す	TNT
15	iishiburu	いいしぶる	言い渋る	TTT
16	iichigau	いいちがう	言い違う	TIT
17	iinayamu	いいなやむ	言い悩む	TTI
18	iihagureru	いいはぐれる	言い逸れる	TII
19	iimorasu	いいもらす	言い漏らす	TTT
20	iiyodomu	いいよどむ	言い淀む	TII
21	ikinobiru	いきのびる	生き延びる	III
22	ijikurimawasu	いじくりまわす	弄くり回す	TTT
23	irekaeru	いれかえる	入れ替える	TTT
24	irechigau	いれちがう	入れ違う	IIT
25	irechigaeru	いれちがえる	入れ違える	TTT
26	ukenagasu	うけながす	受け流す	TTT
27	utaikonasu	うたいこなす	歌いこなす	TTT
28	uchiawaseru	うちあわせる	打ち合わせる	TTT
29	uchichigau	うちちがう	打ち違う	TIT
30	uchimorasu	うちもらす	討ち漏らす	TTT
31	umareawaseru	うまれあわせる	生まれ合わせる	ITI
32	umaretsuku	うまれつく	生まれ付く	III
33	uriageru	うりあげる	売り上げる	TTT
34	uriisogu	うりいそぐ	売り急ぐ	TIT
35	urioshimu	うりおしむ	売り惜しむ	TTT
36	urishiburu	うりしぶる	売り渋る	TTT
37	okimayou	おきまよう	置き迷う	TIT
38	ochinobiru	おちのびる	落ち延びる	III
39	omoiawaseru	おもいあわせる	思い合わせる	TTT
40	omoioyobu	おもいおよぶ	思い及ぶ	TII
41	omoikaesu	おもいかえす	思い返す	TTT
42	omoifukeru	おもいふける	思い耽る	TII
43	omoimadou	おもいまどう	思い惑う	TII
44	kakiaratameru	かきあらためる	書き改める	TTT

45	kakiokosu	かきおこす	書き起こす	TTT
46	kakiotosu	かきおとす	書き落とす	TTT
47	kakioyobu	かきおよぶ	書き及ぶ	TII
48	kakikaeru	かきかえる	書き替える	TTT
49	kakisasu	かきさす	書き止す	TNT
50	kakinagasu	かきながす	書き流す	TT#T
51	kakimorasu	かきもらす	書き漏らす	TTT
52	kakekaeru	かけかえる	掛け替える	TTT
53	kakechigau	かけちがう	掛け違う	TIT
54	kamikaesu	かみかえす	噛み返す	TTT
55	kanngaearatameru	かんがえあらため	考え改める	TTT
56	kanngaeawaseru	かんがえあわせる	考え合わせる	TTT
57	kanngaeoyobu	かんがえおよぶ	考え及ぶ	TII
58	kiawaseru	きあわせる	来合わせる	ITI
59	kigaeru	きがえる	着替える	TTT
60	kikiotosu	ききおとす	聞き落とす	TTT
61	kikioyobu	ききおよぶ	聞き及ぶ	TII
62	kikikaesu	ききかえす	聞き返す	TTT
63	kikichigau	ききちがう	聞き違う	TIT
64	kikinagasu	ききながす	聞き流す	TTT
65	kikinogasu	ききのがす	聞き逃す	TTT
66	kikifukeru	ききふける	聞き耽る	TII
67	kikifurusu	ききふるす	聞き旧す	TTT
68	kikimorasu	ききもらす	聞き漏らす	TTT
69	kikonasu	きこなす	着こなす	TTT
70	kizukiageru	きずきあげる	築き上げる	TTT
71	kitaeageru	きたえあげる	鍛え上げる	TTT
72	kinagasu	きながす	着流す	TTT
73	kirikaeru	きりかえる	切り替える	TTT
74	kuiaratameru	くいあらためる	悔い改める	TTT
75	kuisasu	くいさす	食い止す	TNI
76	kuichigau	くいちがう	食い違う	TII
77	kuihagureru	くいはぐれる	食い逸れる	TII
78	kumiagaru	くみあがる	組み上がる	TII
79	kumiageru	くみあげる	組み上げる	TTT
80	kumikaeru	くみかえる	組み替える	TTT
81	kumikawasu	くみかわす	酌み交わす	TTT
82	kurabeawaseru	くらべあわせる	比べ合わせる	TTT
83	kurikaesu	くりかえす	繰り返す	TTT
84	kurikaeru	くりかえる	繰り替える	TTT
85	kurenazumu	くれなずむ	暮れ泥む	INI
86	kodukimawasu	こづきまわす	小突き回す	TTT
87	koneageru	こねあげる	捏ね上げる	TTT
88	konekaesu	こねかえす	捏ね返す	TTT
89	konekurikaesu	こねくりかえす	捏ねくり返す	TTT
90	konekurimawasu	こねくりまわす	捏ねくり回す	TTT
91	konemawasu	こねまわす	捏ね回す	TTT
92	sashichigaeru	さしちがえる	差し違える	ETI

93	sashichigaeru	さしちがえる	刺し違える	TTT
94	sashitsugu	さしつぐ	指し継ぐ	TTT
95	sasoiawaseru	さそいあわせる	誘い合わせる	TTI
96	shiotosu	しおとす	し落とす	TTT
97	shisasu	しさす	為止す	TNT
98	shitateageru	したてあげる	仕立て上げる	TTT
99	shiniisogu	しにいそぐ	死に急ぐ	III
100	shimeshiawaseru	しめしあわせる	示し合わせる	TTT
101	shirabeageru	しらべあげる	調べ上げる	TTT
102	sukikaesu	すきかえす	漉き返す	TTT
103	sugekaeru	すげかえる	挿げ替える	TTT
104	sumikaeru	すみかえる	住み替える	ITI
105	suriagaru	すりあがる	刷り上がる	TII
106	suriageru	すりあげる	刷り上げる	TTT
107	surikaeru	すりかえる	摺り替える	TTT
108	surechigau	すれちがう	擦れ違う	III
109	sodateageru	そだてあげる	育て上げる	TTT
110	someagaru	そめあがる	染め上がる	TII
111	someageru	そめあげる	染め上げる	TTT
112	somekaesu	そめかえす	染め返す	TTT
113	takiagaru	たきあがる	炊き上がる	TII
114	takiageru	たきあげる	炊き上げる	TTT
115	takiawaseru	たきあわせる	炊き合わせる	TTT
116	dashiokureru	だしおくれる	出し遅れる	TII
117	dashioshimu	だしおしむ	出し惜しむ	TTT
118	dashishiburu	だししぶる	出し渋る	TTT
119	tatakiageru	たたきあげる	叩き上げる	TTI
120	tatamiageru	たたみあげる	畳み上げる	TTT
121	tachiyodomu	たちよどむ	立ち淀む	III
122	tatekaeru	たてかえる	建て替える	TTT
123	tatekaeru	たてかえる	立て替える	TTT
124	tabeosameru	たべおさめる	食べ納める	TTT
125	tsukaikonasu	つかいこなす	使いこなす	TTT
126	tsukimawasu	つきまわす	突き回す	TTT
127	tsukuriageru	つくりあげる	作り上げる	TTT
128	tsukurikaeru	つくりかえる	作り替える	TTT
129	tsukekaeru	つけかえる	付け替える	TTT
130	tsutomeageru	つとめあげる	勤め上げる	ITT
131	tsumekaeru	つめかえる	詰め替える	TTT
132	deokureru	でおくれる	出遅れる	III
133	dekiau	できあう	出来合う	III
134	dekiagaru	できあがる	出来上がる	III
135	terashiawaseru	てらしあわせる	照らし合わせる	TTT
136	teriawaseru	てりあわせる	照り合わせる	IT#T
137	toiawaseru	といあわせる	問い合わせる	TTT
138	tooriawaseru	とおりあわせる	通り合わせる	ITI
139	togiageru	とぎあげる	研ぎ上げる	TTT
140	tokiokosu	ときおこす	説き起こす	TTT

141	tobikau	とびかう	飛び交う	III
142	tobichigau	とびちがう	飛び違う	III
143	torikawasu	とりかわす	取り交わす	TTT
144	torikonasu	とりこなす	取りこなす	TTT
145	torimorasu	とりもらす	取り漏らす	TTT
146	nakikawasu	なきかわす	泣き交わす	I#TI
147	nakikawasu	なきかわす	鳴き交わす	I#TI
148	nakishikiru	なきしきる	泣き頻る	I#II
149	nakishikiru	なきしきる	鳴き頻る	III
150	nakiyamu	なきやむ	泣き止む	III
151	nademawasu	なでまわす	撫で回す	TTT
152	namemawasu	なめまわす	嘗め回す	TTT
153	nariyamu	なりやむ	鳴り止む	III
154	niau	にあう	似合う	III
155	niagaru	にあがる	煮上がる	TII
156	nieagaru	にえあがる	煮え上がる	III
157	nikaesu	にかえす	煮返す	TTT
158	nigeokureru	にげおくれる	逃げ遅れる	III
159	nigenobiru	にげのびる	逃げ延びる	III
160	nigemadou	にげまどう	逃げ惑う	III
161	nigemayou	にげまよう	逃げ迷う	III
162	nitsuku	につく	似付く	III
163	niramiawaseru	にらみあわせる	睨み合わせる	TTI
164	nuiageru	ぬいあげる	縫い上げる	TTT
165	nuikaesu	ぬいかえす	縫い返す	TTT
166	nuriageru	ぬりあげる	塗り上げる	TTT
167	nurikaeru	ぬりかえる	塗り替える	TTT
168	neriageru	ねりあげる	練り上げる(錬り)	TTT
169	nobinayamu	のびなやむ	伸び悩む	ITI
170	nomiosameru	のみおさめる	飲み納める	TTT
171	nomisasu	のみさす	飲み止す	TNT
172	noriawaseru	のりあわせる	乗り合わせる	ITI
173	noriokureru	のりおくれる	乗り遅れる	III
174	norikonasu	のりこなす	乗りこなす	ITI
175	hakikaeru	はきかえる	履き替える	TTT
176	harikaeru	はりかえる	張り替える	ETT
177	hikikonasu	ひきこなす	弾きこなす	TTT
178	hikinagasu	ひきながす	弾き流す	TTT
179	hinekurimawasu	ひねくりまわす	捻くり回す	TTT
180	hinerimawasu	ひねりまわす	捻り回す	TTT
181	fukikaesu	ふきかえす	吹き返す	ETT
182	fukikaeru	ふきかえる	葺き替える	TTT
183	fukishikiru	ふきしきる	吹き頻る	EII
184	fumimayou	ふみまよう	踏み迷う	TII
185	furikaeru	ふりかえる	振り替える	TTT
186	furishikiru	ふりしきる	降り頻る	III
187	furiyamu	ふりやむ	降り止む	III
188	hoshiageru	ほしあげる	干し上げる	TTT

189	hojikurikaesu	ほじくりかえす	穿り返す	TTT
190	horiageru	ほりあげる	彫り上げる	TTT
191	horikaesu	ほりかえす	掘り返す	TTT
192	makikaesu	まきかえす	巻き返す	TTE
193	mazekaesu	まぜかえす	混ぜ返す	TTT
194	miawaseru	みあわせる	見合わせる	TTT
195	miosameru	みおさめる	見納める	TTT
196	migakiageru	みがきあげる	磨き上げる	TTT
197	mikawasu	みかわす	見交わす	TTI
198	minagasu	みながす	見流す	TTT
199	minogasu	みのがす	見逃す	TTT
200	mihagureru	みはぐれる	見逸れる	TII
201	mukaiawaseru	むかいあわせる	向かい合わせる	ITT
202	mushikaesu	むしかえす	蒸し返す	TTT
203	meguriawaseru	めぐりあわせる	巡り合わせる	ITI
204	meshikaeru	めしかえる	召し替える	TTT
205	moushiawaseru	もうしあわせる	申し合わせる	TTT
206	moushiokureru	もうしおくれる	申し遅れる	TIT
207	moushikawasu	もうしかわす	申し交わす	TTI
208	mochiawaseru	もちあわせる	持ち合わせる	TTT
209	mochikaesu	もちかえす	持ち返す	TTE
210	mochikaeru	もちかえる	持ち替える	TTT
211	morikaesu	もりかえす	盛り返す	TTI
212	yakiagaru	やきあがる	焼き上がる	TII
213	yakiageru	やきあげる	焼き上げる	TTT
214	yariageru	やりあげる	遣り上げる	TTT
215	yarikaeru	やりかえる	遣り替える	TTT
216	yarikonasu	やりこなす	遣りこなす	TTT
217	yukiawaseru	ゆきあわせる	行き合わせる	ITI
218	yukiisogu	ゆきいそぐ	行き急ぐ	IIT
219	yukikau	ゆきかう	行き交う	III
220	yukichigau	ゆきちがう	行き違う	III
221	yukichigaeru	ゆきちがえる	行き違える	ITI
222	yukinayamu	ゆきなやむ	行き悩む	ITI
223	yukimayou	ゆきまよう	行き迷う	III
224	yudeagaru	ゆであがる	茹で上がる	TII
225	yudeageru	ゆであげる	茹で上げる	TTT
226	yurikaesu	ゆりかえす	揺り返す	TTI
227	yobikau	よびかう	呼び交う	TII
228	yobikawasu	よびかわす	呼び交わす	TTI
229	yomiotosu	よみおとす	読み落とす	TTT
230	yomikaesu	よみかえす	読み返す	TTT
231	yomikaeru	よみかえる	読み替える	TTT
232	yomikonasu	よみこなす	読みこなす	TTT
233	yomisasu	よみさす	読み止す	TNT
234	yomichigau	よみちがう	読み違う	TIT
235	yominagasu	よみながす	読み流す	TTT
236	yomifukeru	よみふける	読み耽る	TII

Fields

Seq No.:	Sequential number
Alphabet:	Romanized alphabet
Hiragana:	Hiragana
Compound:	Embedding compound
Trs/Intrs:	First alphabet: Transitive/Intransitive of V1
	Second alphabet: Transitive/Intransitive of V1
	Third alphabet: Transitive/Intransitive of compound
	I: Intransitive
	T: Transitive
	E: Labile
	Prefixed by #: Questionable

Appendix B3

Component Verb Meanings & Compound Semantic Types
(G2&G1, G3&G1 and G3&G2 are omitted.)

G1 & G1: 187 instances

V1	V2	S_ttl	Pair	Man	Mean	Cs	DMP	Sit	Pred	Purp	Cond	Int	Act	Emph	M_deg	R_deg
ACT	TRS	2	1	1	0	2	0	1	1	0	0	0	0	0	0	0
TRS	ACT	6	0	6	2	0	0	0	0	0	0	0	0	0	0	0
TRS	TRS	12	7	9	56	0	0	3	6	0	4	3	0	2	11	0
		Ttl	8	16	58	2	0	4	7	0	4	3	0	2	11	0

G1 & G2: 687 instances

V1	V2	S_ttl	Pair	Man	Mean	Cs	DMP	Sit	Pred	Purp	Cond	Int	Act	Emph	M_deg	R_deg
ACT	CCL	1	0	0	7	0	3	0	0	0	0	0	0	0	0	0
TRS	CCS	8	0	5	151	4	0	0	0	0	0	0	2	1	12	2
TRS	CCL	13	0	11	176	0	17	0	0	0	0	6	1	1	4	0
TRS	CCP	4	0	2	22	0	10	0	1	0	0	0	0	2	16	0
TRS	PLC	2	0	1	26	0	4	0	2	0	0	1	0	0	7	0
TRS	CMB	2	0	2	8	0	0	0	0	0	0	0	1	0	0	0
		Ttl	0	21	390	4	34	0	3	0	0	7	4	4	39	2

G1 & G3: 317 instances

V1	V2	S_ttl	Pair	Man	Mean	Cs	DMP	Sit	Pred	Purp	Cond	Int	Act	Emph	M_deg	R_deg
ACT	COS	5	0	2	0	5	0	2	0	0	1	0	0	0	4	0
ACT	COL	7	0	6	2	0	6	0	0	0	0	0	0	0	8	1
TRS	COS	13	0	7	0	12	0	0	0	0	0	0	1	0	2	1
TRS	COL	41	0	28	11	3	23	0	0	3	0	0	0	0	10	0
TRS	MOM	10	0	2	0	0	0	0	0	0	0	0	0	0	0	0
TRS	APR	3	0	1	0	0	0	0	0	0	0	0	0	0	0	2
TRS	PST	7	0	6	2	2	6	0	0	0	0	0	0	0	0	0
PSY	COL	1	0	1	0	0	0	0	0	0	0	0	0	0	6	4
		Ttl	0	53	15	22	35	2	0	3	1	0	1	0	30	8

G2 & G2: 357 instances

V1	V2	S_ttl	Pair	Man	Mean	Cs	DMP	Sit	Pred	Purp	Cond	Int	Act	Emph	M_deg	R_deg
CCS	CCS	0	0	0	38	0	0	0	0	0	0	0	0	0	0	0
CCS	CCL	2	0	1	49	0	5	0	0	0	1	0	0	0	0	2
CCS	CCP	1	0	1	14	0	2	0	1	0	0	0	0	0	5	0
CCS	PLC	0	0	0	11	0	1	0	0	0	0	0	0	0	2	0
CCS	CMB	0	0	0	10	0	0	0	1	0	0	0	0	0	0	0
CCL	CCS	1	0	0	8	0	0	0	0	0	0	0	0	0	0	0
CCL	CCL	1	0	1	44	0	1	1	1	0	0	1	0	0	0	0
CCL	PLC	0	0	0	3	0	3	0	0	0	0	0	0	0	1	0
CCP	PLC	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0
CCP	CCL	17	0	8	13	0	1	0	0	0	0	0	0	0	0	0
CCP	CCP	7	0	3	8	0	0	0	0	0	0	0	0	0	1	0
		Ttl	0	14	200	0	13	1	3	0	1	1	0	0	9	2

G2 & G3: 118 instances

V1	V2	S_ttl	Pair	Man	Mean	Cs	DMP	Sit	Pred	Purp	Cond	Int	Act	Emph	M_deg	R_deg
CCS	COS	2	0	1	0	7	0	0	0	0	0	0	0	0	1	0
CCS	COL	8	0	5	4	1	6	0	0	0	0	0	0	0	2	0
CCP	COL	8	0	1	0	1	0	0	0	0	1	0	0	0	1	0
		Ttl	0	7	4	9	6	0	0	0	1	0	0	0	4	0

G3 & G3: 389 instances

V1	V2	S_ttl	Pair	Man	Mean	Cs	DMP	Sit	Pred	Purp	Cond	Int	Act	Emph	M_deg	R_deg
COS	COS	9	3	8	0	16	0	0	1	0	0	0	0	0	2	2
COS	COL	14	0	6	0	2	10	0	0	0	0	0	0	0	0	18
COS	APR	0	0	0	0	2	0	0	0	0	0	0	0	0	0	11
COS	PST	4	0	1	0	0	0	0	0	0	0	0	0	0	0	13
COL	COL	23	0	15	3	1	9	0	1	0	0	0	0	1	2	3
MOM	COL	59	0	41	3	1	1	0	0	0	0	0	0	0	1	1
PST	COS	6	0	4	3	2	0	0	0	0	0	0	0	0	0	0
PST	COL	7	0	6	0	0	3	0	0	0	0	0	0	0	2	0
PST	PST	10	0	9	1	0	0	0	1	0	0	0	0	0	0	0
PHN	COL	5	0	3	0	0	1	0	0	0	0	0	0	0	0	3
		Ttl	3	93	10	24	24	0	3	0	0	0	0	1	7	51

Abbreviations

G1 Agentive in the verb hierarchy
G2 Causative in the verb hierarchy
G3 Unaccusative in the verb hierarchy

Ttl Total

Component Verb Meanings

ACT Agentive verb
APR Appearance & disappearance verb
CCL Causative change of location verb
CCP Causative change of posture/orientation
CCS Causative change of state verb
CMB Combining verb
COL Change of location verb
COS Causative change of state verb
MOM Manner of motion verb
PHN Phenomenon verb
PLC Setting & placing verb
PST Posture/orientation verb
PSY Psychological verbs
TRS Non-causative transitive verb

Compound Semantic Types

S_ttl Subtotal
Pair Pair compound
Man Manner compound
Mean Means compound
Cs Cause compound
DMP DMP compound
Sit Situation compound
Pred Preceding activity compound
Purp Purpose compound
Cond Condition compound
Int Interaction Type compound
Act Activity type compound
Emph Emphasis compound
M_deg Activity extent compound
R_deg Result extent compound

Note that the highlighted figures represents those listed in Table (101).

Appendix C1

V2 Types Found in CNC

Seq No.	V2	RVC	Token_DB	Token_CNC	V2 Type	Sem	Translation
1	矮	安矮	1	18	R	SDM	short
23	暗	变暗	1	2	R	STA	dark
25	白	变白	5	15	R	COL	white
39	白	念白	5	15	R	COL	incorrectly
60	饱	尝饱	5	7	R	SNS	full
76	扁	按扁	2	14	R	SHP	flat
90	遍	参观遍	7	40	R	EXS	all over
91	遍	查遍	7	40	R	EXS	all over
92	遍	尝遍	7	40	R	EXS	all over
130	瘪	踩瘪	1	10	R	STA	shriveled
140	病	憋病	1	12	R	STA	sick
162	残废	打残废	1	4	R	STA	disable
194	长	裁长	15	31	R	SDM	long
233	成	安装成	484	130	CMP	Cheng	become
363	成熟	考虑成熟	1	3	R	STA	mature
366	迟	办迟	3	3	R	TIM	late
372	重(chong2)	包重	3	8	R	MNR	repeat
385	臭	放臭	1	5	R	SNS	stink
390	出	搬出	1402	124	D	Chu	outward
450	出	熬出	1402	124	D	Chu	appear/achieve
523	穿	叉穿	5	9	R	STA	penetrate
553	错	安错	47	120	PHS/R	EVL	wrong
673	大	编大	55	34	R	SDM	large
707	呆	变呆	8	7	R	SNS	show a blank look
714	倒(dao3)	按倒	93	52	R	CFG	fall/topple
766	到	安到	2496	288	D/PHS	Dao	Result
1054	到底	帮到底	4	8	R	DGR	to the end
1062	到家	说到家	1	3	R	EVL	excellent
1065	到手	分到手	6	12	R	STA	obtained
1089	倒(dao4)	摆倒	1	7	R	CFG	invert
1096	得	熬得	18	14	PHS/CMP	De	indicating possibility
1110	低	安低	16	7	R	SDM	low
1127	掉	拨掉	78	80	PHS/R	STA	detached/off/fall
1207	定	打定	28	11	R	STA	fixed
1218	丢	搬丢	2	8	R	STA	lost
1226	懂	搞懂	6	6	R	MNT	clear/understood
1232	动	按动	7	12	R	STA	MOVE
1246	短	裁短	1	10	R	SDM	short
1256	断	拔断	21	27	R	STA	cut off
1283	对	摆对	19	18	PHS/R	EVL	right
1303	多	熬多	112	44	R	QTY	more than correct/requested
1347	翻	踩翻	10	9	R	CFG	turn over
1370	飞	吓飞	1	2	R	STA	fly
1371	飞	炸飞	1	2	R	STA	hover
1377	疯	逼疯	2	4	R	CHR	crazy
1381	服	说服	30	3	R	STA	obey
1389	干	熬干 (ao2)	15	19	R	STA	dry
1408	干净	擦干净	8	26	R	STA	clean
1418	干净	拨干净	8	26	R	DGR	completely
1434	高	安高	32	20	R	SDM	high
1455	给	掰给	272	47	CMP	Gei	give
1502	够	盛够	10	33	R	QTY	enough
1518	够	吃够	10	33	R	QTY	having had too much/bored

1535	鼓	吃鼓	2	3	R	STA	swell
1538	惯	熬惯	20	22	R	PSY	accustomed
1560	光	拨光	21	24	PHS	Guang	consumed
1584	过	搬过	193	18	D/PHS	Guo	past/through
1591	过	熬过 (ao2)	193	18	D/PHS	Guo	exceed
1610	好	安好	257	98	PHS/R	EVL	well
1708	黑	擦黑	5	8	R	COL	black
1716	红	熬红	19	21	R	COL	red
1736	红	唱红	19	21	R	COL	become popular
1750	糊涂	催糊涂	1	17	R	SNS	muddled
1778	猾	变猾	8	2	R	CHR	shrewd
1783	坏	熬坏 (ao2)	24	104	R	STA	damaged/ruined
1845	坏	拨坏	24	104	R	EVL	fail/fall/make worse
1863	坏	憋坏	24	104	R	DGR	badly
1882	坏	宠坏	24	104	R	PRP	spoil
1887	慌	发慌	16	1	R	PSY	flurried
1888	黄	变黄	1	5	R	COL	yellow
1894	会	背会	53	5	R	EVL	capable
1899	昏	打昏	1	5	R	SNS	faint
1911	活	搞活	29	7	R	PRP	vivid
1915	活	救活	29	7	R	STA	alive
1917	活	说活	29	7	R	STA	moving
1929	急	逼急	6	5	R	PSY	irritated
1936	尖	熬尖	1	3	R	SHP	pointed
1945	见	看见	792	8	R	SNS	sense
1953	僵	搞僵	3	4	R	STA	deadlocked
1956	僵	冻僵	3	4	R	SNS	numb
1957	焦	烤焦	3	2	R	STA	burnt
1974	紧	挨紧	7	14	R	PRP	close/tight
1990	尽	吃尽	19	9	PHS	STA	exhausted
1999	进	搬进	254	32	D	Jin	into
2031	近	挨近	30	5	R	SDM	near
2040	净	簸净	6	16	R	DGR	completely
2054	净	擦净	6	16	R	STA	clean
2056	久	摆久	1	10	R	TIM	long
2066	旧	穿旧	2	6	R	PRP	used/worn/old
2072	就绪	准备就绪	1	1	R	STA	in order/ready
2084	开	扒开	481	116	D/R	STA	separate/away from
2132	开	掰开	481	116	D/R	STA	open
2155	开	巴结开	481	116	D/R	STA	advanced/continued activity
2188	开	传开	481	116	D/R	STA	expand/develop
2193	开	烧开	481	116	D/R	STA	boiling
2195	开	泡开	481	116	D/R	STA	infused
2197	开	陈列开	481	116	D/R	STA	have enough room
2199	开	摆开	481	116	D/R	STA	assuming
2204	空	搬空	3	10	R	STA	empty
2211	空	踩空	3	10	R	MNR	miss the target
2214	哭	打哭	2	8	R	ACT	cry
2226	垮	冲垮	3	7	R	STA	collapse
2233	快	拨快	14	11	R	TIM	fast
2243	快	磨快	14	11	R	TIM	sharp
2244	宽	裁宽	1	9	R	SDM	wide
2266	烂	熬烂	6	23	R	PRP	rotten
2269	烂	放烂	6	23	R	STA	rot/fester
2274	烂	扒拉烂	6	23	R	STA	worn-out
2289	老	变老	4	4	R	STA	old
2293	累	拨累	2	33	R	SNS	tired

2339	凉	冰凉	16	3	R	TMP	cool
2342	亮	拨亮	2	5	R	STA	bright
2366	聋	变聋	1	4	R	STA	deaf
2373	绿	变绿	2	3	R	COL	green
2376	乱	搬乱	10	16	R	STA	in disorder
2395	满	安满	64	79	R	STA	full
2474	慢	吃慢	6	11	R	TIM	slow
2501	灭	踩灭	2	11	R	STA	go out
2512	明	讲明	43	6	R	PRP	clear/plain
2518	明白	查明白	111	11	R	MNT	clear
2534	恼	惹恼	5	2	R	PSY	angry/irritated
2538	腻	剥腻	3	32	R	PSY	be tired of
2585	怕	打怕	2	9	R	PSY	feared
2598	跑	蹦跑	10	17	R	STA	away
2629	平	刨平	4	13	R	SHP	flat
2645	破	擦破	31	31	R	STA	broken
2676	齐	摆齐	8	20	R	STA	neat
2683	齐	备齐	8	20	R	STA	all ready
2699	起	背起	238	29	D/PHS	Qi	up
2713	起	搭起	238	29	D/PHS	Qi	complete
2717	起	吹起	238	29	D/PHS	Qi	starting
2749	清	辨清	71	18	R	STA	distinct
2767	清楚	标清楚	78	18	R	STA	clear
2791	全	编全	4	9	R	EVL	complete
2806	热	搓热	1	14	R	TMP	hot
2847	散(san4)	冲散	6	6	R	EXS	disperse
2859	伤	崩伤	10	18	R	STA	injured
2875	伤	吃伤	10	18	R	PSY	get sick of
2877	上	插上	730	128	D	Shang	high
2886	上	挨上	730	128	D	Shang	starting
2910	上	安上	730	128	D	Shang	finished
3021	少	备少	3	12	R	QTY	a little/a few
3033	折(she2)	掰折	4	28	R	STA	break
3067	剩下	吃剩下	1	7	R	QTY	left
3074	湿	擦湿	4	11	R	STA	wet
3085	瘦	熬瘦	1	5	R	SHP	thin
3092	输	打输	2	3	R	STA	lose
3095	熟	背熟	14	30	R	PRP	skilled
3108	熟	呆熟	14	30	R	STA	familiar
3115	熟	熬熟	14	30	R	STA	cooked
3137	死	崩死	170	47	R	STA	dead
3177	死	顶死	170	47	R	STA	fixed/rigid
3182	死	堵死	170	47	R	STA	closed/impassable
3188	酸	蹬酸	2	13	R	SNS	tingle/ache
3201	碎	崩碎	22	17	R	STA	smashed
3217	碎	操碎	22	17	R	PSY	care-laded
3223	太平	过太平	3	1	R	MNR	peaceful
3225	疼	掰疼	2	21	R	SNS	ache
3245	疼	刺疼	2	21	R	SNS	cause to feel regret
3246	通	拨通	7	12	R	STA	through
3262	透	出透	10	22	R	DGR	fully
3271	透	揣摩透	10	22	R	DGR	thoroughly
3278	透	穿透	10	22	R	STA	pass through
3286	歪	安歪	1	17	R	CFG	askew
3310	完	扒完	266	104	PHS	Wan	finished
3416	晚	拔晚	27	26	R	TIM	late
3446	稳	垫稳	3	3	R	STA	steady

3484	瞎	崩瞎	1	12	R	STA	blind
3494	瞎	弄瞎	1	12	R	STA	become tangled
3496	下	垂下	589	41	D	Xia	down
3511	下	包下	589	41	D	Xia	completed
3532	下	摆下	589	41	D	Xia	having the capacity to hold
3551	响	踩响	1	7	R	SNS	echo
3558	小	变小	3	13	R	SDM	small
3571	笑	逗笑	24	2	R	ACT	laugh
3583	醒	扒拉醒	25	28	R	SNS	awake
3613	哑	唱哑	1	5	R	STA	hoarse
3618	严	把严	5	11	R	STA	tight
3628	严	管严	5	11	R	MNR	strict
3637	赢	打赢	2	5	R	STA	win
3642	硬	变硬	3	5	R	PRP	hard/stiff
3649	圆	瞪圆	3	4	R	SHP	round
3653	远	搬远	7	14	R	SDM	far
3697	砸	办砸	1	7	R	QTY	fail
3704	在	安在	1334	117	CMP	Zai	at/in/on
3821	脏	擦脏	1	16	R	STA	dirty
3844	早	熬早	9	20	R	TIM	early
3866	炸	气炸	1	1	R	PSY	go into a rage
3876	着(zhao2)	崩着	93	64	PHS	Zhao	achieve a goal
3908	着(zhao2)	碍着	93	64	PHS	Zhao	touch
3935	着(zhao2)	点着	93	64	PHS	Zhao	burn
3938	着(zhao2)	哄着	93	64	PHS	Zhao	asleep
3940	整齐	摆整齐	1	5	R	STA	clean and tidy
3945	正	摆正	2	3	R	MNR	correct
3948	直	裁直	7	14	R	SHP	straight
3962	肿	打肿	2	7	R	STA	swollen
3969	中	刺中	23	10	R	MNR	hit exactly
3991	住	扒住	442	60	PHS	Zhu	steady
4023	住	憋住	442	60	PHS	Zhu	stop
4053	准	对准	19	6	R	MNR	correct
4057	准	说准	19	6	R	PRP	clear
4060	仔细	看仔细	1	1	R	MNR	careful
4061	紫	憋紫	1	6	R	COL	purple
4067	走	搬走	120	50	R	STA	away
4120	足	憋足	3	7	R	QTY	sufficient
4127	醉	灌醉	6	2	R	SNS	drunk

Fields

Seq No.:	Sequential No. of V-V compounds	
Token_DB:	Tokens found in Wang et al.	
Token_CNC	Token found in the CNC	
V2 Type:	CMP	Pivotal
	D	Directional
	D/PHS	Directional/Phase
	D/R	Directional/Resultative
	PHS	Phase
	PHS/CMP	Phase/Pivotal
	PHS/R	Phase/Resultative
	R	Resultative
	Semantic Type of V2	
	ACT	Activity
	CFG	Configuration
	Cheng	Pivotal *cheng*
Sem:	CHR	Character

Chu	Directional
COL	Change of location
Dao	Directional
De	Phase *de*
DGR	Degree
EVL	Evaluation
EXS	Existence
Gei	Pivotal *gei*
Guang	Phase *guang*
Guo	Directional guo
Jin	Phase *jin*
MNR	Manner
MNT	Mental activity
PRP	Property
PSY	Psychological
Qi	Directional *qi*
QTY	Quantity
SDM	Space/Dimension
Shang	Directional shang
SHP	Shape
SNS	Sensation
STA	State
TIM	Time
TMP	Temperature
Wan	Phase *wan*
Xia	Directional *xia*
Zai	Pivotal *zai*
Zhao	Phase *zhao*
Zhu	Phase *zhu*

Appendix C2

Aspectual Tests on V2 Found in CNC
(Unique Types Only)

Seq No.	V2	V2_pin	RVC	V2_trans	Yijing-le	Zhe	Hen	Mei
20	安定	anding	住安定	stable	Y	N	Y	N
24	暗	an	遮暗	dark	Y	N	Y	Y
3442	旺	wang	烧旺	rigorous	Y	N	Y	Y
1892	黄	huang	搅黄	fizzle through	Y	N	N	Y
1780	化	hua	熬化	melt/dissolve	Y(V)	Y(V)	N	Y
1768	花	hua	染花	multicolored/ variegated	Y	N	N	Y
1915	活	huo	救活	alive	Y	Y	N	Y
1917	活	huo	说活	moving/touched	N	N	N	N
1918	活动	huodong	打活动	shaky	Y	N	N	Y
1392	干	gan	吹干	dry	Y	N	Y	Y
1408	干净	ganjing	擦干净	clean	Y	N	Y	N
2083	均匀	junyun	分均匀	well-distributed	Y	N	Y	N
2204	空	kong	搬空	empty	Y	Y	Y	Y
1744	糊	hu	炒糊	burnt	Y	N	Y	Y
1536	鼓	gu	吹鼓	swell	Y	Y(V)	Y	Y
1906	混	hun	搞混	mixed	Y(V)	Y	N	Y
2841	散	san	扔散	come loose/fall apart	Y	N	Y	Y
2845	散架	sanjia	摔散架	fall apart	Y	N	N	Y
152	残	can	打残	injured/damaged	Y	N	N	Y
162	残废	canfei	打残废	disable	Y	N	N	Y
3147	死	si	冻死	dead	Y	N	N	Y
3178	死	si	定死	fixed/rigid	N	N	N	N
3183	死	si	缝死	closed/impassable	N	N	N	N
3081	湿	shi	洗湿	wet	Y	?	Y	Y
3124	熟	shu	睡熟	well/enough	N	N	N	N
3116	熟	shu	炒熟	cooked	Y	N	N	Y
3114	熟	shu	走熟	familiar	Y	N	Y	N
1957	焦	jiao	烤焦	burnt	Y	N	?	Y
3006	上当	shangdang	买上当	deceived	Y(V)	N	N	Y
3009	上瘾	shangyin	吃上瘾	addicted	Y(V)	N	N	Y
365	成熟	chengshu	长成熟	mature	Y	N	Y	?
3940	整齐	zengqi	摆整齐	clean and tidy	Y	N	Y	N
2786	晴	qing	刮晴	fine/clear	Y	N	Y	Y
2749	清	qing	辨清	distinct	N	N	N	N
2774	清楚	qingchu	讲清楚	clear	Y	N	Y	N
3033	折	she	掰折	break	Y	N	N	Y
527	穿	chuan	钉穿	penetrate	N	N	N	N
3839	糟	zao	煮糟	rotten	N	N	N	N
3843	糟	zao	弄糟	messy	Y	N	N	Y
4067	走	zou	搬走	away	Y(V)	N	N	Y

4117	走调儿	zoudiaor	唱走调儿	out of tune	Y(V)	N	?	Y
1265	断	duan	剪断	cut off	Y(V)	N	N	Y
380	抽	chou	洗抽	shrink	Y	N	N	Y
226	潮	chao	受潮	dampy	Y	N	Y	Y
3246	通	tong	拨通	through	Y	N	N	Y
1213	定	ding	说定	fixed	Y(V)	N	N	Y
1075	到手	daoshou	赚到手	obtained	Y(V)	N	N	Y
3278	透	tou	穿透	pass through	Y(V)	N	N	Y
2645	破	po	擦破	broken	Y	N	N	Y
68	爆	bao	吹爆	burst	Y(V)	N	N	Y
2616	披	pi	踩披	split/open	Y	N	N	Y
2621	皮	pi	放皮	become soft and soggy	Y	N	Y	Y
143	病	bing	冻病	sick	Y(V)	Y	N	Y
1388	富	fu	过富	rich	Y	N	Y	N
1382	服	fu	压服	obey	Y(V)	N	Y(V)	N
2644	平稳	pingyin	飞平稳	smooth and steady	Y	N	Y	N
2623	偏	pian	挂偏	inclined to one side	Y	Y(V)	Y	Y
70	崩	beng	吹崩	burst	Y(V)	N	N	Y
3636	野	ye	玩野	unrestricted	Y	N	Y	N
2265	落	la	看落	leave	Y(V)	N	N	Y
2383	乱	luan	放乱	in disorder	Y	N	Y	Y
2333	利害	lihai	烧利害	terrible	Y	N	Y	N
2335	利索	lisuo	办利索	settled/finished/ neat	Y	N	Y	N
2362	流血	liuxue	碰流血	bleed	Y(V)	N	N	Y
2343	亮	liang	擦亮	bright	Y	Y(V)	Y	Y
2347	裂	lie	冻裂	split	Y(V)	N	N	Y
2371	漏	lou	烧漏	leak out of a	Y(V)	Y(V)	?	Y
2291	老	lao	蒸老	old	Y	N	Y	Y
1953	僵	jing	搞僵	deadlocked	Y	Y	Y	Y
3648	冤	yuan	花冤	lose	N	N	Y	N
2077	卷	juan	晒卷	rolled up	Y	Y(V)	Y	Y
1833	坏	huai	踢坏	damaged/ruined	Y	N	N	Y
3134	撕	si	揭撕	torn	Y(V)	Y(VT)	N	Y
2831	洒	sa	颠洒	sprinkle	Y(V)	Y(VT)	Y	Y
3493	瞎	xia	治瞎	blind	Y	Y	Y	Y
3494	瞎	xia	弄瞎	become tangled	Y	Y	Y	Y
3203	碎	sui	打碎	smashed	Y	N	Y	Y
381	稠	chou	熬稠	thick	Y	N	Y	Y
1910	豁	huo	扒豁	split	Y(V)	Y(V)	N	Y
2573	黏	nian	弄黏	sticky	Y	Y(V)	Y	Y
3687	匀	yun	拌匀	even	Y	N	Y	Y
3694	匀称	yunchen	摆匀称	well-balanced	Y	N	Y	N
1218	丢	diu	搬丢	lost	Y(V)	N	N	Y
3624	严	yan	关严	tight	?	N	N	N

3629	严实	yanshi	盖严实	tight	Y	N	Y	N
2859	伤	shang	崩伤	injured	Y(V)	N	N	N
2054	净	jing	擦净	clean	N	N	N	N
1238	动	dong	漂动	move	Y(V)	N	N	Y
3555	响	xiang	拉响	echo	Y	Y	Y	Y
3613	哑	ya	唱哑	hoarse	Y	Y(VI/V	Y	Y
2226	垮	kua	冲垮	collapse	Y(V)	N	N	Y
3218	塌	ta	踩塌	collapse	Y(V)	N	N	Y
2147	开	kai	拧开	open	Y	Y	N	Y
2327	愣	leng	打愣	distracted	Y(V)	Y	N	Y
231	沉	chen	压沉	sink	Y(V)	N	N	Y
2448	满	man	上满	full	Y	Y	Y	Y
2501	灭	mie	踩灭	go out	Y(V)	N	N	Y
2276	烂	lan	穿烂	worn-out	Y	N	Y	Y
2269	烂	lan	放烂	rot/fester	Y	N	Y	Y
131	瘪	bie	饿瘪	shriveled	Y	Y(V)	Y	Y
2800	瘸	que	打瘸	limp (by getting injured)	Y	Y	N	Y
3985	皱	zhou	穿皱	wrinkled	Y	Y(V)	Y	Y
3284	秃	tu	磨秃	become blunt	Y	Y	Y	Y
3446	稳	wen	垫稳	steady	Y	N	Y	Y
2788	穷	qiong	吃穷	poor	Y	N	Y	N
2081	绝	jue	用绝	exhausted/used up	Y(V)	N	N	N
74	绷	beng	砸绷	spring/bounce	Y(V)	N	N	Y
2368	聋	long	烧聋	deaf	Y	N	Y	Y
3962	肿	zhong	打肿	swollen	Y	Y	Y	Y
3874	胀	zhang	吃胀	swollen	Y	N	Y	Y
3836	脏	zang	坐脏	dirty	Y	N	Y	Y
2571	蔫	nian	说蔫	spiritless	Y	N	Y	Y
3637	赢	ying	打赢	win	Y(V)	N	N	Y
2613	跑	pao	吓跑	away	Y(V)	N	N	Y
3092	输	shu	打输	lose	Y(V)	N	N	Y
1371	飞	fei	炸飞	away/off	Y(V)	N	N	Y
1370	飞	fei	吓飞	away/off	Y(V)	Y(V)	N	Y
3184	馊	sou	放馊	sour/spoiled	Y	N	?	Y
2683	齐	qi	备齐	all ready	Y(V)	N	N	Y
2676	齐	qi	摆齐	neat	Y	N	Y	Y

Fields

Seq No.:	Sequential Number
V2:	V2
V2_pin:	Pinyin of V2
RVC:	RVC Example
V2_trans	Translation of V2
Yijing-le:	Yijing test
Zhe:	Zhe test
Hen:	Hen test

Mei:	Mei test	
	Test result symbolds	Y: Yes N: No (V): Verb VI: Intransitive verb VT: Transitive verb ?: Unable to judge

Appendix C3

Mandarin V-V compounds from *Hanyu Dongci Jieguo Buyu Dapei Cidian* (1987) and Tokens Found in Chinese Novel Corpus

(Note that compounds are sorted in pinyin alphabet order of V1.)

Seq No.	Compound	Pinyin	Tokens
1	安矮	an1 ai3	0
2	搭矮	da1 ai3	0
3	飞矮	fei1 ai3	0
4	缝矮	feng2 ai3	0
5	改矮	gai3 ai3	1
6	盖矮	gai4 ai3	0
7	挂矮	gua4 ai3	0
8	画矮	hua4 ai3	0
9	垒矮	lei3 ai3	0
10	摞矮	luo4 ai3	0
11	砌矮	qi4 ai3	0
12	扔矮	reng1 ai3	0
13	拴矮	shuan1 ai3	0
14	绣矮	xiu4 ai3	0
15	凿矮	zao2 ai3	0
16	坐矮	zuo4 ai3	0
17	做矮	zuo4 ai3	0
18	压矮	ya1 ai3	0
19	过安定	guo4 an1 ding4	0
20	住安定	zhu4 an1 ding4	0
21	睡安稳	shui4 an1 wen3	0
22	坐安稳	zuo4 an1 wen3	0
23	变暗	bian4 an4	1
24	遮暗	zhe1 an4	0
25	变白	bian4 bai2	1
26	擦白	ca1 bai2	0
27	蹭白	ceng4 bai2	0
28	累白	lei4 bai2	0
29	闷白	men1 bai2	0
30	磨白	mo2 bai2	0
31	弄白	nong4 bai2	0
32	泡白	pao4 bai2	0
33	气白	qi4 bai2	3
34	晒白	shai4 bai2	0
35	刷白	shua1 bai2	1
36	捂白	wu3 bai2	0
37	洗白	xi3 bai2	0
38	吓白	xia4 bai2	0
39	念白	nian4 bai2	0
40	刨薄	bao4 bo2	0
41	擦薄	ca1 bo2	0
42	垫薄	dian4 bo2	0
43	擀薄	gan3 bo2	0
44	糊薄	hu2 bo2	0
45	剪薄	jian3 bo2	0
46	锯薄	ju4 bo2	0
47	烙薄	luo4 bo2	0
48	磨薄	mo2 bo2	0
49	铺薄	pu1 bo2	0
50	切薄	qie1 bo2	0
51	去薄	qu4 bo2	0
52	使薄	shi3 bo2	0
53	摊薄	tan1 bo2	0
54	削薄	xue1 bo2	0
55	絮薄	xu4 bo2	0
56	压薄	ya1 bo2	0
57	用薄	yong4 bo2	0
58	织薄	zhi1 bo2	0
59	做薄	zuo4 bo2	0
60	尝饱	chang2 bao3	0
61	吃饱	chi1 bao3	5
62	灌饱	guan4 bao3	0
63	喝饱	he1 bao3	0
64	看饱	kan4 bao3	0
65	气饱	qi4 bao3	0
66	闻饱	wen2 bao3	0
67	长饱满	zhang3 bao3 man3	0
68	吹爆	chui1 bao4	0
69	晒爆	shai4 bao4	0
70	吹崩	chui1 beng1	0
71	说崩	shuo1 beng1	0
72	谈崩	tan2 beng1	0
73	剁绷	duo4 beng1	0
74	砸绷	za2 beng1	0
75	凿绷	zao2 beng1	0
76	按扁	an4 bian3	0
77	踩扁	cai3 bian3	0
78	画扁	hua4 bian3	0
79	挤扁	ji3 bian3	1
80	捏扁	nie1 bian3	0
81	睡扁	shui4 bian3	0
82	摔扁	shuai1 bian3	0

Seq No.	Compound	Pinyin	Tokens
83	写扁	xie3 bian3	0
84	压扁	ya1 bian3	1
85	砸扁	za2 bian3	0
86	揍扁	zou4 bian3	0
87	撞扁	zhuang4 bian3	0
88	坐扁	zuo4 bian3	0
89	看扁	kan4 bian3	0
90	参观遍	can1 guan1 bian4	0
91	查遍	cha2 bian4	0
92	尝遍	chang2 bian4	0
93	吃遍	chi1 bian4	0
94	传遍	chuan2 bian4	3
95	串遍	chuan4 bian4	0
96	吹遍	chui1 bian4	0
97	打听遍	da3 ting1 bian4	0
98	得罪遍	de2 zui4 bian4	0
99	翻遍	fan1 bian4	0
100	访问遍	fang3 wen4 bian4	0
101	逛遍	guang4 bian4	0
102	喊遍	han3 bian4	0
103	检查遍	jian3 cha2 bian4	0
104	讲遍	jiang3 bian4	0
105	看遍	kan4 bian4	0
106	骂遍	ma4 bian4	0
107	买遍	mai3 bian4	0
108	摸遍	mo1 bian4	0
109	拿遍	na2 bian4	0
110	闹遍	nao4 bian4	0
111	爬遍	pa2 bian4	0
112	跑遍	pao3 bian4	1
113	欺负遍	qi1 fu4 bian4	0
114	敲遍	qiao1 bian4	0
115	去遍	qu4 bian4	0
116	撒遍	sa3 bian4	0
117	试遍	shi4 bian4	0
118	耍遍	shua3 bian4	0
119	搜遍	sou1 bian4	0
120	搜查遍	sou1 cha2 bian4	0
121	掏遍	tao1 bian4	0
122	舔遍	tian3 bian4	0
123	挑遍	tiao1 bian4	0
124	玩遍	wan2 bian4	0
125	闻遍	wen2 bian4	0
126	问遍	wen4 bian4	0
127	找遍	zhao3 bian4	2
128	住遍	zhu4 bian4	0

Seq No.	Compound	Pinyin	Tokens
129	走遍	zou3 bian4	1
130	踩瘪	cai3 bie3	0
131	饿瘪	e4 bie3	1
132	摁瘪	en4 bie3	0
133	挤瘪	ji3 bie3	0
134	磕瘪	ke1 bie3	0
135	捏瘪	nie1 bie3	0
136	摔瘪	shuai1 bie3	0
137	压瘪	ya1 bie3	0
138	撞瘪	zhuang4 bie3	0
139	坐瘪	zuo4 bie3	0
140	憋病	bie1 bing4	0
141	撑病	cheng1 bing4	0
142	吹病	chui1 bing4	0
143	冻病	dong4 bing4	0
144	饿病	e4 bing4	0
145	激病	ji1 bing4	0
146	浇病	jiao1 bing4	0
147	累病	lei4 bing4	0
148	气病	qi4 bing4	1
149	捂病	wu3 bing4	0
150	洗病	xi3 bing4	0
151	吓病	xia4 bing4	0
152	打残	da3 can2	0
153	磕残	ke1 can2	0
154	弄残	nong4 can2	0
155	碰残	peng4 can2	0
156	烧残	shao1 can2	0
157	摔残	shuai1 can2	0
158	踢残	ti1 can2	0
159	轧残	ya4 can2	0
160	砸残	za2 can2	0
161	炸残	za4 can2	0
162	打残废	da3 can2 fei4	1
163	烧残废	shao1 can2 fei4	0
164	摔残废	shuai1 can2 fei4	0
165	砸残废	za2 can2 fei4	0
166	丢惨	diu1 can3	0
167	冻惨	dong4 can3	0
168	饿惨	e4 can3	0
169	浇惨	jiao1 can3	0
170	考惨	kao3 can3	0
171	累惨	lei4 can3	0
172	烧惨	shao1 can1	0
173	输惨	shu1 can3	0
174	摔惨	shuai1 can3	0

Seq No.	Compound	Pinyin	Tokens
175	糟蹋惨	zao1 ta4 can3	0
176	折腾惨	zhe2 teng2 can3	0
177	写草	xie3 cao3	0
178	穿差	chuan1 cha4	0
179	戴差	dai4 cha4	0
180	搞差	gao3 cha4	0
181	记差	ji4 cha4	0
182	看差	kan4 cha4	0
183	拿差	na2 cha4	0
184	弄差	nong4 cha4	0
185	说差	shuo1 cha4	0
186	听差	ting1 cha4	0
187	走差	zou3 cha4	0
188	装差	zhuang1 cha4	0
189	跑岔气	pao3 cha4 qi4	0
190	笑岔气	xiao4 cha4 qi4	0
191	走岔气	zou3 cha4 qi4	0
192	吃馋	chi1 chan2	0
193	说馋	shuo1 chan2	0
194	裁长	cai2 chang2	0
195	抻长	chen1 chang2	0
196	放长	fang4 chang2	0
197	擀长	gan3 chang2	0
198	钩长	gou1 chang2	0
199	接长	jie1 chang2	0
200	锯长	ju4 chang2	0
201	拉长	la1 chang2	4
202	量长	liang4 chang2	0
203	留长	liu2 chang2	0
204	描长	miao2 chang2	0
205	切长	qie1 chang2	0
206	写长	xie3 chang2	0
207	织长	zhi1 chang2	0
208	做长	zuo4 chang2	0
209	戴长	dai4 chang2	0
210	等长	deng3 chang2	0
211	炖长	tun1 chang2	0
212	放长	fang4 chang2	0
213	干长	gan4 chang2	0
214	搁长	ge1 chang2	0
215	工作长	gong1 zuo4 chang2	0
216	混长	hun4 chang2	0
217	教长	jiao1 chang2	6
218	看长	kan4 chang2	5
219	拖长	tuo1 chang2	0
220	闻长	wen2 chang2	0
221	写长	xie3 chang2	0
222	住长	zhu4 chang2	0
223	走长	zou3 chang2	0
224	坐长	zuo4 chang2	0
225	弄潮	nong4 chao2	0
226	受潮	shou4 chao2	0
227	改革彻底	gai3 ge2 che4 di3	0
228	解决彻底	jie3 jue2 che4 di3	0
229	打沉	da3 chen2	0
230	击沉	ji2 chen2	0
231	压沉	ya1 chen2	0
232	撞沉	zhuang4 chen2	0
233	安装成	an1 zhuang1 cheng2	0
234	熬成1	ao1 cheng2	0
235	熬成2	ao2 cheng2	0
236	摆成	bai3 cheng2	2
237	掰成	bai1 cheng2	0
238	扮成	ban4 cheng2	4
239	绑成	bang3 cheng2	0
240	包成	bao1 cheng2	2
241	比画成	bi3 hua4 cheng2	0
242	编成	bian1 cheng2	2
243	变成	bian4 cheng2	280
244	病成	bing4 cheng2	0
245	布置成	bu4 zhi4 cheng2	0
246	擦成	ca1 cheng2	0
247	猜成	cai1 cheng2	0
248	拆成	chai1 cheng2	0
249	铲成	chan3 cheng2	0
250	唱成	chang4 cheng2	1
251	抄成	chao1 cheng2	0
252	处理成	chu4 li3 cheng2	0
253	穿成	chuan1 cheng2	0
254	凑成	cou4 cheng2	2
255	攒成	zan3 cheng2	0
256	搓成	cuo1 cheng2	0
257	搭成	da1 cheng2	1
258	打成	da3 cheng2	14
259	当成	dang1 cheng2	0
260	订成	ding4 cheng2	0
261	剁成	duo4 cheng2	0
262	饿成	e4 cheng2	1
263	发展成	fa1 zhan3 cheng2	1
264	翻译成	fan1 yi4 cheng2	0
265	分成	fen1 cheng2	8
266	改成	gai3 cheng2	8

Seq No.	Compound	Pinyin	Tokens
267	改编成	gai3 bian1 cheng2	0
268	盖成	gai4 cheng2	0
269	隔成	ge2 cheng2	0
270	管成	guan3 cheng2	0
271	惯成	guan4 cheng2	0
272	划分成	hua2 fen1 cheng2	0
273	画成	hua4 cheng2	0
274	糊成	hu2 cheng2	0
275	换成	huan4 cheng2	5
276	急成	ji2 cheng2	0
277	剪成	jian3 cheng2	0
278	减缩成	jian3 suo1 cheng2	0
279	简化成	jian3 hua4 cheng2	0
280	建成	jian4 cheng2	0
281	建设成	jian4 she4 cheng2	0
282	系成	xi4 cheng2	1
283	浇成	jiao1 cheng2	0
284	教育成	jiao4 yu4 cheng2	1
285	接成	jie1 cheng2	1
286	结成	jie2 cheng2	8
287	锯成	ju4 cheng2	0
288	卷成	juan4 cheng2	2
289	撅成	jue1 cheng2	1
290	砍成	kan3 cheng2	0
291	看成	kan4 cheng2	27
292	哭成	ku1 cheng2	4
293	捆成	kun3 cheng2	0
294	垒成	lei3 cheng2	0
295	累成	lei4 cheng2	0
296	乱成	luan4 cheng2	3
297	摞成	luo4 cheng2	2
298	磨成	mo2 cheng2	1
299	磨炼成	mo2 lian4 cheng2	0
300	念成	nian4 cheng2	0
301	酿成	niang4 cheng2	0
302	捏成	nie1 cheng2	1
303	拧成	ning2 cheng2	1
304	扭成	niu3 cheng2	1
305	弄成	nong4 cheng2	4
306	沤成	ou4 cheng2	0
307	排成	pai2 cheng2	6
308	胖成	pang4 cheng2	0
309	喷成	pen1 cheng2	0
310	劈成	pi1 cheng2	0
311	欺负成	qi1 fu4 cheng2	1
312	漆成	qi1 cheng2	3
313	骑成	qi2 cheng2	0
314	气成	qi4 cheng2	0
315	染成	ran3 cheng2	0
316	绕成	rao3 cheng2	0
317	揉成	rou2 cheng2	6
318	删改成	shan1 gai3 cheng2	0
319	烧成	shao1 cheng2	3
320	瘦成	shou4 cheng2	2
321	梳成	shu1 cheng2	0
322	摔成	shuai1 cheng2	2
323	说成	shuo1 cheng2	5
324	撕成	si1 cheng2	0
325	烫成	tang4 cheng2	3
326	踢成	ti1 cheng2	0
327	剃成	ti4 cheng2	0
328	听成	ting1 cheng2	1
329	团成	tuan2 cheng2	3
330	围成	wei2 cheng2	4
331	洗成	xi3 cheng2	0
332	响成	xiang3 cheng2	2
333	想成	xiang3 cheng2	3
334	写成	xie3 cheng2	2
335	压成	ya1 cheng2	1
336	腌成	an1 cheng2	0
337	养成	yang3 cheng2	6
338	译成	yi4 cheng2	2
339	印成	yin4 cheng2	0
340	砸成	za2 cheng2	0
341	糟蹋成	zao1 ta4 cheng2	0
342	造成	zao4 cheng2	21
343	炸成	za4 cheng2	2
344	长成	zhang3 cheng2	3
345	煮成	zhu3 cheng2	0
346	铸成	zhu4 cheng2	2
347	转变成	zhuan3 bian4 cheng2	0
348	装成	zhuang1 cheng2	2
349	追成	zhui1 cheng2	0
350	钻成	zuan1 cheng2	0
351	攥成	zuan4 cheng2	1
352	醉成	zui4 cheng2	0
353	折磨成	zhe2 mo2 cheng2	0
354	办成	ban4 cheng2	1
355	促成	cu4 cheng2	3
356	干成	gan4 cheng2	1
357	画成	hua4 cheng2	0
358	建成	jian4 cheng2	3

Seq No.	Compound	Pinyin	Tokens
359	去成	qu4 cheng2	0
360	学成	xue2 cheng2	0
361	研制成	yan2 zhi4 cheng2	0
362	做成	zuo4 cheng2	1
363	考虑成熟	kao3 lv4 cheng2 shou2	0
364	酝酿成熟	yun4 niang4 cheng2 shou2	0
365	长成熟	zhang3 cheng2 shu2	1
366	办迟	ban4 chi2	0
367	来迟	lai2 chi2	3
368	去迟	qu4 chi2	0
369	摆充分	bai3 chong1 fen1	0
370	研究充分	yan2 jiu4 chong1 fen1	0
371	讨论充分	tao3 lun4 chong1 fen1	0
372	包重	bao1 chong2	0
373	出重	chu1 chong2	0
374	订重	ding4 chong2	0
375	发重	fa1 chong2	0
376	给重	gei3 chong2	2
377	借重	jie4 chong2	1
378	扣重	kou4 chong2	0
379	买重	mai3 chong2	0
380	洗抽	xi3 chou1	0
381	熬稠	ao2 chou2	0
382	冲稠	chong1 chou2	0
383	打稠	da3 chou2	0
384	做稠	zuo4 chou2	0
385	放臭	fang4 chou4	0
386	泡臭	pao4 chou4	0
387	捂臭	wu3 chou4	0
388	熏臭	xun1 chou4	1
389	搞臭	gao3 chou4	0
390	搬出	ban1 chu1	12
391	抱出	bao4 chu1	1
392	爆发出	bao4 fa1 chu1	0
393	背出	bei4 chu1	0
394	表达出	biao3 da2 chu1	0
395	表现出	biao3 xian4 chu1	9
396	表演出	biao3 yan3 chu1	0
397	拨出	bo1 chu1	1
398	播出	bo4 chu1	0
399	长出	chang2 chu1	0
400	唱出	chang4 chu1	1
401	冲出	chong1 chu1	8
402	抽出	chou1 chu1	9
403	传出	chuan2 chu1	7
404	端出	duan1 chu1	1
405	发出	fa1 chu1	53
406	放出	fang4 chu1	23
407	放射出	fang4 she4 chu1	4
408	分泌出	fen1 mi4 chu1	0
409	贡献出	gong4 xian4 chu1	0
410	寄出	ji4 chu1	1
411	救出	jiu4 chu1	22
412	举出	ju3 chu1	3
413	流出	liu2 chu1	14
414	流露出	liu2 lu4 chu1	2
415	露出	lu4 chu1	99
416	迈出	mai4 chu1	2
417	卖出	mai4 chu1	17
418	冒出	mou4 chu1	20
419	拿出	na2 chu1	91
420	排出	pai2 chu1	0
421	派出	pai4 chu1	8
422	喷出	pen1 chu1	2
423	抢救出	qiang3 jiu4 chu1	0
424	清理出	qing1 li3 chu1	0
425	沁出	qin4 chu1	0
426	倾吐出	qing1 tu3 chu1	1
427	取出	qu1 chu1	3
428	让出	rang4 chu1	1
429	闪现出	shan3 xian4 chu1	0
430	散发出	san4 fa1 chu1	3
431	射出	she4 chu1	10
432	伸出	shen1 chu1	36
433	渗出	shen4 chu1	0
434	售出	shou4 chu1	1
435	说出	shuo1 chu1	189
436	送出	song4 chu1	12
437	掏出	tao1 chu1	49
438	提出	ti2 chu1	39
439	提炼出	ti2 lian4 chu1	0
440	透出	tou4 chu1	11
441	挖掘出	wa1 jue2 chu1	0
442	吓出	xia4 chu1	1
443	销出	xiao1 chu1	0
444	销售出	xiao1 shou4 chu1	0
445	笑出	xiao4 chu1	10
446	涌出	yong3 chu1	22
447	涌现出	yong3 xian4 chu1	1
448	长出	zhang3 chu1	15
449	走出	zou3 chu1	178
450	熬出	ao2 chu1	0

Seq No.	Compound	Pinyin	Tokens
451	包出	bao1 chu1	3
452	摆出	bai3 chu1	14
453	爆出	bao4 chu1	0
454	背出	bei1 chu1	2
455	编出	bian1 chu1	1
456	编写出	bian1 xie3 chu1	0
457	辨别出	bian4 bie2 chu1	2
458	辨认出	bian4 ren4 chu1	0
459	猜出	cai1 chu1	9
460	创出	chuang4 chu1	1
461	创造出	chuang4 zao4 chu1	3
462	打出	da3 chu1	20
463	打听出	da3 ting1 chu1	4
464	多出	duo1 chu1	8
465	反映出	fan3 ying4 chu1	1
466	分辨出	fen1 bian4 chu1	0
467	浮现出	fu2 xian4 chu1	2
468	概括出	gai4 gua1 chu1	0
469	高出	gao1 chu1	3
470	喝出	he1 chu1	1
471	画出	hua4 chu1	7
472	焕发出	huan4 fa1 chu1	0
473	挤出	ji3 chu1	13
474	检查出	jian3 cha2 chu1	1
475	揭示出	jie1 shi4 chu1	0
476	决出	jue2 chu1	0
477	觉察出	jue2 cha2 chu1	0
478	开出	kai1 chu1	1
479	看出	kan4 chu1	130
480	列出	lie4 chu1	0
481	考验出	kao3 yan4 chu1	0
482	摸索出	mo1 suo3 chu1	0
483	模仿出	mo2 fang3 chu1	0
484	闹出	nao4 chu1	3
485	拍摄出	pai1 she4 chu1	0
486	排练出	pai2 lian4 chu1	0
487	培养出	pei2 yang3 chu1	3
488	品出	pin3 chu1	0
489	评选出	ping2 xuan3 chu1	0
490	惹出	re3 chu1	6
491	认出	ren4 chu1	30
492	设计出	she4 ji4 chu1	0
493	生产出	sheng1 chan3 chu1	0
494	腾出	teng3 chu1	1
495	听出	ting1 chu1	19
496	推断出	tui1 duan4 chu1	0
497	推算出	tui1 suan4 chu1	0
498	闻出	wen2 chu1	1
499	悟出	wu4 chu1	10
500	显露出	xian3 lu4 chu1	5
501	显示出	xian3 shi4 chu1	3
502	想出	xiang3 chu1	50
503	写出	xie3 chu1	9
504	选出	xuan3 chu1	1
505	研制出	yan2 zhi4 chu1	0
506	游出	you2 chu1	1
507	扎出	zha1 chu1	0
508	展出	zhan3 chu1	3
509	诊断出	zhen3 duan4 chu1	0
510	指出	zhi3 chu1	7
511	装出	zhuang1 chu1	7
512	总结出	zong3 jie2 chu1	0
513	作出	zuo4 chu1	25
514	闹出格儿	nao4 chu1 ge2 er2	0
515	说出格儿	shuo1 chu1 ge2 er2	0
516	问出格儿	wen4 chu1 ge2 er2	0
517	写出格儿	xie3 chu1 ge2 er2	0
518	管出圈儿	guan3 chu1 quan1 er2	0
519	闹出圈儿	nao4 chu1 quan1 er2	0
520	看出神儿	kan4 chu1 shen2r	0
521	听出神儿	ting1 chu1 shen2 er2	0
522	想出神儿	xiang3 chu1 shen2 er2	0
523	叉穿	cha1 chuan1	0
524	刺穿	la4 chuan1	0
525	打穿	da3 chuan1	0
526	滴穿	di1 chuan1	0
527	钉穿	ding1 chuan1	0
528	看穿	kan4 chuan1	4
529	说穿	shuo1 chuan1	1
530	凿穿	zao2 chuan1	0
531	扎穿	zha1 chuan1	0
532	背串	bei4 chuan4	0
533	唱串	chang4 chuan4	0
534	抄串	chao1 chuan4	0
535	答串	da2 chuan4	0
536	记串	ji4 chuan4	0
537	看串	kan4 chuan4	0
538	念串	nian4 chuan4	0
539	说串	shuo1 chuan4	0
540	写串	xie3 chuan4	0
541	干蠢	gan4 chun3	0
542	变粗	bian4 cu1	0

Seq No.	Compound	Pinyin	Tokens
543	画粗	hua4 cu1	0
544	练粗	lian4 cu1	0
545	描粗	miao2 cu1	0
546	切粗	qie1 cu1	0
547	使粗	shi3 cu1	0
548	写粗	xie3 cu1	0
549	变粗	bian4 cu1	0
550	磨粗	mo4 cu1	0
551	弄粗	nong4 cu1	0
552	变粗	bian4 cu1	0
553	安错	an1 cuo4	0
554	按错	an4 cuo4	0
555	摆错	bai3 cuo4	1
556	搬错	ban1 cuo4	0
557	办错	ban4 cuo4	1
558	包错	bao1 cuo4	0
559	报错	bao4 cuo4	0
560	背错	bei4 cuo4	0
561	猜错	cai1 cuo4	0
562	裁错	cai2 cuo4	0
563	藏错	cang2 cuo4	0
564	搽错	cha2 cuo4	0
565	查错	cha2 cuo4	0
566	唱错	chang4 cuo4	0
567	抄错	chao1 cuo4	0
568	称错	cheng1 cuo4	0
569	乘错	cheng2 cuo4	0
570	吃错	chi1 cuo4	0
571	出错	chu1 cuo4	1
572	穿错	chuan1 cuo4	1
573	传错	chuan2 cuo4	0
574	吹错	chui1 cuo4	0
575	搭错	da1 cuo4	1
576	答错	da2 cuo4	0
577	打错	da3 cuo4	2
578	戴错	dai4 cuo4	0
579	登错	deng1 cuo4	0
580	点错	dian3 cuo4	3
581	叠错	die2 cuo4	0
582	订错	ding4 cuo4	0
583	读错	du2 cuo4	0
584	发错	fa1 cuo4	0
585	罚错	fa2 cuo4	0
586	翻译错	fan1 yi4 cuo4	0
587	放错	fang4 cuo4	2
588	分析错	fen1 xi1 cuo4	0

Seq No.	Compound	Pinyin	Tokens
589	缝错	feng2 cuo4	0
590	服错	fu2 cuo4	0
591	改错	gai3 cuo4	0
592	盖错	gai4 cuo4	0
593	搞错	gao3 cuo4	2
594	告诉错	gao4 su4 cuo4	0
595	给错	gei3 cuo4	0
596	估计错	gu1 ji4 cuo4	0
597	拐错	guai3 cuo4	0
598	怪罪错	guai4 zui4 cuo4	0
599	关错	guan1 cuo4	0
600	管错	guan3 cuo4	0
601	灌错	guan4 cuo4	0
602	喊错	han3 cuo4	0
603	化验错	hua4 yan4 cuo4	0
604	画错	hua4 cuo4	0
605	怀疑错	huai2 yi2 cuo4	0
606	还错	huan2 cuo4	0
607	换错	huan4 cuo4	0
608	回答错	hui2 da2 cuo4	0
609	计算错	ji4 suan4 cuo4	0
610	记错	ji4 cuo4	0
611	系错	ji4 cuo4	0
612	加错	jia1 cuo4	0
613	嫁错	jia4 cuo4	0
614	剪错	jian3 cuo4	0
615	减错	jian3 cuo4	0
616	讲错	jiang3 cuo4	0
617	讲解错	jiang3 jie3 cuo4	0
618	校对错	xiao4 dui4 cuo4	0
619	教错	jiao1 cuo4	0
620	解释错	jie3 shi4 cuo4	0
621	解说错	jie3 shuo1 cuo4	0
622	介绍错	jie4 shao4 cuo4	0
623	借错	jie4 cuo4	0
624	锯错	ju4 cuo4	0
625	决定错	jue2 ding4 cuo4	0
626	开错	kai1 cuo4	0
627	看错	kan4 cuo4	1
628	理解错	li3 jie3 cuo4	0
629	量错	liang4 cuo4	0
630	领错	ling3 cuo4	0
631	录错	lu4 cuo4	0
632	骂错	ma4 cuo4	0
633	买错	mai3 cuo4	0
634	埋怨错	mai2 yuan4 cuo4	0

Seq No.	Compound	Pinyin	Tokens
635	描错	miao2 cuo4	0
636	拿错	na2 cuo4	0
637	念错	nian4 cuo4	1
638	弄错	nong4 cuo4	1
639	排错	pai2 cuo4	0
640	派错	pai4 cuo4	0
641	判错	pan4 cuo4	0
642	判断错	pan4 duan4 cuo4	0
643	批评错	pi1 ping2 cuo4	0
644	拼写错	pin1 xie3 cuo4	0
645	骑错	qi2 cuo4	0
646	签错	qian1 cuo4	0
647	敲错	qiao1 cuo4	0
648	求错	qiu2 cuo4	0
649	认错	ren4 cuo4	9
650	收错	shou1 cuo4	0
651	数错	shu3 cuo4	0
652	说错	shuo1 cuo4	6
653	送错	song4 cuo4	0
654	算错	suan4 cuo4	3
655	弹错	dan4 cuo4	0
656	填错	tian2 cuo4	0
657	听错	ting1 cuo4	0
658	停错	ting2 cuo4	0
659	统计错	tong3 ji4 cuo4	0
660	问错	wen4 cuo4	0
661	想错	xiang3 cuo4	2
662	写错	xie3 cuo4	1
663	选错	xuan3 cuo4	1
664	用错	yong4 cuo4	0
665	找错	zhao3 cuo4	1
666	织错	zhi1 cuo4	0
667	治错	zhi4 cuo4	0
668	抓错	zhua1 cuo4	1
669	装错	zhuang1 cuo4	0
670	走错	zou3 cuo4	6
671	坐错	zuo4 cuo4	0
672	做错	zuo4 cuo4	0
673	编大	bian1 da4	0
674	变大	bian4 da4	1
675	裁大	cai2 da4	0
676	撑大	cheng1 da4	1
677	搭大	da1 da4	0
678	打大	da3 da4	3
679	戴大	dai4 da4	0
680	瞠大	cheng1 da4	0

Seq No.	Compound	Pinyin	Tokens
681	钉大	ding1 da4	0
682	放大	fang4 da4	5
683	缝大	feng2 da4	0
684	刮大	gua1 da4	0
685	画大	hua4 da4	0
686	加大	jia1 da4	1
687	锯大	ju4 da4	0
688	开大	kai1 da4	0
689	刻大	ke4 da4	0
690	捆大	kun3 da4	0
691	留大	liu2 da4	0
692	买大	mai3 da4	0
693	泡大	pao4 da4	0
694	切大	qie1 da4	0
695	写大	xie3 da4	0
696	张大	zhang1 da4	7
697	胀大	zhang4 da4	0
698	织大	zhi1 da4	0
699	钻大	zuan1 da4	0
700	做大	zuo4 da4	3
701	闯大	chuang3 da4	0
702	闹大	nao4 da4	2
703	带大	dai4 da4	3
704	长大	zhang3 da4	27
705	拨大	bo1 da4	0
706	开大	kai1 da4	2
707	变呆	bian4 ai2	0
708	发呆	fa1 ai2	5
709	惊呆	liang2 ai2	0
710	看呆	kan4 dai1	1
711	听呆	ting1 ai2	0
712	吓呆	xia4 ai2	2
713	想呆	xiang3 ai2	0
714	按倒	an4 dao3	2
715	扒倒	ba1 dao3	0
716	扒拉倒	ba1 la1 dao3	0
717	绊倒	ban4 dao3	1
718	别倒	bie2 dao3	0
719	病倒	bing4 dao3	2
720	踩倒	cai3 dao3	0
721	蹭倒	ceng4 dao3	0
722	冲倒	chong1 dao3	0
723	抽倒	chou1 dao3	0
724	锄倒	chu2 dao3	0
725	踹倒	chuai4 dao3	0
726	吹倒	chui1 dao3	0

Seq No.	Compound	Pinyin	Tokens
727	打倒	da3 dao3	25
728	扽倒	dun4 dao3	0
729	蹬倒	deng4 dao3	0
730	跌倒	die1 dao3	10
731	顶倒	ding3 dao3	0
732	摁倒	en4 dao3	0
733	放倒	fang4 dao3	0
734	刮倒	gua1 dao3	0
735	跪倒	gui4 dao3	2
736	滑倒	hua2 dao3	0
737	晃倒	huang4 dao3	0
738	昏倒	hun1 dao3	4
739	击倒	ji2 dao3	0
740	挤倒	ji3 dao3	0
741	砍倒	kan3 dao3	0
742	靠倒	kao4 dao3	0
743	哭倒	ku1 dao3	0
744	拉倒	la1 dao3	3
745	撂倒	liao4 dao3	0
746	弄倒	nong4 dao3	0
747	碰倒	peng4 dao3	2
748	扑倒	pu1 dao3	3
749	摔倒	shuai1 dao3	7
750	躺倒	tang3 dao3	0
751	踢倒	ti1 dao3	0
752	推倒	tui1 dao3	2
753	卧倒	wo4 dao3	3
754	晕倒	yun1 dao3	3
755	砸倒	za2 dao3	0
756	栽倒	zai1 dao3	5
757	震倒	zhen4 dao3	0
758	拽倒	zhuai4 dao3	1
759	撞倒	zhuang4 dao3	5
760	醉倒	zui4 dao3	0
761	驳倒	bo2 dao3	5
762	吃倒	chi1 dao3	0
763	难倒	nan2 dao3	2
764	问倒	wen4 dao3	2
765	吓倒	xia4 dao3	4
766	安到	an1 dao4	0
767	安排到	an1 pai2 dao4	0
768	安置到	an1 zhi4 dao4	0
769	扒拉到	ba1 la1 dao4	1
770	搬到	ban1 dao4	20
771	抱到	bao4 dao4	2
772	背到	bei1 dao4	1
773	奔到	ben1 dao4	0
774	绷到	beng1 dao4	0
775	蹦到	beng4 dao4	0
776	编到	bian1 dao4	0
777	拨到	bo1 dao4	0
778	藏到	cang2 dao4	4
779	蹭到	ceng4 dao4	2
780	插到	cha1 dao4	2
781	搀到	chan1 dao4	3
782	沉到	chen2 dao4	0
783	盛到	cheng2 dao4	0
784	吃到	chi1 dao4	8
785	冲到	chong1 dao4	5
786	传到	chuan2 dao4	8
787	闯到	chuang3 dao4	0
788	吹到	chui1 dao4	3
789	吹落到	chui1 luo4 dao4	0
790	垂到	chui2 dao4	1
791	蹿到	cuan1 dao4	2
792	存到	cun2 dao4	0
793	搭到	da1 dao4	0
794	带到	dai4 dao4	17
795	滴到	di1 dao4	2
796	递到	di4 dao4	3
797	叨到	tao1 dao4	0
798	掉到	diao4 dao4	2
799	跌到	die1 dao4	0
800	顶到	ding3 dao4	2
801	丢到	diu1 dao4	0
802	端到	duan1 dao4	1
803	堆到	dui1 dao4	0
804	踱到	duo4 dao4	0
805	躲到	duo3 dao4	7
806	发到	fa1 dao4	0
807	翻到	fan1 dao4	4
808	放到	fang4 dao4	0
809	飞到	fei1 dao4	8
810	分配到	fen1 pei4 dao4	0
811	分散到	fen1 san4 dao4	0
812	扶到	fu2 dao4	1
813	夹到	jia1 dao4	0
814	赶到	gan3 dao4	44
815	告到	gao4 dao4	1
816	够到	gou4 dao4	3
817	挂到	gua4 dao4	3
818	拐到	guai3 dao4	1

Seq No.	Compound	Pinyin	Tokens
819	贯彻到	guan4 che4 dao4	0
820	贯穿到	guan4 chuan1 dao4	1
821	灌到	guan4 dao4	0
822	逛到	guang4 dao4	0
823	滚到	gun3 dao4	3
824	轰到	hong1 dao4	0
825	红到	hong2 dao4	0
826	划到	hua2 dao4	0
827	画到	hua4 dao4	0
828	怀疑到	huai2 yi2 dao4	0
829	护送到	hu4 song4 dao4	0
830	回到	hui2 dao4	113
831	挤到	ji3 dao4	2
832	寄到	ji4 dao4	3
833	嫁到	jia4 dao4	0
834	减少到	jian3 shao3 dao4	0
835	减退到	jian3 tui4 dao4	0
836	溅到	jian4 dao4	1
837	交到	jiao1 dao4	6
838	揪到	jiu1 dao4	1
839	开到	kai1 dao4	2
840	扛到	kang2 dao4	0
841	拉到	la1 dao4	22
842	晾到	liang4 dao4	0
843	搂到	lou3 dao4	0
844	撩到	liao2 dao4	1
845	流到	liu2 dao4	1
846	轮到	lun2 dao4	16
847	落到	luo4 dao4	15
848	埋到	mai2 dao4	1
849	蔓延到	man4 yan2 dao4	1
850	拿到	na2 dao4	23
851	扭到	niu3 dao4	1
852	挪到	nuo2 dao4	2
853	排到	pai2 dao4	3
854	派到	pai4 dao4	5
855	抛到	pao1 dao4	2
856	捧到	peng3 dao4	0
857	漂泊到	piao1 bo2 dao4	0
859	扑到	pu1 dao4	2
860	让到	rang4 dao4	0
861	绕到	rao3 dao4	4
862	扔到	reng1 dao4	7
863	撇到	pie1 dao4	1
864	塞到	sai1 dao4	5
865	射到	she4 dao4	3

Seq No.	Compound	Pinyin	Tokens
866	伸到	shen1 dao4	6
867	渗到	shen4 dao4	0
868	摔到	shuai1 dao4	2
869	甩到	shuai3 dao4	1
870	拴到	shuan1 dao4	1
871	送到	song4 dao4	42
872	缩减到	suo1 jian3 dao4	0
873	抬到	tai2 dao4	5
874	逃到	tao2 dao4	2
875	踢到	ti1 dao4	0
876	填到	tian2 dao4	0
877	跳到	tiao4 dao4	10
878	退到	tui4 dao4	3
879	移植到	yi2 zhi2 dao4	0
880	倚到	yi3 dao4	0
881	引到	yin3 dao4	3
882	游到	you2 dao4	0
883	押到	ya1 dao4	2
884	栽到	zai1 dao4	0
885	种到	zhong3 dao4	0
886	住到	zhu4 dao4	1
887	拽到	zhuai4 dao4	0
888	转到	zhuan3 dao4	8
889	转业到	zhuan3 ye4 dao4	0
890	装到	zhuang1 dao4	2
891	撞到	zhuang4 dao4	3
892	走到	zou3 dao4	172
893	挨到	ai2 dao4	0
894	熬到	ao2 dao4	2
895	罢到	ba4 dao4	0
896	剥到	bao1 dao4	0
897	保存到	bao3 cun2 dao4	0
898	辩论到	bian4 lun4 dao4	0
899	播到	bo4 dao4	0
900	唱到	chang4 dao4	1
901	持续到	chi2 xu4 dao4	0
902	出到	chu1 dao4	0
903	穿到	chuan1 dao4	3
904	答到	da2 dao4	0
905	等到	deng3 dao4	50
906	订到	ding4 dao4	0
907	读到	du2 dao4	3
908	赌到	du3 dao4	0
909	炖到	tun1 dao4	0
910	饿到	e4 dao4	0
911	放到	fang4 dao4	6

Seq No.	Compound	Pinyin	Tokens
912	负担到	fu4 dan4 dao4	0
913	盖到	gai4 dao4	0
914	干到	gan4 dao4	0
915	工作到	gong1 zuo4 dao4	0
916	供应到	gong1 ying4 dao4	0
917	刮到	gua1 dao4	1
918	哄到	hong3 dao4	0
919	活到	huo2 dao4	5
920	坚持到	jian1 chi2 dao4	1
921	降到	jiang4 dao4	2
922	教到	jiao1 dao4	0
923	哭到	ku1 dao4	1
924	扩大到	kuo4 da4 dao4	0
925	劳动到	lao2 dong4 dao4	0
926	垒到	lei3 dao4	0
927	冷到	leng3 dao4	0
928	聊到	liao2 dao4	0
929	流传到	liu2 chuan2 dao4	0
930	留到	liu2 dao4	2
931	遛到	liu2 dao4	0
932	忙到	mang2 dao4	5
933	绵延到	mian2 yan2 dao4	1
934	磨蹭到	mo2 ceng4 dao4	0
935	闹到	nao4 dao4	4
936	念到	nian4 dao4	1
937	陪到	pei2 dao4	0
938	漂到	piao1 dao4	2
939	铺到	pu1 dao4	0
940	欺负到	qi1 fu4 dao4	0
941	烧到	shao1 dao4	2
942	深入到	shen1 ru4 dao4	0
943	使到	shi3 dao4	0
944	数到	shu3 dao4	3
945	睡到	shui4 dao4	1
946	躺到	tang3 dao4	2
947	推迟到	tui1 chi2 dao4	0
948	通到	tong1 dao4	7
949	拖到	tuo1 dao4	5
950	挖到	wa1 dao4	1
951	玩到	wan2 dao4	0
952	下降到	xia4 jiang4 dao4	0
953	歇到	xie1 dao4	0
954	写到	xie3 dao4	2
955	延期到	yan2 qi2 dao4	0
956	演到	yan3 dao4	1
957	增加到	zeng1 jia1 dao4	0

Seq No.	Compound	Pinyin	Tokens
958	站到	zhan4 dao4	8
959	长到	zhang3 dao4	5
960	追到	zhui1 dao4	2
961	追溯到	zhui1 su4 dao4	0
962	赚到	zhuan4 dao4	1
963	坐到	zuo4 dao4	5
964	办到	ban4 dao4	3
965	抽到	chou1 dao4	0
966	触到	hong2 dao4	2
967	触及到	hong2 ji2 dao4	0
968	达到	da2 dao4	15
969	打听到	da3 ting1 dao4	6
970	钓到	diao4 dao4	0
971	分到	fen1 dao4	2
972	感觉到	gan3 jue2 dao4	22
973	感受到	gan3 shou4 dao4	1
974	搞到	gao3 dao4	0
975	估计到	gu1 ji4 dao4	0
976	观察到	guan1 cha2 dao4	0
977	捡到	jian3 dao4	0
978	见到	jian4 dao4	76
979	讲到	jiang3 dao4	2
980	叫到	jiao4 dao4	10
981	接到	jie1 dao4	21
982	接触到	jie1 hong2 dao4	4
983	借到	jie4 dao4	1
984	尽到	jin3 dao4	13
985	觉察到	jue2 cha2 dao4	0
986	看到	kan4 dao4	365
987	考虑到	kao3 lv4 dao4	0
988	练到	lian4 dao4	0
989	领到	ling3 dao4	14
990	买到	mai3 dao4	20
991	摸到	mo1 dao4	22
992	爬到	pa2 dao4	6
993	盼到	pan4 dao4	1
994	碰到	peng4 dao4	41
995	品尝到	pin3 chang2 dao4	0
996	普及到	pu3 ji2 dao4	0
997	起到	qi3 dao4	2
998	请到	qing3 dao4	3
999	拾到	shi2 dao4	1
1000	收到	shou1 dao4	6
1001	说到	shuo1 dao4	35
1002	提到	ti2 dao4	20
1003	体会到	ti3 hui4 dao4	1

Seq No.	Compound	Pinyin	Tokens
1004	听到	ting1 dao4	236
1005	闻到	wen2 dao4	10
1006	问到	wen4 dao4	8
1007	享受到	xiang3 shou4 dao4	1
1008	想到	xiang3 dao4	347
1009	选到	xuan3 dao4	0
1010	意识到	yi4 shi4 dao4	9
1011	影响到	ying3 xiang3 dao4	4
1012	预感到	yu4 gan3 dao4	2
1013	遇到	yu4 dao4	81
1014	运到	yun4 dao4	8
1015	遭到	zao1 dao4	6
1016	找到	zhao3 dao4	139
1017	指到	zhi3 dao4	0
1018	注意到	zhu4 yi4 dao4	24
1019	做到	zuo4 dao4	6
1020	逼到	bi1 dao4	3
1021	贬到	bian3 dao4	1
1022	病到	bing4 dao4	0
1023	猜到	cai1 dao4	20
1024	猜想到	cai1 xiang3 dao4	2
1025	炒到	chao3 dao4	0
1026	迟钝到	chi2 dun4 dao4	0
1027	筹备到	chou2 bei4 dao4	0
1028	堕落到	duo4 luo4 dao4	0
1029	恶化到	e4 hua4 dao4	0
1030	愤怒到	fen4 nu4 dao4	0
1031	激化到	ji1 hua4 dao4	0
1032	僵化到	jiang1 hua4 dao4	0
1033	烤到	kao3 dao4	0
1034	老到	lao3 dao4	2
1035	胖到	pang4 dao4	0
1036	燃烧到	ran2 shao1 dao4	0
1037	受到	shou4 dao4	39
1038	脏到	zang1 dao4	0
1039	缠到	chan2 dao4	0
1040	扯到	che3 dao4	8
1041	撮到	cuo1 dao4	0
1042	撮合到	cuo1 he2 dao4	0
1043	归结到	gui1 jie2 dao4	0
1044	汇集到	hui4 ji2 dao4	0
1045	集中到	ji2 zhong1 dao4	2
1046	加到	jia1 dao4	4
1047	拢到	long3 dao4	0
1048	拧到	ning2 dao4	0
1049	拼到	pin1 dao4	1

Seq No.	Compound	Pinyin	Tokens
1050	谈到	tan2 dao4	11
1051	攒到	zan3 dao4	0
1052	关系到	guan1 xi4 dao4	0
1053	牵涉到	qian1 she4 dao4	1
1054	帮到底	bang1 dao4 di3	1
1055	打到底	da3 dao4 di3	0
1056	干到底	gan4 dao4 di3	1
1057	管到底	guan3 dao4 di3	0
1058	救到底	jiu4 dao4 di3	0
1059	输到底	shu1 dao4 di3	0
1060	追查到底	zhui1 cha2 dao4 di3	0
1061	看到底	kan4 dao4 di3	2
1062	说到家	shuo1 dao4 jia1	1
1063	学到家	xue2 dao4 jia1	0
1064	研究到家	yan2 jiu4 dao4 jia1	0
1065	分到手	fen1 dao4 shou3	0
1066	搞到手	gao3 dao4 shou3	0
1067	哄到手	hong3 dao4 shou3	0
1068	领到手	ling3 dao4 shou3	0
1069	买到手	mai3 dao4 shou3	0
1070	弄到手	nong4 dao4 shou3	6
1071	骗到手	pian4 dao4 shou3	0
1072	抢到手	qiang3 dao4 shou3	0
1073	收集到手	shou1 ji2 dao4 shou3	0
1074	学到手	xue2 dao4 shou3	0
1075	赚到手	zhuan4 dao4 shou3	0
1076	抓到手	zhua1 dao4 shou3	0
1077	熬到头	ao2 dao4 tou2	0
1078	扯到头	che3 dao4 tou2	0
1079	乘到头	cheng2 dao4 tou2	0
1080	锄到头	chu2 dao4 tou2	0
1081	顶到头	ding3 dao4 tou2	0
1082	割到头	ge1 dao4 tou2	0
1083	垒到头	lei3 dao4 tou2	0
1084	拧到头	ning3 dao4 tou2	0
1085	跑到头	pao3 dao4 tou2	0
1086	砌到头	qi4 dao4 tou2	0
1087	游到头	you2 dao4 tou2	0
1088	走到头	zou3 dao4 tou2	0
1089	摆倒	bai3 dao4	0
1090	放倒	fang4 dao4	1
1091	挂倒	gua4 dao4	0
1092	拿倒	na2 dao4	0
1093	贴倒	tie1 dao4	0
1094	写倒	xie3 dao4	0
1095	印倒	yin4 dao4	0

Seq No.	Compound	Pinyin	Tokens
1096	熬得	ao2 de2	0
1097	拌得	ban4 de2	0
1098	炒得	chao3 de2	0
1099	炖得	tun1 de2	0
1100	缝得	feng2 de2	1
1101	改得	gai3 de2	1
1102	擀得	gan3 de2	0
1103	染得	ran3 de2	0
1104	印得	yin4 de2	1
1105	熨得	yun4 de2	1
1106	蒸得	zheng1 de2	0
1107	织得	zhi1 de2	0
1108	煮得	zhu3 de2	0
1109	做得	zuo4 de2	14
1110	安低	an1 di1	0
1111	戴低	dai4 di1	0
1112	放低	fang4 di1	14
1113	飞低	fei1 di1	0
1114	挂低	gua4 di1	0
1115	架低	jia4 di1	0
1116	压低	ya1 di1	2
1117	犯嘀咕	fan4 di2 gu1	1
1118	安颠倒	an1 dian1 dao3	0
1119	背颠倒	bei4 dian1 dao3	0
1120	放颠倒	fang4 dian1 dao3	0
1121	记颠倒	ji4 dian1 dao3	0
1122	弄颠倒	nong4 dian1 dao3	0
1123	说颠倒	shuo1 dian1 dao3	0
1124	贴颠倒	tie1 dian1 dao3	0
1125	写颠倒	xie3 dian1 dao3	0
1126	印颠倒	yin4 dian1 dao3	0
1127	拔掉	ba2 diao4	0
1128	掰掉	bai1 diao4	0
1129	摆脱掉	bai3 tuo1 diao4	0
1130	剥掉	bao1 diao4	0
1131	踩掉	cai3 diao4	2
1132	蹭掉	ceng4 diao4	1
1133	扯掉	che3 diao4	1
1134	撤掉	che4 diao4	0
1135	锄掉	chu2 diao4	0
1136	吹掉	chui1 diao4	0
1137	打掉	da3 diao4	3
1138	掸掉	dan3 diao4	0
1139	扽掉	dun4 diao4	1
1140	颠掉	dian1 diao4	0
1141	蹬掉	deng4 diao4	0

Seq No.	Compound	Pinyin	Tokens
1142	冻掉	dong4 diao4	0
1143	剁掉	duo4 diao4	1
1144	跺掉	duo4 diao4	0
1145	硌掉	ge4 diao4	0
1146	刮掉	gua1 diao4	0
1147	滑掉	hua2 diao4	0
1148	挤掉	ji3 diao4	0
1149	剪掉	jian3 diao4	1
1150	锯掉	ju4 diao4	0
1151	磕掉	ke1 diao4	0
1152	拿掉	na2 diao4	0
1153	弄掉	nong4 diao4	2
1154	刨掉	pao2 diao4	0
1155	碰掉	peng4 diao4	0
1156	撇掉	pie1 diao4	0
1157	掐掉	qia1 diao4	0
1158	去掉	qu4 diao4	6
1159	甩掉	shuai3 diao4	0
1160	撕掉	si1 diao4	0
1161	剃掉	ti4 diao4	1
1162	捅掉	tong3 diao4	0
1163	脱掉	tuo1 diao4	3
1164	揪掉	jiu1 diao4	0
1165	削掉	xue1 diao4	1
1166	笑掉	xiao4 diao4	0
1167	轧掉	ya4 diao4	0
1168	咬掉	yao3 diao4	1
1169	摘掉	zhai1 diao4	0
1170	撞掉	zhuang4 diao4	0
1171	擦掉	ca1 diao4	0
1172	拆掉	chai1 diao4	2
1173	铲掉	chan3 diao4	0
1174	吃掉	chi1 diao4	2
1175	冲掉	chong1 diao4	0
1176	处理掉	chu4 li3 diao4	0
1177	搓掉	cuo1 diao4	0
1178	倒掉	dao3 diao4	0
1179	丢掉	diu1 diao4	12
1180	抖掉	dou3 diao4	0
1181	改掉	gai3 diao4	1
1182	干掉	gan1 diao4	1
1183	勾掉	yun2 diao4	0
1184	关掉	guan1 diao4	0
1185	花掉	hua1 diao4	1
1186	划掉	hua2 diao4	0
1187	砍掉	kan3 diao4	0

Seq No.	Compound	Pinyin	Tokens
1188	啃掉	ken3 diao4	0
1189	赖掉	lai4 diao4	0
1190	烂掉	lan4 diao4	0
1191	溜掉	liu1 diao4	1
1192	流掉	liu2 diao4	0
1193	漏掉	lou4 diao4	0
1194	卖掉	mai4 diao4	3
1195	磨掉	mo2 diao4	0
1196	抹掉	mo3 diao4	0
1197	跑掉	pao3 diao4	5
1198	清除掉	qing1 chu2 diao4	0
1199	扔掉	reng1 diao4	2
1200	删掉	shan1 diao4	0
1201	烧掉	shao1 diao4	4
1202	逃掉	tao2 diao4	0
1203	涂掉	tu2 diao4	0
1204	忘掉	wang4 diao4	19
1205	吓掉	xia4 diao4	1
1206	炸掉	za4 diao4	0
1207	打定	da3 ding4	7
1208	讲定	jiang3 ding4	1
1209	看定	kan4 ding4	0
1210	买定	mai3 ding4	0
1211	拿定	na2 ding4	17
1212	输定	shu1 ding4	0
1213	说定	shuo1 ding4	1
1214	下定	xia4 ding4	1
1215	咬定	yao3 ding4	1
1216	住定	zhu4 ding4	0
1217	走定	zou3 ding4	0
1218	搬丢	ban1 diu1	0
1219	绷丢	beng1 diu1	0
1220	刮丢	gua1 diu1	0
1221	挤丢	ji3 diu1	0
1222	寄丢	ji4 diu1	0
1223	弄丢	nong4 diu1	0
1224	掏丢	tao1 diu1	0
1225	走丢	zou3 diu1	2
1226	搞懂	gao3 dong3	0
1227	讲懂	jiang3 dong3	0
1228	看懂	kan4 dong3	1
1229	抠懂	kou1 dong3	0
1230	弄懂	nong4 dong3	0
1231	听懂	ting1 dong3	5
1232	按动	an4 dong4	1
1233	搬动	ban1 dong4	0
1234	背动	bei1 dong4	0
1235	嚼动	jiao2 dong4	0
1236	拉动	la1 dong4	1
1237	拧动	ning3 dong4	0
1238	漂动	piao1 dong4	0
1239	飘动	piao1 dong4	5
1240	抬动	tai2 dong4	0
1241	挑动	tiao1 dong4	0
1242	甩动	shuai3 dong4	0
1243	挖动	wa1 dong4	0
1244	写端正	xie3 duan1 zheng4	0
1245	坐端正	zuo4 duan1 zheng4	0
1246	裁短	cai2 duan3	0
1247	改短	gai3 duan3	0
1248	剪短	jian3 duan3	1
1249	揪短	jiu1 duan3	0
1250	锯短	ju4 duan3	0
1251	理短	li3 duan3	0
1252	量短	liang4 duan3	0
1253	去短	qu4 duan3	0
1254	织短	zhi1 duan3	0
1255	做短	zuo4 duan3	0
1256	拔断	ba2 duan4	1
1257	掰断	bai1 duan4	0
1258	别断	bie2 duan4	0
1259	拨断	bo1 duan4	0
1260	抽断	chou1 duan4	0
1261	打断	da3 duan4	13
1262	跌断	die1 duan4	0
1263	割断	ge1 duan4	2
1264	刮断	gua1 duan4	0
1265	剪断	jian3 duan4	0
1266	铰断	jiao3 duan4	0
1267	截断	jie2 duan4	0
1268	揪断	jiu1 duan4	0
1269	锯断	ju4 duan4	0
1270	撅断	jue1 duan4	1
1271	砍断	kan3 duan4	0
1272	拉断	la1 duan4	0
1273	勒断	le4 duan4	0
1274	磨断	mo2 duan4	0
1275	碰断	peng4 duan4	0
1276	切断	qie1 duan4	1
1277	烧断	shao1 duan4	1
1278	拌断	ban4 duan4	0
1279	炸断	za4 duan4	0

Seq No.	Compound	Pinyin	Tokens
1280	折断	zhe2 duan4	1
1281	挣断	zheng4 duan4	1
1282	拽断	zhuai4 duan4	0
1283	摆对	bai3 dui4	0
1284	报对	bao4 dui4	0
1285	猜对	cai1 dui4	7
1286	唱对	chang4 dui4	0
1287	读对	du2 dui4	0
1288	改对	gai3 dui4	0
1289	估计对	gu1 ji4 dui4	0
1290	画对	hua4 dui4	0
1291	回答对	hui2 da2 dui4	0
1292	坚持对	jian1 chi2 dui4	0
1293	理解对	li3 jie3 dui4	0
1294	量对	liang4 dui4	0
1295	数对	shu3 dui4	0
1296	说对	shuo1 dui4	10
1297	算对	suan4 dui4	0
1298	填对	tian2 dui4	0
1299	写对	xie3 dui4	2
1300	走对	zou3 dui4	0
1301	使钝	shi3 dun4	0
1302	用钝	yong4 dun4	0
1303	熬多	ao2 duo1	0
1304	拌多	ban4 duo1	0
1305	剥多	bao1 duo1	0
1306	炒多	chao3 duo1	0
1307	盛多	cheng2 duo1	0
1308	吃多	chi1 duo1	4
1309	抽多	chou1 duo1	0
1310	穿多	chuan1 duo1	0
1311	带多	dai4 duo1	0
1312	倒多	dao3 duo1	0
1313	点多	dian3 duo1	12
1314	订多	ding4 duo1	0
1315	发多	fa1 duo1	0
1316	放多	fang4 duo1	0
1317	费多	fei4 duo1	5
1318	分多	fen1 duo1	2
1319	复写多	fu4 xie3 duo1	0
1320	盖多	gai4 duo1	0
1321	擀多	gan3 duo1	0
1322	花多	hua1 duo1	4
1323	寄多	ji4 duo1	0
1324	浇多	jiao1 duo1	0
1325	借多	jie4 duo1	0

Seq No.	Compound	Pinyin	Tokens
1326	喝多	he1 duo1	5
1327	买多	mai3 duo1	0
1328	切多	qie1 duo1	0
1329	收多	shou1 duo1	0
1330	睡多	shui4 duo1	2
1331	说多	shuo1 duo1	8
1332	贴多	tie1 duo1	0
1333	印多	yin4 duo1	0
1334	用多	yong4 duo1	4
1335	煮多	zhu3 duo1	0
1336	懂事多	dong3 shi4 duo1	0
1337	好多	hao3 duo1	46
1338	累多	lei4 duo1	0
1339	冷多	leng3 duo1	0
1340	厉害多	li4 hai4 duo1	0
1341	凉多	liang2 duo1	0
1342	亮多	liang4 duo1	0
1343	胖多	pang4 duo1	0
1344	少多	shao3 duo1	20
1345	省多	sheng3 duo1	0
1346	攒多	zan3 duo1	0
1347	踩翻	cai3 fan1	0
1348	蹬翻	deng4 fan1	0
1349	开翻	kai1 fan1	0
1350	推翻	tui1 fan1	6
1351	掀翻	xian1 fan1	0
1352	炸翻	za4 fan1	0
1353	撞翻	zhuang4 fan1	0
1354	闹翻	nao4 fan1	3
1355	惹翻	re3 fan1	1
1356	背烦	bei4 fan2	0
1357	等烦	deng3 fan2	0
1358	看烦	kan4 fan2	0
1359	说烦	shuo1 fan2	0
1360	听烦	ting1 fan2	0
1361	安反	an1 fan3	0
1362	包反	bao1 fan3	0
1363	穿反	chuan1 fan3	0
1364	戴反	dai4 fan3	0
1365	盖反	gai4 fan3	0
1366	拧反	ning3 fan3	0
1367	铺反	pu1 fan3	0
1368	写反	xie3 fan3	0
1369	印反	yin4 fan3	0
1370	吓飞	xia4 fei1	0
1371	炸飞	za4 fei1	1

Seq No.	Compound	Pinyin	Tokens
1372	喂肥	wei4 fei2	0
1373	长肥	zhang3 fei2	0
1374	织肥	zhi1 fei2	0
1375	做肥	zuo4 fei2	0
1376	长丰满	zhang3 feng1 man3	0
1377	逼疯	bi1 feng1	0
1378	饿疯	e4 feng1	1
1379	玩疯	wan2 feng1	0
1380	想疯	xiang3 feng1	1
1381	说服	shuo1 fu2	13
1382	压服	ya1 fu2	2
1383	制服	zhi4 fu2	15
1384	改复杂	gai3 fu4 za2	0
1385	搞复杂	gao3 fu4 za2	0
1386	弄复杂	nong4 fu4 za2	0
1387	变富	bian4 fu4	0
1388	过富	guo4 fu4	0
1389	熬干	ao2 gan1	0
1390	擦干	ca1 gan1	1
1391	抽干	chou1 gan1	1
1392	吹干	chui1 gan1	0
1393	放干	fang4 gan1	0
1394	喊干	han3 gan1	1
1395	耗干	hao4 gan1	0
1396	烘干	hong1 gan1	1
1397	挤干	ji3 gan	0
1398	哭干	ku1 gan1	1
1399	晾干	liang4 gan1	0
1400	流干	liu2 gan1	1
1401	拧干	ning3 gan1	0
1402	晒干	shai4 gan1	2
1403	烧干	shao1 gan1	0
1404	甩干	shuai3 gan1	0
1405	说干	shuo1 gan1	5
1406	吸干	xi1 gan1	2
1407	熨干	yun4 gan1	0
1408	擦干净	ca1 gan1 jing4	2
1409	冲干净	chong1 gan1 jing4	0
1410	打扫干净	da3 sao3 gan1 jing	1
1411	掸干净	dan3 gan1 jing4	0
1412	拍打干净	pai1 da3 gan1 jing4	0
1413	扫干净	sao3 gan1 jing4	1
1414	收拾干净	shou1 shi2 gan1 jing4	1
1415	刷干净	shua1 gan1 jing4	0
1416	淘干净	tao2 gan1 jing4	0
1417	洗干净	xi3 gan1 jing4	2

Seq No.	Compound	Pinyin	Tokens
1418	拔干净	ba2 gan1 jing4	0
1419	剥干净	bao1 gan1 jing4	0
1420	吃干净	chi1 gan1 jing4	1
1421	抽干净	chou1 gan1 jing4	0
1422	锄干净	chu2 gan1 jing4	0
1423	倒干净	dao3 gan1 jing4	0
1424	刮干净	gua1 gan1 jing4	0
1425	捡干净	jian3 gan1 jing4	0
1426	捞干净	lao1 gan1 jing4	0
1427	涮干净	shuan4 gan1 jing4	0
1429	剔干净	ti1 gan1 jing4	0
1430	剃干净	ti4 gan1 jing4	0
1431	舔干净	tian3 gan1 jing4	0
1432	煺干净	tui1 gan1 jing4	0
1433	削干净	xue1 gan1 jing4	0
1434	安高	an1 gao1	0
1435	蹦高	beng4 gao1	1
1436	垫高	dian4 gao1	0
1437	吊高	diao4 gao1	0
1438	挂高	gua4 gao1	0
1439	架高	jia4 gao1	0
1440	举高	ju3 gao1	1
1441	卷高	juan4 gao1	0
1442	垒高	lei3 gao1	0
1443	码高	ma3 gao1	0
1444	起高	qi3 gao1	4
1445	升高	sheng1 gao1	1
1446	抬高	tai2 gao1	4
1447	踢高	ti1 gao1	0
1448	提高	ti2 gao1	16
1449	贴高	tie1 gao1	0
1450	长高	zhang3 gao1	5
1451	涨高	zhang3 gao1	0
1452	枕高	zhen3 gao1	0
1453	坐高	zuo4 gao1	0
1454	玩高兴	wan2 gao1 xing1	0
1455	掰给	bai1 gei3	0
1456	败给	bai4 gei3	0
1457	背给	bei4 gei3	0
1458	拨给	bo1 gei3	0
1459	补给	bu3 gei3	0
1460	传给	chuan2 gei3	2
1461	传染给	chuan2 ran3 gei3	1
1462	带给	dai4 gei3	6
1463	倒给	dao3 gei3	2
1464	递给	di4 gei3	19

Seq No.	Compound	Pinyin	Tokens
1465	丢给	diu1 gei3	1
1466	发给	fa1 gei3	11
1467	分给	fen1 gei3	12
1468	奉献给	feng4 xian4 gei3	0
1469	贡献给	gong4 xian4 gei3	0
1470	还给	huan2 gei3	23
1471	换给	huan4 gei3	1
1472	寄给	ji4 gei3	0
1473	嫁给	jia4 gei3	25
1474	奖给	jiang3 gei3	0
1475	交给	jiao1 gei3	57
1476	教给	jiao1 gei3	16
1477	介绍给	jie4 shao4 gei3	1
1478	借给	jie4 gei3	7
1479	捐献给	juan1 xian4 gei3	0
1480	捐赠给	juan1 zeng4 gei3	0
1481	留给	liu2 gei3	15
1482	卖给	mai4 gei3	13
1483	拿给	na2 gei3	0
1484	念给	nian4 gei3	0
1485	批给	pi1 gei3	0
1486	强加给	qiang2 jia1 gei3	0
1487	切给	qie1 gei3	0
1488	让给	rang4 gei3	8
1489	扔给	reng1 gei3	8
1490	赏给	shang3 gei3	1
1491	输给	shu1 gei3	2
1492	说给	shuo1 gei3	26
1493	推给	tui1 gei3	0
1494	推荐给	tui1 jian4 gei3	0
1495	献给	xian4 gei3	13
1496	写给	xie3 gei3	1
1497	印发给	yin4 fa1 gei3	0
1498	赠给	zeng4 gei3	1
1499	转嫁给	zhuan3 jia4 gei3	0
1500	转交给	zhuan3 jiao1 gei3	0
1501	做给	zuo4 gei3	0
1502	盛够	cheng2 gou4	0
1503	凑够	cou4 gou4	0
1504	存够	cun2 gou4	0
1505	打够	da3 gou4	0
1506	搁够	ge1 gou4	0
1507	滑够	hua2 gou4	0
1508	买够	mai3 gou4	0
1509	闹够	nao4 gou4	1
1510	上够	shang4 gou4	0
1511	睡够	shui4 gou4	0
1512	躺够	tang3 gou4	0
1513	歇够	xie1 gou4	0
1514	休息够	xiu1 xi1 gou4	0
1515	游够	you2 gou4	0
1516	攒够	zan3 gou4	0
1517	招够	zhao1 gou4	0
1518	吃够	chi1 gou4	1
1519	穿够	chuan1 gou4	0
1520	呆够	ai2 gou4	1
1521	戴够	dai4 gou4	0
1522	逛够	guang4 gou4	0
1523	过够	guo4 gou4	0
1524	看够	kan4 gou4	4
1525	爬够	pa2 gou4	0
1526	骑够	qi2 gou4	0
1527	去够	qu4 gou4	1
1528	受够	shou4 gou4	0
1529	踢够	ti1 gou4	0
1530	玩够	wan2 gou4	2
1531	洗够	xi3 gou4	0
1532	养够	yang3 gou4	0
1533	站够	zhan4 gou4	0
1534	住够	zhu4 gou4	0
1535	吃鼓	chi1 gu3	0
1536	吹鼓	chui1 gu3	2
1537	气鼓	qi4 gu3	0
1538	熬惯	ao2 guan4	0
1539	唱惯	chang4 guan4	0
1540	吃惯	chi1 guan4	0
1541	抽惯	chou1 guan4	0
1542	穿惯	chuan1 guan4	1
1543	凑合惯	cou4 he2 guan4	0
1544	戴惯	dai4 guan4	0
1545	当惯	dang1 guan4	2
1546	冻惯	dong4 guan4	0
1547	饿惯	e4 guan4	0
1548	看惯	kan4 guan4	7
1549	叫惯	jiao4 guan4	0
1550	骑惯	qi2 guan4	0
1551	睡惯	shui4 guan4	0
1552	说惯	shuo1 guan4	2
1553	听惯	ting1 guan4	3
1554	偷惯	tou1 guan4	0
1555	写惯	xie3 guan4	0
1556	用惯	yong4 guan4	0

Seq No.	Compound	Pinyin	Tokens
1557	站惯	zhan4 guan4	0
1558	住惯	zhu4 guan4	4
1559	走惯	zou3 guan4	1
1560	拔光	ba2 guang1	0
1561	吃光	chi1 guang1	3
1562	丢光	diu1 guang1	1
1563	分光	fen1 guang1	0
1564	喝光	he1 guang1	0
1565	花光	hua1 guang1	2
1566	砍光	kan3 guang1	0
1567	捞光	lao1 guang1	0
1568	流光	liu2 guang1	2
1569	漏光	lou4 guang1	0
1570	买光	mai3 guang1	0
1571	卖光	mai4 guang1	1
1572	磨光	mo2 guang1	0
1573	跑光	pao3 guang1	1
1574	杀光	sha1 guang1	1
1575	烧光	shao1 guang1	3
1576	死光	si3 guang1	3
1577	煺光	tui1 guang1	0
1578	脱光	tuo1 guang1	1
1579	忘光	wang4 guang1	0
1580	消灭光	xiao1 mie4 guang1	1
1581	用光	yong4 guang1	2
1582	折腾光	zhe2 teng2 guang1	0
1583	走光	zou3 guang1	0
1584	搬过	ban1 guo4	6
1585	背过	bei4 guo4	0
1586	穿过	chuan1 guo4	17
1587	飞过	fei1 guo4	6
1588	开过	kai1 guo4	3
1589	拉过	la1 guo4	4
1590	跑过	pao3 guo4	30
1591	熬过	ao2 guo4	2
1592	冲过	chong1 guo4	18
1593	闯过	chuang3 guo4	1
1594	爬过	pa2 guo4	5
1595	踢过	ti1 guo4	0
1596	跳过	tiao4 guo4	2
1597	透过	tou4 guo4	8
1598	用过	yong4 guo4	0
1599	越过	yue4 guo4	10
1600	走过	zou3 guo4	79
1601	坐过	zuo4 guo4	2
1602	熬过火儿	ao2 guo4 huo3 er2	0
1603	焯过火儿	zhuo2 guo4 huo3 er2	0
1604	花过头	hua1 guo4 tou2	0
1605	讲过头	jiang3 guo4 tou2	0
1606	睡过头	shui4 guo4 tou2	0
1607	说过头	shuo1 guo4 tou2	0
1608	走过头	zou3 guo4 tou2	0
1609	说寒心	shuo1 han2 xin1	0
1610	安好	an1 hao3	2
1611	安排好	an1 pai2 hao3	1
1612	安置好	an1 zhi4 hao3	2
1613	安装好	an1 zhuang1 hao3	0
1614	摆好	bai3 hao3	4
1615	办好	ban4 hao3	11
1616	绑好	bang3 hao3	0
1617	包好	bao1 hao3	4
1618	保存好	bao3 cun2 hao3	0
1619	保养好	bao3 yang3 hao3	0
1620	抱好	bao4 hao3	0
1621	编好	bian1 hao3	0
1622	别好	bie2 hao3	4
1623	布置好	bu4 zhi4 hao3	1
1624	裁好	cai2 hao3	0
1625	拆好	chai1 hao3	0
1626	缠好	chan2 hao3	0
1627	抄好	chao1 hao3	0
1628	炒好	chao3 hao3	0
1629	吃好	chi1 hao3	14
1630	处理好	chu4 li3 hao3	0
1631	穿好	chuan1 hao3	10
1632	存好	cun2 hao3	0
1633	搭好	da1 hao3	2
1634	答好	da2 hao3	7
1635	打好	da3 hao3	12
1636	打印好	da3 yin4 hao3	0
1637	带好	dai4 hao3	2
1638	戴好	dai4 hao3	0
1639	当好	dang1 hao3	10
1640	导演好	dao3 yan3 hao3	0
1641	倒好	dao3 hao3	64
1642	垫好	dian4 hao3	0
1643	叠好	die2 hao3	0
1644	订好	ding4 hao3	1
1645	端好	duan1 hao3	0
1646	堵好	du3 hao3	0
1647	翻译好	fan1 yi4 hao3	0
1648	放好	fang4 hao3	2

Seq No.	Compound	Pinyin	Tokens
1649	封好	feng1 hao3	2
1650	缝好	feng2 hao3	1
1651	扶好	fu2 hao3	0
1652	盖好	gai4 hao3	2
1653	搞好	gao3 hao3	1
1654	挂好	gua4 hao3	1
1655	关好	guan1 hao3	9
1656	管理好	guan3 li3 hao3	0
1657	灌好	guan4 hao3	2
1658	过好	guo4 hao3	7
1659	捆好	kun3 hao3	1
1660	夹好	jia1 hao3	0
1661	校对好	xiao4 dui4 hao3	0
1662	教育好	jiao4 yu4 hao3	0
1663	接待好	jie1 dai4 hao3	0
1664	开好	kai1 hao3	0
1665	看好1	kan1 hao3	0
1666	看好2	kan4 hao3	3
1667	考好	kao3 hao3	0
1668	烤好	kao3 hao3	0
1669	理好	li3 hao3	0
1670	练好	lian4 hao3	1
1671	录好	lu4 hao3	0
1672	埋好	mai2 hao3	0
1673	拿好	na2 hao3	0
1674	排好	pai2 hao3	1
1675	泡好	pao4 hao3	0
1676	铺好	pu1 hao3	1
1677	砌好	qi4 hao3	0
1678	切好	qie1 hao3	3
1679	热好	re4 hao3	0
1680	商量好	shang1 liang4 hao3	4
1681	试好	shi4 hao3	0
1682	收好	shou1 hao3	2
1683	收拾好	shou1 shi2 hao3	1
1684	守好	shou3 hao3	1
1685	睡好	shui4 hao3	6
1686	说好	shuo1 hao3	16
1687	锁好	suo3 hao3	2
1688	谈好	tan2 hao3	0
1689	填好	tian2 hao3	0
1690	围好	wei2 hao3	0
1691	学好	xue2 hao3	1
1692	研好	yan2 hao3	1
1693	演好	yan3 hao3	0
1694	养好	yang3 hao3	0

Seq No.	Compound	Pinyin	Tokens
1695	掖好	ye1 hao3	1
1696	约好	yue1 hao3	0
1697	粘好	nian2 hao3	0
1698	站好	zhan4 hao3	6
1699	长好	zhang3 hao3	0
1700	支好	zhi1 hao3	0
1701	织好	zhi1 hao3	1
1702	治好	zhi4 hao3	8
1703	治理好	zhi4 li3 hao3	0
1704	贮藏好	zhu3 cang2 hao3	0
1705	准备好	zhun3 bei4 hao3	3
1706	做好	zuo4 hao3	7
1707	坐好	zuo4 hao3	9
1708	擦黑	ca1 hei1	0
1709	蹭黑	ceng4 hei1	0
1710	盖黑	gai4 hei1	0
1711	摸黑	mo1 hei1	2
1712	染黑	ran3 hei1	0
1713	晒黑	shai4 hei1	1
1714	烧黑	shao1 hei1	0
1715	熏黑	xun1 hei1	2
1716	熬红	ao2 hong2	0
1717	变红	bian4 hong2	0
1718	搓红	cuo1 hong2	0
1719	冻红	dong4 hong2	6
1720	搁红	ge1 hong2	0
1721	跪红	gui4 hong2	0
1722	急红	ji2 hong2	0
1723	烤红	kao3 hong2	0
1724	磕红	ke1 hong2	0
1725	哭红	ku1 hong2	4
1726	勒红	le4 hong2	1
1727	拍红	pai1 hong2	0
1728	掐红	qia1 hong2	0
1729	臊红	sao4 hong2	0
1730	晒红	shai4 hong2	0
1731	烧红	shao1 hong2	5
1732	涨红	zhang4 hong2	1
1733	照红	zhao4 hong2	1
1734	蒸红	zheng1 hong2	0
1735	抓红	zhua1 hong2	0
1736	唱红	chang4 hong2	1
1737	垫厚	dian4 hou4	0
1738	盖厚	gai4 hou4	0
1739	擀厚	gan3 hou4	0
1740	烙厚	luo4 hou4	0

Seq No.	Compound	Pinyin	Tokens
1741	铺厚	pu1 hou4	0
1742	切厚	qie1 hou4	0
1743	絮厚	xu4 hou4	0
1744	炒糊	chao3 hu2	0
1745	煎糊	jian1 hu2	0
1746	烤糊	kao3 hu2	0
1747	熨糊	yun4 hu2	0
1748	炸糊	za2 hu2	0
1749	做糊	zuo4 hu2	0
1750	催糊涂	cui1 hu2 tu2	0
1751	搞糊涂	gao3 hu2 tu	1
1752	过糊涂	guo4 hu2 tu2	0
1753	看糊涂	kan4 hu2 tu	0
1754	考糊涂	kao3 hu2 tu2	0
1755	累糊涂	lei4 hu2 tu2	0
1756	忙糊涂	mang2 hu2 tu2	0
1757	闯糊涂	chuang3 hu2 tu2	0
1758	弄糊涂	nong4 hu2 tu2	0
1759	气糊涂	qi4 hu2 tu2	0
1760	烧糊涂	shao1 hu2 tu	0
1761	数糊涂	shu3 hu2 tu2	0
1762	算糊涂	suan4 hu2 tu2	0
1763	问糊涂	wen4 hu2 tu2	0
1764	吓糊涂	xia4 hu2 tu2	0
1765	笑糊涂	xiao4 hu2 tu2	0
1766	支使糊涂	zhi1 shi3 hu2 tu2	0
1767	抹花	mo3 hua1	0
1768	染花	ran3 hua1	0
1769	晒花	shai4 hua1	0
1770	洗花1	xi3 hua1	0
1774	洗花2	xi3 hua1	0
1775	看花眼	kan4 hua1 yan3	0
1776	挑花眼	tiao1 hua1 yan3	0
1777	磨滑	mo2 hua2	0
1778	变猾	bian4 hua2	8
1779	学猾	xue2 hua2	0
1780	熬化	ao2 hua4	0
1781	烤化	kao3 hua4	0
1782	晒化	shai4 hua4	0
1783	熬坏	ao2 huai4	0
1784	扒坏	ba1 huai4	0
1785	掰坏	bai1 huai4	0
1786	摆弄坏	bai3 nong4 huai4	0
1787	搬坏	ban1 huai4	0
1788	崩坏	beng1 huai4	0
1789	裱坏	biao3 huai4	0

Seq No.	Compound	Pinyin	Tokens
1790	别坏	bie2 huai4	0
1791	裁坏	cai2 huai4	0
1792	拆坏	chai1 huai4	0
1793	车坏	che1 huai4	0
1794	冲坏	chong1 huai4	0
1795	撑坏	cheng1 huai4	0
1796	吃坏	chi1 huai4	0
1797	愁坏	chou2 huai4	0
1798	穿坏	chuan1 huai4	1
1799	打坏	da3 huai4	1
1800	戴坏	dai4 huai4	0
1801	动坏	dong4 huai4	0
1802	翻坏	fan1 huai4	0
1803	放坏	fang4 huai4	0
1804	改坏	gai3 huai4	0
1805	搞坏	gao3 huai4	0
1806	糊坏	hu2 huai4	0
1807	揭坏	jie1 huai4	0
1808	撅坏	jue1 huai4	0
1809	砍坏	kan3 huai4	0
1810	看坏	kan4 huai4	0
1811	烤坏	kao3 huai4	0
1812	磕坏	ke1 huai4	0
1813	啃坏	ken3 huai4	0
1814	哭坏	ku1 huai4	1
1815	勒坏	le4 huai4	0
1816	磨坏	mo2 huai4	0
1817	拧坏	ning3 huai4	0
1818	弄坏	nong4 huai4	4
1819	沤坏	ou4 huai4	0
1820	刨坏	pao2 huai4	0
1821	泡坏	pao4 huai4	0
1822	碰坏	peng4 huai4	0
1823	漂坏	piao3 huai4	0
1824	骑坏	qi2 huai4	0
1825	撬坏	qiao4 huai4	0
1826	染坏	ran3 huai4	0
1827	晒坏	shai4 huai4	0
1828	使坏	shi3 huai4	3
1829	摔坏	shuai1 huai4	1
1830	撕坏	si1 huai4	0
1831	拓坏	ta4 huai4	0
1832	烫坏	tang4 huai4	0
1833	踢坏	ti1 huai4	0
1834	玩坏	wan2 huai4	1
1835	洗坏	xi3 huai4	0

Seq No.	Compound	Pinyin	Tokens
1836	压坏	ya1 huai4	0
1837	轧坏	ya4 huai4	0
1838	咬坏	yao3 huai4	0
1839	用坏	yong4 huai4	0
1840	扎坏	zha1 huai4	0
1841	震坏	zhen4 huai4	0
1842	抓坏	zhua1 huai4	0
1843	撞坏	zhuang4 huai4	0
1844	坐坏	zuo4 huai4	0
1845	拔坏	ba2 huai4	0
1846	办坏	ban4 huai4	0
1847	抄坏	chao1 huai4	0
1848	吹坏	chui1 huai4	0
1849	冲坏	chong1 huai4	1
1850	搭坏	da1 huai4	0
1851	干坏	gan4 huai4	0
1852	焊坏	han4 huai4	0
1853	画坏	hua4 huai4	0
1854	考坏	kao3 huai4	0
1855	录坏	lu4 huai4	0
1856	买坏	mai3 huai4	0
1857	写坏	xie3 huai4	0
1858	修坏	xiu1 huai4	0
1859	演坏	yan3 huai4	0
1860	印坏	yin4 huai4	0
1861	照坏	zhao4 huai4	0
1862	治坏	zhi4 huai4	0
1863	憋坏	bie1 huai4	2
1864	踩坏	cai3 huai4	0
1865	颠坏	dian1 huai4	0
1866	冻坏	dong4 huai4	1
1867	饿坏	e4 huai4	1
1868	硌坏	ge4 huai4	0
1869	急坏	ji2 huai4	1
1870	挤坏	ji3 huai4	0
1871	浇坏	jiao1 huai4	0
1872	渴坏	ke3 huai4	0
1873	坑坏	keng1 huai4	0
1874	困坏	kun4 huai4	0
1875	辣坏	la4 huai4	0
1876	乐坏	yue4 huai4	0
1877	累坏	lei4 huai4	0
1878	淋坏	lin2 huai4	0
1879	气坏	qi4 huai4	2
1880	想坏	xiang3 huai4	0
1881	折磨坏	zhe2 mo2 huai4	0

Seq No.	Compound	Pinyin	Tokens
1882	宠坏	chong3 huai4	0
1883	带坏	dai4 huai4	0
1884	惯坏	guan4 huai4	3
1885	教坏	jiao1 huai4	0
1886	学坏	xue2 huai4	1
1887	发慌	fa1 huang1	16
1888	变黄	bian4 huang2	1
1889	晒黄	shai4 huang2	0
1890	熏黄	xun1 huang2	0
1891	炸黄	za2 huang2	0
1892	搅黄	jiao3 huang2	0
1893	说灰心	shuo1 hui1 xin1	0
1894	背会	bei4 hui4	0
1895	教会	jiao1 hui4	3
1896	看会	kan4 hui4	0
1897	练会	lian4 hui4	0
1898	学会	xue2 hui4	50
1899	打昏	da3 hun1	0
1900	饿昏	e4 hun1	0
1901	搞昏	gao3 hun1	0
1902	晒昏	shai4 hun1	0
1903	吓昏	xia4 hun1	1
1904	搅浑	jiao3 hun2	0
1905	蹚浑	tang1 hun2	0
1906	搞混	gao3 hun4	0
1907	记混	ji4 hun3	0
1908	念混	nian4 hun3	0
1909	弄混	nong4 hun3	0
1910	扒豁	ba1 huo4	0
1911	搞活	gao3 huo2	0
1912	讲活	jiang3 huo2	0
1913	画活	hua4 huo2	0
1914	演活	yan3 huo2	0
1915	救活	jiu4 huo2	4
1916	养活	yang3 huo2	23
1917	说活	shuo1 huo2	2
1918	打活动	da3 huo2 dong4	0
1919	摔活动	shuai1 huo2 dong4	0
1920	摇晃活动	yao2 huang3 huo2 dong4	0
1921	撬活动	qiao4 huo2 dong4	0
1922	骂火	ma4 huo3	0
1923	弄火	nong4 huo3	0
1924	气火	qi4 huo3	0
1925	惹火	re3 huo3	0
1926	输火	shu1 huo3	0
1927	变机灵	bian4 ji1 ling2	0

Seq No.	Compound	Pinyin	Tokens
1928	学机灵	xue2 ji1 ling2	0
1929	逼急	bi1 ji2	3
1930	逗急	dou4 ji2	0
1931	惹急	re3 ji2	3
1932	吃急	chi1 ji2	0
1933	等急	deng3 ji2	0
1934	呆寂寞	ai2 ji4 mo4	0
1935	住寂寞	zhu4 ji4 mo4	0
1936	熬尖	ao2 jian1	0
1937	磨尖	mo2 jian1	0
1938	削尖	xue1 jian1	1
1939	提尖锐	ti2 jian1 rui4	0
1940	办简单	ban4 jian3 dan1	0
1941	编简单	bian1 jian3 dan1	0
1942	改简单	gai3 jian3 dan1	0
1943	看简单	kan4 jian3 dan1	0
1944	写简单	xie3 jian3 dan1	0
1945	看见	kan4 jian4	580
1946	梦见	meng4 jian4	5
1947	碰见	peng4 jian4	8
1948	瞧见	qiao2 jian4	4
1949	听见	ting1 jian4	138
1950	闻见	wen2 jian4	4
1951	遇见	yu4 jian4	53
1952	照见	zhao4 jian4	0
1953	搞僵	gao3 jiang1	0
1954	闹僵	nao4 jiang1	0
1955	弄僵	nong4 jiang1	1
1956	冻僵	dong4 jiang1	2
1957	烤焦	kao3 jiao1	0
1958	烧焦	shao1 jiao1	3
1959	安结实	an1 jie2 shi2	0
1960	绑结实	bang3 jie2 shi2	0
1961	编结实	bian1 jie2 shi2	0
1962	缠结实	chan2 jie2 shi2	0
1963	搭结实	da1 jie2 shi2	0
1964	钉结实	ding1 jie2 shi2	0
1965	冻结实	dong4 jie2 shi2	0
1966	缝结实	feng2 jie2 shi2	0
1967	焊结实	han4 jie2 shi2	0
1968	糊结实	hu2 jie2 shi2	0
1969	系结实	ji4 jie2 shi2	0
1970	捆结实	kun3 jie2 shi2	0
1971	砌结实	qi4 jie2 shi2	0
1972	扎结实	za1 jie2 shi2	0
1973	砸结实	za2 jie2 shi2	0

Seq No.	Compound	Pinyin	Tokens
1974	挨紧	ai1 jin3	0
1975	绑紧	bang3 jin3	0
1976	跟紧	gen1 jin3	0
1977	系紧	ji4 jin3	0
1978	卷紧	juan4 jin3	0
1979	捆紧	kun3 jin3	0
1980	拉紧	la1 jin3	0
1981	勒紧	le4 jin3	0
1982	拧紧	ning3 jin3	1
1983	绕紧	rao3 jin3	0
1984	塞紧	sai1 jin3	0
1985	上紧	shang4 jin3	2
1986	拴紧	shuan1 jin3	0
1987	握紧	wo4 jin3	4
1988	安排紧凑	an1 pai2 jin3 cou4	0
1989	写紧凑	xie3 jin3 cou4	0
1990	吃尽	chi1 jin3	1
1991	丢尽	diu1 jin3	0
1992	费尽	fei4 jin3	5
1993	干尽	gan4 jin3	0
1994	耗尽	hao4 jin3	0
1995	使尽	shi3 jin3	0
1996	说尽	shuo1 jin3	1
1997	想尽	xiang3 jin3	3
1998	用尽	yong4 jin3	9
1999	搬进	ban1 jin4	10
2000	编进	bian1 jin4	3
2001	插进	cha1 jin4	6
2002	冲进	chong1 jin4	6
2003	打进	da3 jin4	3
2004	掉进	diao4 jin4	2
2005	放进	fang4 jin4	9
2006	飞进	fei1 jin4	1
2007	赶进	gan3 jin4	4
2008	刮进	gua1 jin4	0
2009	关进	guan1 jin4	1
2010	挤进	ji3 jin4	4
2011	开进	kai1 jin4	1
2012	领进	ling3 jin4	2
2013	迈进	mai4 jin4	7
2014	跑进	pao3 jin4	25
2015	让进	rang4 jin4	5
2016	扔进	reng1 jin4	6
2017	塞进	sai1 jin4	10
2018	射进	she4 jin4	2
2019	伸进	shen1 jin4	6

Seq No.	Compound	Pinyin	Tokens
2020	送进	song4 jin4	11
2021	抬进	tai2 jin4	0
2022	弹进	dan4 jin4	1
2023	跳进	tiao4 jin4	5
2024	投进	tou2 jin4	1
2025	推进	tui1 jin4	1
2026	陷进	xian4 jin4	5
2027	写进	xie3 jin4	1
2028	住进	zhu4 jin4	2
2029	装进	zhuang1 jin4	5
2030	走进	zou3 jin4	109
2031	挨近	ai1 jin4	1
2032	凑近	cou4 jin4	8
2033	靠近	kao4 jin4	12
2034	拿近	na2 jin4	0
2035	走近	zou3 jin4	9
2036	变精	bian4 jing1	0
2037	学精	xue2 jing1	0
2038	计算精确	ji4 suan4 jing1 que4	0
2039	统计精确	tong3 ji4 jing1 que4	0
2040	簸净	bo3 jing4	0
2041	撤净	che4 jing4	0
2042	吃净	chi1 jing4	0
2043	锄净	chu2 jing4	0
2044	撮净	cuo1 jing4	0
2045	掸净	dan3 jing4	0
2046	倒净	dao3 jing4	0
2047	刮净	gua1 jing4	0
2048	喝净	he1 jing4	2
2049	啃净	ken3 jing4	0
2050	捞净	lao1 jing4	0
2051	刨净	pao2 jing4	0
2052	涮净	shuan4 jing4	0
2053	掏净	tao1 jing4	0
2054	擦净	ca1 jing4	0
2055	洗净	xi3 jing4	4
2056	摆久	bai3 jiu3	0
2057	病久	bing4 jiu3	0
2058	穿久	chuan1 jiu3	0
2059	呆久	ai2 jiu3	0
2060	戴久	dai4 jiu3	0
2061	蹲久	dun1 jiu3	0
2062	用久	yong4 jiu3	0
2063	站久	zhan4 jiu3	0
2064	住久	zhu4 jiu3	0
2065	坐久	zuo4 jiu3	1
2066	穿旧	chuan1 jiu4	0
2067	戴旧	dai4 jiu4	0
2068	翻旧	fan1 jiu4	0
2069	放旧	fang4 jiu4	0
2070	挂旧	gua4 jiu4	0
2071	用旧	yong4 jiu4	2
2072	准备就绪	zhun3 bei4 jiu4 xu4	1
2073	说具体	shuo1 ju4 ti3	0
2074	想具体	xiang3 ju4 ti3	0
2075	揣卷	chuai1 juan4	0
2076	弄卷	nong4 juan4	0
2077	晒卷	shai4 juan4	0
2078	办绝	ban4 jue2	0
2079	说绝	shuo1 jue2	0
2080	想绝	xiang3 jue2	0
2081	用绝	yong4 jue2	0
2082	做绝	zuo4 jue2	0
2083	分均匀	fen1 jun1 yun2	0
2084	扒开	ba1 kai1	0
2085	扒拉开	ba1 la1 kai1	1
2086	搬开	ban1 kai1	2
2087	抱开	bao4 kai1	0
2088	避开	bi4 kai1	1
2089	裁开	cai2 kai1	0
2090	叉开	cha3 kai1	0
2091	岔开	cha4 kai1	2
2092	敞开	chang3 kai1	7
2093	扯开	che3 kai1	7
2094	颠开	dian1 kai1	0
2095	丢开	diu1 kai1	1
2096	放开	fang4 kai1	32
2097	分开	fen1 kai1	9
2098	隔开	ge2 kai1	3
2099	滚开	gun3 kai1	2
2100	轰开	hong1 kai1	0
2101	化开	hua4 kai1	4
2102	夹开	jia1 kai1	0
2103	剪开	jian3 kai1	0
2104	铰开	jiao3 kai1	0
2105	解开	jie3 kai1	8
2106	揪开	jiu1 kai1	1
2107	锯开	ju4 kai1	0
2108	撩开	liao2 kai1	1
2109	裂开	lie4 kai1	7
2110	迈开	mai4 kai1	2
2111	拿开	na2 kai1	1

Seq No.	Compound	Pinyin	Tokens
2112	挪开	nuo2 kai1	3
2113	切开	qie1 kai1	4
2114	区别开	qu1 bie2 kai1	0
2115	劝开	quan4 kai1	0
2116	让开	rang4 kai1	0
2117	散开	san4 kai1	8
2118	闪开	shan3 kai1	7
2119	伸开	shen1 kai1	4
2120	甩开	shuai3 kai1	1
2121	松开	song1 kai1	9
2122	摊开	tan1 kai1	1
2123	踢开	ti1 kai1	5
2124	挑开	tiao1 kai1	0
2125	跳开	tiao4 kai1	0
2126	捅开	tong3 kai1	0
2127	脱离开	tuo1 chi1 kai1	0
2128	炸开	za4 kai1	4
2129	张开	zhang1 kai1	28
2130	拽开	zhuai1 kai1	1
2131	走开	zou3 kai1	59
2132	掰开	bai1 kai1	9
2133	拆开	chai1 kai1	3
2134	撑开	cheng1 kai1	2
2135	冲开	chong1 kai1	2
2136	蹦开	beng4 kai1	0
2137	打开	da3 kai1	66
2138	顶开	ding3 kai1	0
2139	翻开	fan1 kai1	2
2140	刮开	gua1 kai1	0
2141	叫开	jiao4 kai1	1
2142	揭开1	jie1 kai1	0
2143	揭开2	jie1 kai1	5
2144	开开	kai1 kai1	34
2145	拉开	la1 kai1	16
2146	咧开	lie3 kai1	0
2147	拧开	ning3 kai1	3
2148	敲开	qiao1 kai1	3
2149	撬开	qiao4 kai1	0
2150	推开	tui1 kai1	23
2151	掀开	xian1 kai1	9
2152	砸开	za2 kai1	2
2153	睁开	zheng1 kai1	60
2154	撞开	zhuang4 kai1	2
2155	巴结开	ba1 jie2 kai1	0
2156	抱怨开	bao4 yuan4 kai1	0
2157	刨开	bao4 kai1	0
2158	背开	bei1 kai1	0
2159	辩论开	bian4 lun4 kai1	0
2160	抄开	chao1 kai1	0
2161	吵开	chao3 kai1	0
2162	喘开	chuan3 kai1	0
2163	吹开	chui1 kai1	3
2164	打扮开	da3 ban4 kai1	0
2165	嘀咕开	di2 gu1 kai1	0
2166	钉开	ding1 kai1	0
2167	读开	du2 kai1	0
2168	广播开	yan3 bo4 kai1	0
2169	嚎开	hao2 kai1	0
2170	划开	hua2 kai1	4
2171	哭开	ku1 kai1	1
2172	唠叨开	lao2 tao1 kai1	0
2173	聊开	liao2 kai1	0
2174	遛开	liu2 kai1	0
2175	骂开	ma4 kai1	1
2176	埋怨开	mai2 yuan4 kai1	0
2177	忙开	mang2 kai1	0
2178	磨蹭开	mo2 ceng4 kai1	0
2179	闹腾开	nao4 teng2 kai1	0
2180	嚷嚷开	rang3 rang3 kai1	0
2181	商量开	shang1 liang4 kai1	0
2182	拾掇开	shi2 duo2 kai1	0
2183	收拾开	shou1 shi2 kai1	0
2184	搜查开	sou1 cha2 kai1	0
2185	闲扯开	xian2 che3 kai1	0
2186	研究开	yan2 jiu4 kai1	0
2187	折腾开	zhe2 teng2 kai1	0
2188	传开	chuan2 kai1	1
2189	喊开	han3 kai1	0
2190	扩散开	kuo4 san4 kai1	0
2191	蔓延开	man4 yan2 kai1	0
2192	议论开	yi4 lun4 kai1	0
2193	烧开	shao1 kai1	3
2194	煮开	zhu3 kai1	0
2195	泡开	pao4 kai1	0
2196	沏开	qi1 kai1	0
2197	陈列开	chen2 lie4 kai1	0
2198	坐开	zuo4 kai1	0
2199	摆开	bai3 kai1	1
2200	吃渴	chi1 ke3	0
2201	讲渴	jiang3 ke3	0
2202	跑渴	pao3 ke3	0
2203	说渴	shuo1 ke3	0

Seq No.	Compound	Pinyin	Tokens
2204	搬空	ban1 kong1	1
2205	盗空	dao4 kong1	0
2206	抢空	qiang3 kong1	0
2207	腾空	teng3 kong1	2
2208	吐空	tu3 kong1	0
2209	挖空	wa1 kong1	0
2210	蛀空	zhu4 kong1	0
2211	踩空	cai3 kong1	0
2212	蹬空	deng4 kong1	0
2213	坐空	zuo4 kong1	0
2214	打哭	da3 ku1	1
2215	逗哭	dou4 ku1	0
2216	饿哭	e4 ku1	0
2217	急哭	ji2 ku1	0
2218	骂哭	ma4 ku1	0
2219	批评哭	pi1 ping2 ku1	0
2220	说哭	shuo1 ku1	0
2221	吓哭	xia4 ku1	1
2222	害苦	hai4 ku3	0
2223	欺负苦	qi1 fu4 ku3	0
2224	折腾苦	zhe2 teng2 ku3	0
2225	整苦	zheng3 ku3	0
2226	冲垮	chong1 kua3	0
2227	打垮	da3 kua3	2
2228	搞垮	gao3 kua3	0
2229	挤垮	ji3 kua3	0
2230	累垮	lei4 kua3	0
2231	拖垮	tuo1 kua3	0
2232	压垮	ya1 kua3	1
2233	拨快	bo1 kuai4	0
2234	吃快	chi1 kuai4	0
2235	加快	jia1 kuai4	14
2236	开快	kai1 kuai4	0
2237	念快	nian4 kuai4	0
2238	跑快	pao3 kuai4	0
2239	骑快	qi2 kuai4	0
2240	说快	shuo1 kuai4	0
2241	写快	xie3 kuai4	0
2242	走快	zou3 kuai4	0
2243	磨快	mo2 kuai4	0
2244	裁宽	cai2 kuan1	0
2245	叠宽	die2 kuan1	0
2246	加宽	jia1 kuan1	1
2247	接宽	jie1 kuan1	0
2248	锯宽	ju4 kuan1	0
2249	拉宽	la2 kuan1	0
2250	铺宽	pu1 kuan1	0
2251	挖宽	wa1 kuan1	0
2252	织宽	zhi1 kuan1	0
2253	盖宽敞	gai4 kuan1 chang3	0
2254	等困	deng3 kun4	0
2255	看困	kan4 kun4	0
2256	晒困	shai4 kun4	0
2257	说困	shuo1 kun4	0
2258	听困	ting1 kun4	0
2259	玩困	wan2 kun4	0
2260	坐困	zuo4 kun4	0
2261	背落	bei1 la4	0
2262	抄落	chao1 la4	0
2263	锄落	chu2 la4	0
2264	讲落	jiang3 la4	0
2265	看落	kan4 la4	0
2266	熬烂	ao2 lan4	0
2267	炒烂	chao3 lan4	0
2268	炖烂	tun1 lan4	0
2269	放烂	fang4 lan4	0
2270	搁烂	ge1 lan4	1
2271	沤烂	ou4 lan4	0
2272	泡烂	pao4 lan4	0
2273	捂烂	wu3 lan4	0
2274	扒拉烂	ba1 la1 lan4	0
2275	踩烂	cai3 lan4	0
2276	穿烂	chuan1 lan4	0
2277	戴烂	dai4 lan4	0
2278	剁烂	duo4 lan4	0
2279	翻烂	fan1 lan4	0
2280	挤烂	ji3 lan4	0
2281	嚼烂	jiao2 lan4	0
2282	磨烂	mo2 lan4	0
2283	挠烂	nao2 lan4	0
2284	揉烂	rou2 lan4	0
2285	摔烂	shuai1 lan4	0
2286	压烂	ya1 lan4	0
2287	咬烂	yao3 lan4	3
2288	砸烂	za2 lan4	2
2289	变老	bian4 lao3	1
2290	炒老	chao3 lao3	0
2291	蒸老	zheng1 lao3	0
2292	长老	zhang3 lao3	3
2293	拔累	ba2 lei4	0
2294	搬累	ban1 lei4	0
2295	抱累	bao4 lei4	0

Seq No.	Compound	Pinyin	Tokens
2296	背累	bei1 lei4	0
2297	擦累	ca1 lei4	0
2298	唱累	chang4 lei4	0
2299	抄累	chao1 lei4	0
2300	吵累	chao3 lei4	0
2301	吹累	chui1 lei4	0
2302	打累	da3 lei4	0
2303	打扫累	da3 sao3 lei4	0
2304	翻累	fan1 lei4	0
2305	飞累	fei1 lei4	0
2306	干累	gan4 lei4	0
2307	逛累	guang4 lei4	0
2308	举累	ju3 lei4	0
2309	看累	kan4 lei4	1
2310	扛累	kang2 lei4	0
2311	哭累	ku1 lei4	0
2312	拿累	na2 lei4	0
2313	念累	nian4 lei4	0
2314	跑累	pao3 lei4	0
2315	骑累	qi2 lei4	0
2316	扫累	sao3 lei4	0
2317	抬累	tai2 lei4	0
2318	踢累	ti1 lei4	0
2319	提累	ti2 lei4	0
2320	玩累	wan2 lei4	1
2321	洗累	xi3 lei4	0
2322	游累	you2 lei4	0
2323	站累	zhan4 lei4	0
2324	坐累	zuo4 lei4	0
2325	走累	zou3 lei4	0
2326	变冷	bian4 leng3	0
2327	打愣	da3 leng4	0
2328	看愣	kan4 leng4	0
2329	听愣	ting1 leng2	0
2330	问愣	wen4 leng2	0
2331	笑愣	xiao4 leng2	0
2332	变利害	bian4 li4 hai4	0
2333	烧利害	shao1 li4 hai	0
2334	说利害	shuo1 li4 hai4	0
2335	办利索	ban4 li4 suo3	0
2336	好利索	hao3 li4 suo3	0
2337	交代利索	jiao1 dai4 li4 suo3	0
2338	收拾利索	shou1 shi2 li4 suo3	0
2339	冰凉	bing1 liang2	16
2340	放凉	fang4 liang2	0
2341	弄凉	nong4 liang2	0
2342	拨亮	bo1 liang4	0
2343	擦亮	ca1 liang4	2
2344	摸亮	mo1 liang4	0
2345	磨亮	mo2 liang4	0
2346	调亮	tiao2 liang4	0
2347	冻裂	dong4 lie4	0
2348	踩裂	cai3 lie4	0
2349	吹裂	chui1 lie4	0
2350	烤裂	kao3 lie4	0
2351	拧裂	ning3 lie4	0
2352	晒裂	shai4 lie4	0
2353	烧裂	shao1 lie4	0
2354	摔裂	shuai1 lie4	0
2355	砸裂	za2 lie4	0
2356	震裂	zhen4 lie4	0
2357	叮流血	ding1 liu2 xie3	0
2358	划流血	hua2 liu2 xie3	0
2359	剐流血	gua3 liu2 xie3	0
2360	磕流血	ke1 liu2 xie3	0
2361	挠流血	nao2 liu2 xie3	0
2362	碰流血	peng4 liu2 xie3	0
2363	摔流血	shuai1 liu2 xie3	0
2364	扎流血	zha1 liu2 xie3	0
2365	抓流血	zhua1 liu2 xie3	0
2366	变聋	bian4 long2	0
2367	打聋	da3 long2	0
2368	烧聋	shao1 long2	0
2369	震聋	zhen4 long2	1
2370	踩漏	cai3 lou4	0
2371	烧漏	shao1 lou4	0
2372	用漏	yong4 lou4	0
2373	变绿	bian4 lv4	2
2374	染绿	ran3 lv4	0
2375	涂绿	tu2 lv4	0
2376	搬乱	ban1 luan4	0
2377	抽乱	chou1 luan4	0
2378	吹乱	chui1 luan4	0
2379	打乱	da3 luan4	5
2380	动乱	dong4 luan4	3
2381	发乱	fa1 luan4	1
2382	翻乱	fan1 luan4	0
2383	放乱	fang4 luan4	0
2384	搞乱	gao3 luan4	0
2385	记乱	ji4 luan4	0
2386	搅乱	jiao3 luan4	0
2387	拿乱	na2 luan4	0

Seq No.	Compound	Pinyin	Tokens
2388	排乱	pai2 luan4	0
2389	碰乱	peng4 luan4	1
2390	数乱	shu3 luan4	0
2391	装乱	zhuang1 luan4	0
2392	蹲麻	dun1 ma2	0
2393	压麻	ya1 ma2	0
2394	坐麻	zuo4 ma2	0
2395	安满	an1 man3	0
2396	安排满	an1 pai2 man3	0
2397	摆满	bai3 man3	2
2398	别满	bie2 man3	0
2399	补满	bu3 man3	0
2400	插满	cha1 man3	1
2401	缠满	chan2 man3	0
2402	铲满	chan3 man3	0
2403	抄满	chao1 man3	0
2404	盛满	cheng2 man3	2
2405	出满	chu1 man3	3
2406	揣满	chuai1 man3	0
2407	撮满	cuo1 man3	0
2408	搭满	da1 man3	0
2409	答满	da2 man3	0
2410	打满	da3 man3	0
2411	戴满	dai4 man3	0
2412	倒满	dao3 man3	4
2413	登满	deng1 man3	0
2414	滴满	di1 man3	0
2415	垫满	dian4 man3	0
2416	钉满	ding1 man3	0
2417	堆满	dui1 man3	3
2418	放满	fang4 man3	0
2419	盖满	gai4 man3	0
2420	搁满	ge1 man3	0
2421	挂满	gua4 man3	2
2422	灌满	guan4 man3	0
2423	含满	han2 man3	1
2424	划满	hua2 man3	0
2425	画满	hua4 man3	0
2426	挤满	ji3 man3	6
2427	记满	ji4 man3	0
2428	捡满	jian3 man3	0
2429	溅满	jian4 man3	0
2430	接满	jie1 man3	0
2431	结满	jie2 man3	3
2432	开满	kai1 man3	0
2433	烤满	kao3 man3	0
2434	刻满	ke4 man3	0
2435	捆满	kun3 man3	0
2436	晾满	liang4 man3	0
2437	流满	liu2 man3	2
2438	落满	luo4 man3	4
2439	趴满	pa1 man3	0
2440	爬满	pa2 man3	1
2441	排满	pai2 man3	0
2442	泼满	po1 man3	0
2443	铺满	pu1 man3	2
2444	洒满	sa3 man3	1
2445	撒满	sa3 man3	0
2446	塞满	sai1 man3	2
2447	晒满	shai4 man3	0
2448	上满	shang4 man3	4
2449	摊满	tan1 man3	0
2450	躺满	tang3 man3	0
2451	添满	tian1 man3	0
2452	贴满	tie1 man3	0
2453	停满	ting2 man3	0
2454	吸满	xi1 man3	0
2455	腌满	an1 man3	0
2456	栽满	zai1 man3	1
2457	扎满	zha1 man3	0
2458	沾满	zhan1 man3	1
2459	站满	zhan4 man3	2
2460	长满	zhang3 man3	1
2461	招满	zhao1 man3	0
2462	斟满	zhen1 man3	2
2463	种满	zhong3 man3	0
2464	住满	zhu4 man3	0
2465	驻满	zhu4 man3	0
2466	装满	zhuang1 man3	8
2467	坐满	zuo4 man3	3
2468	呆满	ai2 man3	0
2469	蹲满	dun1 man3	0
2470	干满	gan4 man3	0
2471	念满	nian4 man3	0
2472	学满	xue2 man3	0
2473	住满	zhu4 man3	3
2474	吃慢	chi1 man4	0
2475	躲慢	duo3 man4	0
2476	放慢	fang4 man4	5
2477	讲慢	jiang3 man4	0
2478	开慢	kai1 man4	0
2479	念慢	nian4 man4	0

Seq No.	Compound	Pinyin	Tokens
2480	跑慢	pao3 man4	0
2481	骑慢	qi2 man4	0
2482	说慢	shuo1 man4	0
2483	写慢	xie3 man4	0
2484	走慢	zou3 man4	1
2485	喝没	he1 mei2	0
2486	扣没	kou4 mei2	0
2487	卖没	mai4 mei2	0
2488	消耗没	xiao1 hao4 mei2	0
2489	打蒙	da3 meng1	0
2490	问蒙	wen4 meng2	0
2491	吓蒙	xia4 meng2	0
2492	使猛	shi3 meng3	0
2493	灌迷糊	guan4 mi2 hu2	0
2494	烧迷糊	shao1 mi2 hu	0
2495	睡迷糊	shui4 mi2 hu2	0
2496	摆密	bai3 mi4	0
2497	播密	bo4 mi4	0
2498	缝密	feng2 mi4	0
2499	写密	xie3 mi4	0
2500	种密	zhong3 mi4	0
2501	踩灭	cai3 mie4	0
2502	吹灭	chui1 mie4	1
2503	封灭	feng1 mie4	0
2504	盖灭	gai4 mie4	0
2505	刮灭	gua1 mie4	0
2506	划灭	hua2 mie4	0
2507	浇灭	jiao1 mie4	1
2508	掐灭	qia1 mie4	0
2509	捅灭	tong3 mie4	0
2510	捂灭	wu3 mie4	0
2511	压灭	ya1 mie4	0
2512	讲明	jiang3 ming2	0
2513	亮明	liang4 ming2	0
2514	说明	shuo1 ming2	42
2515	挑明	tiao3 ming2	0
2516	问明	wen4 ming2	0
2517	写明	xie3 ming2	1
2518	查明白	cha2 ming2 bai2	0
2519	打听明白	da3 ting1 ming2 bai	10
2520	搞明白	gao3 ming2 bai	0
2521	讲明白	jiang3 ming2 bai2	0
2522	看明白	kan4 ming2 bai	52
2523	闹明白	nao4 ming2 bai2	0
2524	弄明白	nong4 ming2 bai2	2
2525	说明白	shuo1 ming2 bai2	8
2526	听明白	ting1 ming2 bai2	35
2527	问明白	wen4 ming2 bai2	4
2528	写明白	xie3 ming2 bai2	0
2529	蹭模糊	ceng4 mo2 hu2	0
2530	洗模糊	xi3 mo2 hu2	0
2531	印模糊	yin4 mo2 hu2	0
2532	冻木	dong4 mu4	0
2533	出难	chu1 nan2	0
2534	惹恼	re3 nao3	4
2535	说恼	shuo1 nao3	1
2536	炒嫩	chao3 nen4	0
2537	煎嫩	jian1 nen4	0
2538	剥腻	bao1 ni4	0
2539	擦腻	ca1 ni4	0
2540	唱腻	chang4 ni4	0
2541	抄腻	chao1 ni4	0
2542	吃腻	chi1 ni4	1
2543	抽腻	chou1 ni4	0
2544	穿腻	chuan1 ni4	0
2545	吹腻	chui1 ni4	0
2546	打腻	da3 ni4	0
2547	呆腻	ai2 ni4	0
2548	等腻	deng3 ni4	0
2549	干腻	gan4 ni4	0
2550	管腻	guan3 ni4	0
2551	逛腻	guang4 ni4	0
2552	过腻	guo4 ni4	0
2553	讲腻	jiang3 ni4	0
2554	教腻	jiao1 ni4	0
2555	看腻	kan4 ni4	0
2556	爬腻	pa2 ni4	0
2557	去腻	qu4 ni4	0
2558	上腻	shang4 ni4	0
2559	弹腻	dan4 ni4	0
2560	躺腻	tang3 ni4	0
2561	踢腻	ti1 ni4	0
2562	听腻	ting1 ni4	0
2563	玩腻	wan2 ni4	2
2564	闻腻	wen2 ni4	0
2565	写腻	xie3 ni4	0
2566	学腻	xue2 ni4	0
2567	演腻	yan3 ni4	0
2568	养腻	yang3 ni4	0
2569	住腻	zhu4 ni4	0
2570	变蔫	bian4 nian1	0
2571	说蔫	shuo1 nian1	0

Seq No.	Compound	Pinyin	Tokens
2572	晒蔫	shai4 nian1	0
2573	弄黏	nong4 nian2	0
2574	弄拧	nong4 ning3	0
2575	说拧	shuo1 ning3	0
2576	变暖和	bian4 nuan3 he2	0
2577	穿暖和	chuan1 nuan3 he2	0
2578	盖暖和	gai4 nuan3 he2	0
2579	烤暖和	kao3 nuan3 he2	0
2580	晒暖和	shai4 nuan3 he2	0
2581	睡暖和	shui4 nuan3 he2	0
2582	踢暖和	ti1 nuan3 he2	0
2583	焐暖和	wu4 nuan3 he2	0
2584	累趴下	lei4 pa1 xia4	0
2585	打怕	da3 pa4	2
2586	丢怕	diu1 pa4	0
2587	挤怕	ji3 pa4	0
2588	冷怕	leng3 pa4	0
2589	骂怕	ma4 pa4	0
2590	欺负怕	qi1 fu4 pa4	0
2591	穷怕	qiong2 pa4	0
2592	吓怕	xia4 pa4	0
2593	蜇怕	zhe1 pa4	0
2594	吃胖	chi1 pang4	0
2595	呆胖	ai2 pang4	0
2596	养胖	yang3 pang4	0
2597	长胖	zhang3 pang4	0
2598	蹦跑	beng4 pao3	0
2599	冲跑	chong1 pao3	0
2600	吹跑	chui1 pao3	0
2601	打跑	da3 pao3	1
2602	叼跑	diao1 pao3	0
2603	放跑	fang4 pao3	1
2604	赶跑	gan3 pao3	1
2605	刮跑	gua1 pao3	0
2606	拐跑	guai3 pao3	1
2607	开跑	kai1 pao3	0
2608	骂跑	ma4 pao3	0
2609	弄跑	nong4 pao3	0
2610	气跑	qi4 pao3	3
2611	抢跑	qiang3 pao3	0
2612	说跑	shuo1 pao3	0
2613	吓跑	xia4 pao3	3
2614	熏跑	xun1 pao3	0
2615	卖赔	mai4 pei2	0
2616	踩披	cai3 pi1	0
2617	钉披	ding1 pi1	0

Seq No.	Compound	Pinyin	Tokens
2618	打皮	da3 pi2	0
2619	骂皮	ma4 pi2	0
2620	说皮	shuo1 pi2	0
2621	放皮	fang4 pi2	0
2622	搁皮	ge1 pi2	0
2623	挂偏	gua4 pian1	0
2624	锯偏	ju4 pian1	0
2625	磨偏	mo2 pian1	0
2626	凿偏	zao2 pian1	0
2627	买便宜	mai3 bian4 yi2	0
2628	卖便宜	mai4 bian4 yi2	0
2629	刨平	bao4 ping2	0
2630	铲平	chan3 ping2	1
2631	垫平	dian4 ping2	0
2632	端平	duan1 ping2	0
2633	放平	fang4 ping2	1
2634	捋平	luo1 ping2	0
2635	磨平	mo2 ping2	0
2636	抹平	mo4 ping2	0
2637	铺平	pu1 ping2	0
2638	躺平	tang3 ping2	0
2639	填平	tian2 ping2	2
2640	推平	tui1 ping2	0
2641	熨平	yun4 ping2	0
2642	分平均	fen1 ping2 jun1	0
2643	放平稳	fang4 ping2 wen3	0
2644	飞平稳	fei1 ping2 wen3	0
2645	擦破	ca1 po4	1
2646	撑破	cheng1 po4	0
2647	穿破	chuan1 po4	0
2648	搓破	cuo1 po4	0
2649	打破	da3 po4	11
2650	戴破	dai4 po4	0
2651	剐破	gua3 po4	0
2652	喊破	han3 po4	0
2653	划破	hua2 po4	1
2654	挤破	ji3 po4	0
2655	剪破	jian3 po4	0
2656	磕破	ke1 po4	0
2657	拉破	la2 po4	0
2658	勒破	le4 po4	0
2659	磨破	mo2 po4	3
2660	挠破	nao2 po4	0
2661	弄破	nong4 po4	0
2662	碰破	peng4 po4	0
2663	敲破	qiao1 po4	0

Seq No.	Compound	Pinyin	Tokens
2664	说破	shuo1 po4	4
2665	撕破	si1 po4	2
2666	踢破	ti1 po4	1
2667	捅破	tong3 po4	0
2668	洗破	xi3 po4	0
2669	笑破	xiao4 po4	0
2670	咬破	yao3 po4	1
2671	用破	yong4 po4	5
2672	砸破	za2 po4	0
2673	扎破	zha1 po4	1
2674	煮破	zhu3 po4	0
2675	抓破	zhua1 po4	1
2676	摆齐	bai3 qi2	0
2677	比齐	bi3 qi2	0
2678	裁齐	cai2 qi2	0
2679	叠齐	die2 qi2	0
2680	对齐	dui4 qi2	0
2681	剪齐	jian3 qi2	0
2682	走齐	zou3 qi2	0
2683	备齐	bei4 qi2	0
2684	补齐	bu3 qi2	0
2685	凑齐	cou4 qi2	0
2686	到齐	dao4 qi2	7
2687	订齐	ding4 qi2	0
2688	发齐	fa1 qi2	0
2689	来齐	lai2 qi2	1
2690	买齐	mai3 qi2	0
2691	配齐	pei4 qi2	0
2692	收齐	shou1 qi2	0
2693	找齐	zhao3 qi2	0
2694	置齐	zhi4 qi2	0
2695	攒齐	zan3 qi2	0
2696	买齐全	mai3 qi2 quan2	0
2697	置齐全	zhi4 qi2 quan2	0
2698	准备齐全	zhun3 bei4 qi2 quan2	0
2699	背起	bei1 qi3	3
2700	踮起	dian3 qi3	0
2701	举起	ju3 qi3	22
2702	卷起	juan4 qi3	7
2703	拿起	na2 qi3	43
2704	欠起	que1 qi3	3
2705	竖起	shu4 qi3	9
2706	抬起	tai2 qi3	38
2707	挑起	tiao3 qi3	2
2708	挺起	ting3 qi3	19
2709	挽起	wan3 qi3	2

Seq No.	Compound	Pinyin	Tokens
2710	支撑起	zhi1 cheng1 qi3	0
2711	直起	zhi2 qi3	6
2712	抓起	zhua1 qi3	20
2713	搭起	da1 qi3	3
2714	建立起	jian4 li4 qi3	1
2715	点起	dian3 qi3	7
2716	收拾起	shou1 shi2 qi3	0
2717	吹起	chui1 qi3	1
2718	勾起	yun2 qi3	3
2719	回忆起	hui2 yi4 qi3	2
2720	讲起	jiang3 qi3	3
2721	拉起	la1 qi3	14
2722	朗诵起	lang3 song4 qi3	1
2723	联想起	lian2 xiang3 qi3	0
2724	谈起	tan2 qi3	7
2725	问起	wen4 qi3	3
2726	响起	xiang3 qi3	11
2727	皱起	zhou4 qi3	8
2728	变浅	bian4 qian3	0
2729	埋浅	mai2 qian3	0
2730	刨浅	pao2 qian3	0
2731	编浅	bian1 qian3	0
2732	来巧	lai2 qiao3	0
2733	去巧	qu4 qiao3	0
2734	问巧	wen4 qiao3	0
2735	走巧	zou3 qiao3	0
2736	憋青	bie1 qing1	0
2737	打青	da3 qing1	0
2738	冻青	dong4 qing1	0
2739	挤青	ji3 qing1	0
2740	磕青	ke1 qing1	0
2741	拧青	ning2 qing1	0
2742	掐青	qia1 qing1	0
2743	摔青	shuai1 qing1	0
2744	砸青	za2 qing1	0
2745	撞青	zhuang4 qing1	0
2746	放轻	fang4 qing1	0
2747	批评轻	pi1 ping2 qing1	0
2748	判轻	pan4 qing1	0
2749	辨清	bian4 qing1	2
2750	查清	cha2 qing1	1
2751	点清	dian3 qing1	0
2752	记清	ji4 qing1	0
2753	讲清	jiang3 qing1	0
2754	看清	kan4 qing1	44
2755	理清	li3 qing1	1

Seq No.	Compound	Pinyin	Tokens
2756	摸清	mo1 qing1	4
2757	弄清	nong4 qing1	0
2758	盘点清	pan2 dian3 qing1	0
2759	认清	ren4 qing1	9
2760	算清	suan4 qing1	3
2761	数清	shu3 qing1	1
2762	听清	ting1 qing1	3
2763	问清	wen4 qing1	0
2764	付清	fu4 qing1	0
2765	还清	huan2 qing1	3
2766	洗清	xi3 qing1	0
2767	标清楚	biao1 qing1 chu3	0
2768	表达清楚	biao3 da2 qing1 chu3	0
2769	抄清楚	chao1 qing1 chu3	0
2770	点清楚	dian3 qing1 chu3	0
2771	分清楚	fen1 qing1 chu3	6
2772	搞清楚	gao3 qing1 chu	3
2773	记清楚	ji4 qing1 chu3	1
2774	讲清楚	jiang3 qing1 chu3	0
2775	解释清楚	jie3 shi4 qing1 chu3	2
2776	看清楚	kan4 qing1 chu	37
2777	摸清楚	mo1 qing1 chu3	0
2778	弄清楚	nong4 qing1 chu3	5
2779	说清楚	shuo1 qing1 chu3	9
2780	谈清楚	tan2 qing1 chu3	0
2781	听清楚	ting1 qing1 chu3	5
2782	问清楚	wen4 qing1 chu3	0
2783	写清楚	xie3 qing1 chu3	0
2784	想清楚	xiang3 qing1 chu3	10
2785	吹清醒	chui1 qing1 xing3	0
2786	刮晴	gua1 qing2	0
2787	变穷	bian4 qiong2	0
2788	吃穷	chi1 qiong2	0
2789	赌穷	du3 qiong2	0
2790	过穷	guo4 qiong2	0
2791	编全	bian1 quan2	0
2792	补全	bu3 quan2	0
2793	背全	bei4 quan2	0
2794	带全	dai4 quan2	0
2795	订全	ding4 quan2	0
2796	买全	mai3 quan2	0
2797	配全	pei4 quan2	0
2798	收全	shou1 quan2	0
2799	说全	shuo1 quan2	4
2800	打瘸	da3 que2	0
2801	摔瘸	shuai1 que2	0
2802	踢瘸	ti1 que2	0
2803	砸瘸	za2 que2	0
2804	炸瘸	za4 que2	0
2805	打听确实	da3 ting1 que4 shi	0
2806	搓热	cuo1 re4	0
2807	打热	da3 re4	0
2808	对热	dui4 re4	0
2809	喝热	he1 re4	0
2810	烤热	kao3 re4	0
2811	跑热	pao3 re4	0
2812	晒热	shai4 re4	0
2813	烧热	shao1 re4	0
2814	睡热	shui4 re4	0
2815	跳热	tiao4 re4	0
2816	温热	wen1 re4	1
2817	焐热	wu4 re4	0
2818	走热	zou3 re4	0
2819	攥热	zuan4 re4	0
2820	搞入迷	gao3 ru4 mi3	0
2821	看入迷	kan4 ru4 mi3	0
2822	听入迷	ting1 ru4 mi2	0
2823	玩入迷	wan2 ru4 mi2	0
2824	和软	huo2 ruan3	0
2825	烤软	kao3 ruan3	0
2826	泡软	pao4 ruan3	0
2827	晒软	shai4 ruan3	0
2828	吓软	xia4 ruan3	0
2829	抻洒	dun4 sa3	0
2830	蹬洒	deng4 sa3	0
2831	颠洒	dian1 sa3	0
2832	拱洒	gong3 sa3	0
2833	晃洒	huang4 sa3	0
2834	弄洒	nong4 sa3	0
2835	碰洒	peng4 sa3	0
2836	踢洒	ti1 sa3	0
2837	颠散	dian1 san3	0
2838	挤散	ji3 san3	0
2839	拿散	na2 san3	0
2840	弄散	nong4 san3	0
2841	扔散	reng1 san3	0
2842	摔散	shuai1 san3	0
2843	搬散架	ban1 san4 jia4	0
2844	颠散架	dian1 san4 jia4	0
2845	摔散架	shuai1 san4 jia4	0
2846	抬散架	tai2 san4 jia4	0
2847	冲散	chong1 san4	1

Seq No.	Compound	Pinyin	Tokens
2848	吹散	chui1 san4	4
2849	打散	da3 san4	0
2850	轰散	hong1 san4	0
2851	驱散	qu1 san4	0
2852	走散	zou3 san4	1
2853	变傻	bian4 sha3	0
2854	吃傻	chi1 sha3	0
2855	烧傻	shao1 sha3	0
2856	看傻	kan4 sha3	0
2857	吓傻	xia4 sha3	0
2858	笑傻	xiao4 sha3	0
2859	崩伤	beng1 shang1	0
2860	擦伤	ca1 shang1	0
2861	刺伤	ci4 shang1	1
2862	打伤	da3 shang1	7
2863	划伤	hua2 shang1	0
2864	拉伤	la2 shang1	0
2865	挠伤	nao2 shang1	0
2866	弄伤	nong4 shang1	0
2867	碰伤	peng4 shang1	2
2868	烧伤	shao1 shang1	0
2869	摔伤	shuai1 shang1	0
2870	烫伤	tang4 shang1	0
2871	踢伤	ti1 shang1	0
2872	砸伤	za2 shang1	0
2873	扎伤	zha1 shang1	0
2874	撞伤	zhuang4 shang1	0
2875	吃伤	chi1 shang1	0
2876	喝伤	he1 shang1	0
2877	插上	cha1 shang4	8
2878	登上	deng1 shang4	1
2879	递上	di4 shang4	7
2880	飞上	fei1 shang4	1
2881	混上	hun4 shang4	2
2882	挤上	ji3 shang4	4
2883	爬上	pa2 shang4	20
2884	踏上	ta4 shang4	3
2885	挽上	wan3 shang4	0
2886	挨上	ai1 shang4	3
2887	爱上	ai4 shang4	9
2888	熬上	ao2 shang4	0
2889	背上	bei1 shang4	23
2890	吵上	chao3 shang4	0
2891	抽上	chou1 shang4	1
2892	催上	cui1 shang4	0
2893	搭上	da1 shang4	8

Seq No.	Compound	Pinyin	Tokens
2894	蹲上	dun1 shang4	0
2895	干上	gan4 shang4	4
2896	好上	hao3 shang4	0
2897	喝上	he1 shang4	1
2898	怀疑上	huai2 yi2 shang4	0
2899	嫉妒上	ji2 du4 shang4	0
2900	讲上	jiang3 shang4	0
2901	看上	kan4 shang4	59
2902	聊上	liao2 shang4	0
2903	闹上	nao4 shang4	0
2904	嚷上	rang3 shang4	0
2905	睡上	shui4 shang4	0
2906	兴上	xing1 shang4	0
2907	学上	xue2 shang4	3
2908	研究上	yan2 jiu4 shang4	0
2909	站上	zhan4 shang4	15
2910	安上	an1 shang4	6
2911	安装上	an1 zhuang1 shang4	0
2912	摆上	bai3 shang4	3
2913	搬上	ban1 shang4	0
2914	绑上	bang3 shang4	0
2915	包上	bao1 shang4	7
2916	包扎上	bao1 zha1 shang4	0
2917	报上	bao4 shang4	7
2918	闭上	bi4 shang4	101
2919	补上	bu3 shang4	15
2920	踩上	cai3 shang4	3
2921	蹭上	ceng4 shang4	1
2922	缠上	chan2 shang4	0
2923	吃上	chi1 shang4	9
2924	穿上	chuan1 shang4	42
2925	传染上	chuan2 ran3 shang4	0
2926	存上	cun2 shang4	0
2927	带上	dai4 shang4	6
2928	戴上	dai4 shang4	13
2929	当上	dang1 shang4	8
2930	当选上	dang1 xuan3 shang4	0
2931	挡上	dang3 shang4	1
2932	点上	dian3 shang4	19
2933	垫上	dian4 shang4	2
2934	盯上	cheng2 shang4	2
2935	订上	ding4 shang4	0
2936	堵上	du3 shang4	3
2937	放上	fang4 shang4	3
2938	缝上	feng2 shang4	1
2939	赶上	gan3 shang4	34

Seq No.	Compound	Pinyin	Tokens
2940	雇上	gu4 shang4	0
2941	挂上	gua4 shang4	5
2942	关上	guan1 shang4	24
2943	灌上	guan4 shang4	0
2944	换上	huan4 shang4	21
2945	记上	ji4 shang4	2
2946	系上	ji4 shang4	3
2947	加上	jia1 shang4	49
2948	交上	jiao1 shang4	3
2949	叫上	jiao4 shang4	1
2950	接上	jie1 shang4	3
2951	结合上	jie2 he2 shang4	0
2952	扛上	kang2 shang4	0
2953	考上	kao3 shang4	1
2954	铐上	kao4 shang4	0
2955	扣上	kou4 shang4	4
2956	挎上	kua4 shang4	1
2957	跨上	kua3 shang4	0
2958	联系上	lian2 xi4 shang4	1
2959	晾上	liang4 shang4	1
2960	录上	lu4 shang4	0
2961	蒙上	meng2 shang4	3
2962	念上	nian4 shang4	1
2963	拧上	ning3 shang4	3
2964	弄上	nong4 shang4	3
2965	泡上	pao4 shang4	2
2966	配上	pei4 shang4	8
2967	喷上	pen1 shang4	0
2968	碰上	peng4 shang4	20
2969	披上	pi1 shang4	11
2970	评上	ping2 shang4	0
2971	评选上	ping2 xuan3 shang4	0
2972	铺上	pu1 shang4	4
2973	沏上	qi1 shang4	1
2974	漆上	qi1 shang4	0
2975	骑上	qi2 shang4	4
2976	砌上	qi4 shang4	0
2977	牵扯上	qian1 che3 shang4	0
2978	签上	qian1 shang4	1
2979	圈上	quan1 shang4	1
2980	染上	ran3 shang4	7
2981	塞上	sai1 shang4	0
2982	上上	shang4 shang4	7
2983	刷上	shua1 shang4	1
2984	送上	song4 shang4	4
2985	算上	suan4 shang4	2

Seq No.	Compound	Pinyin	Tokens
2986	锁上	suo3 shang4	2
2987	摊上	tan1 shang4	0
2988	套上	tao4 shang4	2
2989	填上	tian2 shang4	1
2990	挑上	tiao1 shang4	0
2991	挑选上	tiao1 xuan3 shang4	0
2992	涂上	tu2 shang4	5
2993	围上	wei2 shang4	8
2994	写上	xie3 shang4	8
2995	修上	xiu1 shang4	0
2996	选上	xuan3 shang4	1
2997	遇上	yu4 shang4	27
2998	栽上	zai1 shang4	0
2999	粘上	nian2 shang4	0
3000	支上	zhi1 shang4	0
3001	装上	zhuang1 shang4	3
3002	撞上	zhuang4 shang4	1
3003	追上	zhui1 shang4	4
3004	坐上	zuo4 shang4	8
3005	吃上当	chi1 shang4 dang1	0
3006	买上当	mai3 shang4 dang1	0
3007	去上当	qu4 shang4 dang1	0
3008	做上当	zuo4 shang4 dang1	0
3009	吃上瘾	chi1 shang4 yin3	0
3010	抽上瘾	chou1 shang4 yin3	0
3011	打上瘾	da3 shang4 yin3	0
3012	钓上瘾	diao4 shang4 yin3	0
3013	喝上瘾	he1 shang4 yin3	0
3014	画上瘾	hua4 shang4 yin3	0
3015	看上瘾	kan4 shang4 yin3	0
3016	踢上瘾	ti1 shang4 yin3	0
3017	听上瘾	ting1 shang4 yin3	0
3018	玩上瘾	wan2 shang4 yin3	0
3019	学上瘾	xue2 shang4 yin3	0
3020	织上瘾	zhi1 shang4 yin3	0
3021	备少	bei4 shao3	0
3022	炒少	chao3 shao3	0
3023	盛少	cheng2 shao3	0
3024	吃少	chi1 shao3	1
3025	穿少	chuan1 shao3	2
3026	带少	dai4 shao3	0
3027	放少	fang4 shao3	0
3028	付少	fu4 shao3	0
3029	浇少	jiao1 shao3	0
3030	买少	mai3 shao3	0
3031	抹少	mo3 shao3	0

Seq No.	Compound	Pinyin	Tokens
3032	做少	zuo4 shao3	0
3033	掰折	bai1 she2	0
3034	摆弄折	bai3 nong4 she2	0
3035	拔折	ba2 she2	0
3036	踩折	cai3 she2	0
3037	抽折	chou1 she2	0
3038	打折	da3 she2	4
3039	戴折	dai4 she2	0
3040	扽折	dun4 she2	0
3041	缝折	feng2 she2	0
3042	刮折	gua1 she2	0
3043	剐折	gua3 she2	0
3044	铰折	jiao3 she2	0
3045	撅折	jue1 she2	0
3046	勒折	le4 she2	0
3047	扭折	niu3 she2	0
3048	弄折	nong4 she2	0
3049	碰折	peng4 she2	0
3050	劈折	pi1 she2	0
3051	敲折	qiao1 she2	0
3052	撬折	qiao4 she2	0
3053	使折	shi3 she2	0
3054	摔折	shuai1 she2	0
3055	压折	ya1 she2	0
3056	轧折	ya4 she2	0
3057	咬折	yao3 she2	0
3058	炸折	za4 she2	0
3059	撞折	zhuang4 she2	0
3060	坐折	zuo4 she2	0
3061	打深	da3 shen1	0
3062	埋深	mai2 shen1	0
3063	钻深	zuan1 shen1	0
3064	漆深	qi1 shen1	0
3065	染深	ran3 shen1	0
3066	说神	shuo1 shen2	0
3067	吃剩下	chi1 sheng4 xia4	0
3068	抽剩下	chou1 sheng4 xia4	0
3069	喝剩下	he1 sheng4 xia4	0
3070	啃剩下	ken3 sheng4 xia4	0
3071	使剩下	shi3 sheng4 xia4	0
3072	挑剩下	tiao1 sheng4 xia4	1
3073	用剩下	yong4 sheng4 xia4	0
3074	擦湿	ca1 shi1	0
3075	踩湿	cai3 shi1	0
3076	浇湿	jiao1 shi1	0
3077	淋湿	lin2 shi1	0
3078	尿湿	niao4 shi1	2
3079	弄湿	nong4 shi1	1
3080	喷湿	pen1 shi1	1
3081	洗湿	xi3 shi1	0
3082	下湿	xia4 shi1	0
3083	蘸湿	zhan4 shi1	0
3084	坐湿	zuo4 shi1	0
3085	熬瘦	ao2 shou4	0
3086	饿瘦	e4 shou4	1
3087	累瘦	lei4 shou4	0
3088	改瘦	gai3 shou4	0
3089	买瘦	mai3 shou4	0
3090	吃舒服	chi1 shu1 fu2	0
3091	过舒服	guo4 shu1 fu2	0
3092	打输	da3 shu1	2
3093	赌输	du3 shu1	0
3094	踢输	ti1 shu1	0
3095	背熟	bei4 shou2	4
3096	唱熟	chang4 shou2	0
3097	吹熟	chui1 shou2	0
3098	干熟	gan4 shou2	0
3099	搞熟	gao3 shu2	0
3100	讲熟	jiang3 shou2	0
3101	拉熟	la1 shou2	0
3102	练熟	lian4 shou2	0
3103	念熟	nian4 shou2	2
3104	算熟	suan4 shou2	0
3105	弹熟	dan4 shou2	0
3106	写熟	xie3 shou2	0
3107	演熟	yan3 shou2	0
3108	呆熟	ai2 shou2	0
3109	混熟	hun4 shou2	0
3110	摸熟	mo1 shou2	0
3111	跑熟	pao3 shou2	1
3112	送熟	song4 shou2	0
3113	养熟	yang3 shou2	0
3114	走熟	zou3 shou2	0
3115	熬熟	ao2 shou2	0
3116	炒熟	chao3 shou2	0
3117	炖熟	tun1 shou2	0
3118	煎熟	jian1 shou2	0
3119	烤熟	kao3 shou2	0
3120	焖熟	men4 shou2	0
3121	蒸熟	zheng1 shou2	0
3122	煮熟	zhu3 shou2	1
3123	做熟	zuo4 shou2	0

Seq No.	Compound	Pinyin	Tokens
3124	睡熟	shui4 shou2	6
3125	哄睡	hong3 shui4	0
3126	摆顺	bai3 shun4	0
3127	理顺	li3 shun4	0
3128	拢顺	long3 shun4	0
3129	改顺	gai3 shun4	0
3130	排顺	pai2 shun4	0
3131	说顺口	shuo1 shun4 kou3	0
3132	做顺手	zuo4 shun4 shou3	0
3133	剐撕	gua3 si1	0
3134	揭撕	jie1 si1	0
3135	弄撕	nong4 si1	0
3136	抢撕	qiang3 si1	0
3137	崩死	beng1 si3	0
3138	逼死	bi1 si3	5
3139	踩死	cai3 si3	1
3140	撑死	cheng1 si3	0
3141	刺死	ci4 si3	0
3142	打死	da3 si3	39
3143	电死	dian4 si3	0
3144	吊死	diao4 si3	2
3145	顶死	ding3 si3	0
3146	钉死	ding1 si3	0
3147	冻死	dong4 si3	11
3148	毒死	du2 si3	6
3149	饿死	e4 si3	58
3150	干死	gan1 si3	0
3151	害死	hai4 si3	1
3152	旱死	han4 si3	0
3153	老死	lao3 si3	1
3154	累死	lei4 si3	0
3155	闷死	men1 si3	2
3156	捻死	nian3 si3	0
3157	捏死	nie1 si3	0
3158	拍死	pai1 si3	0
3159	劈死	pi1 si3	0
3160	气死	qi4 si3	6
3161	掐死	qia1 si3	5
3162	呛死	qiang1 si3	0
3163	杀死	sha1 si3	7
3164	烧死	shao1 si3	2
3165	射死	she4 si3	0
3166	摔死	shuai1 si3	7
3167	烫死	tang4 si3	0
3168	踢死	ti1 si3	1
3169	捅死	tong3 si3	1

Seq No.	Compound	Pinyin	Tokens
3170	压死	ya1 si3	2
3171	淹死	yan1 si3	4
3172	咬死	yao3 si3	2
3173	砸死	za2 si3	1
3174	战死	zhan4 si3	0
3175	蜇死	zhe1 si3	0
3176	揍死	zou4 si3	0
3177	顶死	ding3 si3	0
3178	定死	ding4 si3	1
3179	说死	shuo1 si3	2
3180	限死	xian4 si3	0
3181	锈死	xiu4 si3	0
3182	堵死	du3 si3	3
3183	缝死	feng2 si3	0
3184	放馊	fang4 sou1	0
3185	泡馊	pao4 sou1	0
3186	捂馊	wu3 sou1	0
3187	炸酥	za2 su1	0
3188	蹬酸	deng4 suan1	0
3189	剁酸	duo4 suan1	0
3190	举酸	ju3 suan1	0
3191	锯酸	ju4 suan1	0
3192	看酸	kan4 suan1	0
3193	拉酸	la1 suan1	0
3194	累酸	lei4 suan1	0
3195	跑酸	pao3 suan1	1
3196	切酸	qie1 suan1	0
3197	站酸	zhan4 suan1	1
3198	织酸	zhi1 suan1	0
3199	写酸	xie3 suan1	0
3200	走酸	zou3 suan1	0
3201	崩碎	beng1 sui4	0
3202	炒碎	chao3 sui4	0
3203	打碎	da3 sui4	15
3204	颠碎	dian1 sui4	0
3205	剁碎	duo4 sui4	1
3206	挤碎	ji3 sui4	0
3207	嚼碎	jiao2 sui4	1
3208	磕碎	ke1 sui4	0
3209	碰碎	peng4 sui4	0
3210	撕碎	si1 sui4	3
3211	踢碎	ti1 sui4	0
3212	压碎	ya1 sui4	0
3213	轧碎	ya4 sui4	0
3214	砸碎	za2 sui4	2
3215	凿碎	zao2 sui4	0

Seq No.	Compound	Pinyin	Tokens
3216	震碎	zhen4 sui4	0
3217	操碎	cao1 sui4	0
3218	踩塌	cai3 ta1	0
3219	冲塌	chong1 ta1	0
3220	睡塌	shui4 ta1	0
3221	压塌	ya1 ta1	0
3222	炸塌	za4 ta1	0
3223	过太平	guo4 tai4 ping2	3
3224	学淘气	xue2 tao2 qi4	0
3225	掰疼	bai1 teng2	1
3226	剥疼	bao1 teng2	0
3227	戳疼	chuo1 teng2	0
3228	搓疼	cuo1 teng2	0
3229	冻疼	dong4 teng2	0
3230	硌疼	ge4 teng2	0
3231	拉疼	la1 teng2	0
3232	勒疼	le4 teng2	0
3233	磨疼	mo2 teng2	0
3234	拍疼	pai1 teng2	0
3235	碰疼	peng4 teng2	1
3236	摔疼	shuai1 teng2	0
3237	笑疼	xiao4 teng2	0
3238	写疼	xie3 teng2	0
3239	擤疼	xing3 teng2	0
3240	熏疼	xun1 teng2	0
3241	蜇疼	zhe1 teng2	0
3242	拽疼	zhuai4 teng2	0
3243	走疼	zou3 teng2	0
3244	坐疼	zuo4 teng2	0
3245	刺疼	ci4 teng2	0
3246	拨通	bo1 tong1	0
3247	打通1	da3 tong1	0
3248	打通2	da3 tong1	4
3249	叫通	jiao4 tong1	1
3250	接通	jie1 tong1	0
3251	挖通	wa1 tong1	0
3252	凿通	zao2 tong1	0
3253	搞通	gao3 tong1	0
3254	弄通	nong4 tong1	0
3255	谈通	tan2 tong1	0
3256	说通	shuo1 tong1	0
3257	想通	xiang3 tong1	2
3258	写通顺	xie3 tong1 shun4	0
3259	打痛快	da3 tong4 kuai	0
3260	骂痛快	ma4 tong4 kuai4	0
3261	说痛快	shuo1 tong4 kuai4	0

Seq No.	Compound	Pinyin	Tokens
3262	出透	chu1 tou4	0
3263	干透	gan4 tou4	1
3264	浇透	jiao1 tou4	0
3265	馏透	liu4 tou4	0
3266	烧透	shao1 tou4	0
3267	湿透	shi1 tou4	3
3268	熟透	shou2 tou4	2
3269	炸透	za2 tou4	0
3270	蒸透	zheng1 tou4	0
3271	揣摩透	chuai3 mo2 tou4	0
3272	看透	kan4 tou4	1
3273	理解透	li3 jie3 tou4	0
3274	摸透	mo1 tou4	0
3275	说透	shuo1 tou4	0
3276	研究透	yan2 jiu4 tou4	0
3277	琢磨透	zhuo2 mo2 tou4	0
3278	穿透	chuan1 tou4	3
3279	吹透	chui1 tou4	0
3280	钉透	ding1 tou4	0
3281	磨透	mo2 tou4	0
3282	扎透	zha1 tou4	0
3283	钻透	zuan1 tou4	0
3284	磨秃	mo2 tu1	0
3285	使秃	shi3 tu1	0
3286	安歪	an1 wai1	0
3287	戴歪	dai4 wai1	0
3288	顶歪	ding3 wai1	0
3289	钉歪	ding1 wai1	0
3290	垛歪	duo4 wai1	0
3291	缝歪	feng2 wai1	0
3292	挂歪	gua4 wai1	0
3293	画歪	hua4 wai1	0
3294	剪歪	jian3 wai1	0
3295	气歪	qi4 wai1	1
3296	摔歪	shuai1 wai1	0
3297	贴歪	tie1 wai1	0
3298	写歪	xie3 wai1	0
3299	栽歪	zai1 wai1	0
3300	凿歪	zao2 wai1	0
3301	长歪	zhang3 wai1	0
3302	撞歪	zhuang4 wai1	0
3303	钉弯	ding1 wan1	0
3304	累弯	lei4 wan1	0
3305	撬弯	qiao4 wan1	0
3306	窝弯	wo1 wan1	0
3307	压弯	ya1 wan1	0

Seq No.	Compound	Pinyin	Tokens
3308	撞弯	zhuang4 wan1	0
3309	坐弯	zuo4 wan1	0
3310	扒完	ba1 wan2	0
3311	拔完	ba2 wan2	0
3312	搬完	ban1 wan2	0
3313	办完	ban4 wan2	4
3314	包扎完	bao1 zha1 wan2	0
3315	备完	bei4 wan2	0
3316	背完	bei4 wan2	0
3317	比完	bi3 wan2	0
3318	编完	bian1 wan2	0
3319	编写完	bian1 xie3 wan2	0
3320	变完	bian4 wan2	0
3321	补完	bu3 wan2	0
3322	参观完	can1 guan1 wan2	0
3323	查完	cha2 wan2	0
3324	拆完	chai1 wan2	0
3325	唱完	chang4 wan2	5
3326	抄完	chao1 wan2	0
3327	吵完	chao3 wan2	1
3328	炒完	chao3 wan2	0
3329	称完	cheng1 wan2	0
3330	吃完	chi1 wan2	27
3331	冲完	chong1 wan2	0
3332	打完1	da3 wan2	0
3333	打完2	da3 wan2	0
3334	打完3	da3 wan2	0
3335	打完4	da3 wan2	10
3336	打扫完	da3 sao3 wan2	0
3337	读完	du2 wan2	3
3338	钓完	diao4 wan2	0
3339	发完	fa1 wan2	4
3340	翻译完	fan1 yi4 wan2	0
3341	放完	fang4 wan2	0
3342	放映完	fang4 ying4 wan2	0
3343	分完	fen1 wan2	0
3344	缝完	feng2 wan2	0
3345	付完	fu4 wan2	0
3346	改完	gai3 wan2	0
3347	盖完	gai4 wan2	0
3348	干完	gan4 wan2	1
3349	割完	ge1 wan2	0
3350	挂完	gua4 wan2	0
3351	灌完	guan4 wan2	0
3352	逛完	guang4 wan2	0
3353	喝完	he1 wan2	6
3354	花完	hua1 wan2	0
3355	划完	hua2 wan2	0
3356	滑完	hua2 wan2	0
3357	换完	huan4 wan2	0
3358	回答完	hui2 da2 wan2	0
3359	寄完	ji4 wan2	0
3360	讲完	jiang3 wan2	2
3361	教完	jiao1 wan2	0
3362	介绍完	jie4 shao4 wan2	0
3363	锯完	ju4 wan2	0
3364	开完1	kai1 wan2	0
3365	开完2	kai1 wan2	4
3366	看完	kan4 wan2	8
3367	考完	kao3 wan2	1
3368	捆完	kun3 wan2	0
3369	扩建完	kuo4 jian4 wan2	0
3370	理完	li3 wan2	0
3371	练完	lian4 wan2	0
3372	量完	liang4 wan2	0
3373	买完	mai3 wan2	1
3374	卖完	mai4 wan2	2
3375	忙完	mang2 wan2	2
3376	拟完	ni3 wan2	0
3377	念完	nian4 wan2	0
3378	判完	pan4 wan2	1
3379	跑完	pao3 wan2	0
3380	配完	pei4 wan2	0
3381	评完	ping2 wan2	0
3382	骑完	qi2 wan2	1
3383	求完	qiu2 wan2	0
3384	取完	qu1 wan2	0
3385	热完	re4 wan2	0
3386	烧完	shao1 wan2	0
3387	收完	shou1 wan2	0
3388	售完	shou4 wan2	0
3389	说完	shuo1 wan2	138
3390	谈完	tan2 wan2	1
3391	弹完	dan4 wan2	0
3392	淘完	tao2 wan2	0
3393	讨论完	tao3 lun4 wan2	0
3394	填完	tian2 wan2	0
3395	挑完	tiao1 wan2	0
3396	听完	ting1 wan2	18
3397	玩完	wan2 wan2	3
3398	洗完	xi3 wan2	5
3399	削完	xue1 wan2	0

Seq No.	Compound	Pinyin	Tokens
3400	写完	xie3 wan2	9
3401	卸完	xie4 wan2	0
3402	修理完	xiu1 li3 wan2	0
3403	学完	xue2 wan2	0
3404	训完	xun4 wan2	0
3405	演完	yan3 wan2	0
3406	用完	yong4 wan2	5
3407	炸完	za4 wan2	0
3408	招完	zhao1 wan2	0
3409	照完	zhao4 wan2	0
3410	整理完	zheng3 li3 wan2	0
3411	织完	zhi1 wan2	0
3412	装完	zhuang1 wan2	0
3413	做完	zuo4 wan2	4
3414	答完全	da2 wan2 quan2	0
3415	说完全	shuo1 wan2 quan2	0
3416	拔晚	ba2 wan3	0
3417	办晚	ban4 wan3	0
3418	报晚	bao4 wan3	0
3419	吃晚	chi1 wan3	14
3420	传达晚	chuan2 da2 wan3	0
3421	订晚	ding4 wan3	0
3422	放晚	fang4 wan3	0
3423	还晚	huan2 wan3	0
3424	回来晚	hui2 lai2 wan3	1
3425	叫晚	jiao4 wan3	0
3426	接晚	jie1 wan3	0
3427	开晚	kai1 wan3	0
3428	来晚	lai2 wan3	0
3429	买晚	mai3 wan3	0
3430	卖晚	mai4 wan3	0
3431	起晚	qi3 wan3	10
3432	去晚	qu4 wan3	0
3433	说晚	shuo1 wan3	0
3434	睡晚	shui4 wan3	2
3435	送晚	song4 wan3	0
3436	喂晚	wei4 wan3	0
3437	醒晚	xing3 wan3	0
3438	学晚	xue2 wan3	0
3439	抓晚	zhua1 wan3	0
3440	走晚	zou3 wan3	0
3441	做晚	zuo4 wan3	0
3442	烧旺	shao1 wang4	0
3443	捅旺	tong3 wang4	0
3444	对温	dui4 wen1	0
3445	烧温	shao1 wen1	0
3446	垫稳	dian4 wen3	0
3447	站稳	zhan4 wen3	1
3448	坐稳	zuo4 wen3	2
3449	缝稀	feng2 xi1	0
3450	写稀	xie3 xi1	0
3451	栽稀	zai1 xi1	0
3452	种稀	zhong3 xi1	0
3453	熬稀	ao2 xi1	0
3454	吃习惯	chi1 xi2 guan4	0
3455	穿习惯	chuan1 xi2 guan4	0
3456	呆习惯	ai2 xi2 guan4	0
3457	戴习惯	dai4 xi2 guan4	0
3458	垫习惯	dian4 xi2 guan4	0
3459	顶习惯	ding3 xi2 guan4	0
3460	读习惯	du2 xi2 guan4	0
3461	蹲习惯	dun1 xi2 guan4	0
3462	干习惯	gan4 xi2 guan4	0
3463	讲习惯	jiang3 xi2 guan4	0
3464	看习惯	kan4 xi2 guan4	0
3465	骂习惯	ma4 xi2 guan4	0
3466	骗习惯	pian4 xi2 guan4	0
3467	使习惯	shi3 xi2 guan4	0
3468	听习惯	ting1 xi2 guan4	0
3469	偷习惯	tou1 xi2 guan4	0
3470	闻习惯	wen2 xi2 guan4	0
3471	写习惯	xie3 xi2 guan4	0
3472	用习惯	yong4 xi2 guan4	0
3473	站习惯	zhan4 xi2 guan4	0
3474	住习惯	zhu4 xi2 guan4	0
3475	走习惯	zou3 xi2 guan4	0
3476	变细	bian4 xi4	0
3477	抻细	chen1 xi4	0
3478	画细	hua4 xi4	0
3479	磨细	mo2 xi4	0
3480	切细	qie1 xi4	0
3481	旋细	xuan2 xi4	0
3482	磨细	mo4 xi4	0
3483	做细致	zuo4 xi4 zhi4	0
3484	崩瞎	beng1 xia1	0
3485	抽瞎	chou1 xia1	0
3486	打瞎	da3 xia1	1
3487	急瞎	ji2 xia1	0
3488	哭瞎	ku1 xia1	0
3489	烧瞎	shao1 xia1	0
3490	捅瞎	tong3 xia1	0
3491	扎瞎	zha1 xia1	0

Seq No.	Compound	Pinyin	Tokens
3492	炸瞎	za4 xia1	0
3493	治瞎	zhi4 xia1	0
3494	弄瞎	nong4 xia1	0
3495	绕瞎	rao3 xia1	0
3496	垂下	chui2 xia4	7
3497	低下	di1 xia4	79
3498	蹲下	dun1 xia4	12
3499	放下	fang4 xia4	62
3500	俯下	fu3 xia4	4
3501	跪下	gui4 xia4	17
3502	落下	luo4 xia4	0
3503	趴下	pa1 xia4	7
3504	扔下	reng1 xia4	3
3505	撒下	sa3 xia4	1
3506	躺下	tang3 xia4	28
3507	弯下	wan1 xia4	2
3508	摘下	zhai1 xia4	18
3509	拽下	zhuai4 xia4	0
3510	坐下	zuo4 xia4	0
3511	包下	bao1 xia4	2
3512	扯下	che3 xia4	2
3513	闯下	chuang3 xia4	1
3514	打下	da3 xia4	28
3515	结下	jie2 xia4	0
3516	扣下	kou4 xia4	3
3517	落下	la4 xia4	53
3518	立下	li4 xia4	0
3519	留下	liu2 xia4	38
3520	买下	mai3 xia4	3
3521	撇下	pie1 xia4	2
3522	去下	qu4 xia4	3
3523	生下	sheng1 xia4	21
3524	省下	sheng3 xia4	6
3525	剩下	sheng4 xia4	54
3526	收下	shou1 xia4	4
3527	说下	shuo1 xia4	13
3528	替下	ti4 xia4	0
3529	压下	ya1 xia4	7
3530	攒下	zan3 xia4	2
3531	住下	zhu4 xia4	2
3532	摆下	bai3 xia4	0
3533	盛下	cheng2 xia4	0
3534	容纳下	rong2 na4 xia4	0
3535	装下	zhuang1 xia4	0
3536	坐下	zuo4 xia4	105
3537	拌咸	ban4 xian2	0

Seq No.	Compound	Pinyin	Tokens
3538	吃咸	chi1 xian2	0
3539	炒咸	chao3 xian2	0
3540	腌咸	an1 xian2	0
3541	做咸	zuo4 xian2	0
3542	答详细	da2 xiang2 xi4	0
3543	记详细	ji4 xiang2 xi4	0
3544	讲详细	jiang3 xiang2 xi4	0
3545	介绍详细	jie4 shao4 xiang2 xi4	0
3546	开详细	kai1 xiang2 xi4	0
3547	说详细	shuo1 xiang2 xi4	0
3548	谈详细	tan2 xiang2 xi4	0
3549	写详细	xie3 xiang2 xi4	0
3550	叙述详细	xu4 shu4 xiang2 xi4	0
3551	踩响	cai3 xiang3	0
3552	吹响	chui1 xiang3	0
3553	摁响	en4 xiang3	0
3554	放响	fang4 xiang3	0
3555	拉响	la1 xiang3	1
3556	敲响	qiao1 xiang3	0
3557	摔响	shuai1 xiang3	0
3558	变小	bian4 xiao3	0
3559	裁小	cai2 xiao3	0
3560	搭小	da1 xiao3	0
3561	打小	da3 xiao3	3
3562	叠小	die2 xiao3	0
3563	改小	gai3 xiao3	0
3564	盖小	gai4 xiao3	0
3565	画小	hua4 xiao3	0
3566	刻小	ke4 xiao3	0
3567	留小	liu2 xiao3	0
3568	买小	mai3 xiao3	0
3569	写小	xie3 xiao3	0
3570	凿小	zao2 xiao3	0
3571	逗笑	dou4 xiao4	1
3572	说笑	shuo1 xiao4	23
3573	摆斜	bai3 xie2	0
3574	裁斜	cai2 xie2	0
3575	插斜	cha1 xie2	0
3576	抄斜	chao1 xie2	0
3577	钉斜	ding1 xie2	0
3578	挂斜	gua4 xie2	0
3579	画斜	hua4 xie2	0
3580	剪斜	jian3 xie2	0
3581	锯斜	ju4 xie2	0
3582	喝兴奋	he1 xing1 fen4	0
3583	扒拉醒	ba1 la1 xing3	0

Seq No.	Compound	Pinyin	Tokens
3584	吵醒	chao3 xing3	1
3585	吹醒	chui1 xing3	4
3586	打醒	da3 xing3	2
3587	扽醒	dun4 xing3	0
3588	颠醒	dian1 xing3	0
3589	饿醒	e4 xing3	0
3590	刮醒	gua1 xing3	0
3591	喊醒	han3 xing3	0
3592	急醒	ji2 xing3	0
3593	叫醒	jiao4 xing3	4
3594	惊醒	liang2 xing3	11
3595	咳嗽醒	ke2 sou4 xing3	0
3596	哭醒	ku1 xing3	0
3597	弄醒	nong4 xing3	0
3598	碰醒	peng4 xing3	0
3599	敲醒	qiao1 xing3	0
3600	嚷醒	rang3 xing3	0
3601	热醒	re4 xing3	0
3602	疼醒	teng2 xing3	0
3603	推醒	tui1 xing3	2
3604	吓醒	xia4 xing3	1
3605	笑醒	xiao4 xing3	0
3606	吆喝醒	yao1 he1 xing3	0
3607	咬醒	yao3 xing3	0
3608	砸醒	za2 xing3	0
3609	折腾醒	zhe2 teng2 xing3	0
3610	震醒	zhen4 xing3	0
3611	讲絮烦	jiang3 xu4 fan2	0
3612	听絮烦	ting1 xu4 fan2	0
3613	唱哑	chang4 ya3	0
3614	喊哑	han3 ya3	1
3615	叫哑	jiao4 ya3	0
3616	咳嗽哑	ke2 sou4 ya3	0
3617	哭哑	ku1 ya3	0
3618	把严	ba3 yan2	0
3619	包严	bao1 yan2	0
3620	挡严	dang3 yan2	0
3621	糊严	hu2 yan2	0
3622	封严	feng1 yan2	2
3623	盖严	gai4 yan2	1
3624	关严	guan1 yan2	2
3625	裹严	guo3 yan2	0
3626	拉严	la1 yan2	0
3627	塞严	sai1 yan2	0
3628	管严	guan3 yan2	0
3629	盖严实	gai4 yan2 shi2	0
3630	捂严实	wu3 yan2 shi2	0
3631	呆厌烦	ai2 yan4 fan2	0
3632	过厌烦	guo4 yan4 fan2	0
3633	看厌烦	kan4 yan4 fan2	0
3634	听厌烦	ting1 yan4 fan2	0
3635	逛野	guang4 ye3	0
3636	玩野	wan2 ye3	0
3637	打赢	da3 ying2	2
3638	赌赢	du3 ying2	0
3639	赛赢	sai4 ying2	0
3640	下赢	xia4 ying2	0
3641	踢赢	ti1 ying2	0
3642	变硬	bian4 ying4	2
3643	冻硬	dong4 ying4	1
3644	放硬	fang4 ying4	0
3645	和硬	huo2 ying4	0
3646	织硬	zhi1 ying4	0
3647	办愚蠢	ban4 yu2 chun3	0
3648	花冤	hua1 yuan1	0
3649	瞪圆	deng4 yuan2	3
3650	画圆	hua4 yuan2	0
3651	磨圆	mo2 yuan2	0
3652	窝圆	wo1 yuan2	0
3653	搬远	ban1 yuan3	0
3654	抱远	bao4 yuan3	0
3655	调远	diao4 yuan3	0
3656	躲远	duo3 yuan3	0
3657	放远	fang4 yuan3	0
3658	飞远	fei1 yuan3	0
3659	划远	hua2 yuan3	0
3660	看远	kan4 yuan3	2
3661	离远	chi1 yuan3	0
3662	跑远	pao3 yuan3	0
3663	说远	shuo1 yuan3	0
3664	站远	zhan4 yuan3	0
3665	走远	zou3 yuan3	5
3666	坐远	zuo4 yuan3	0
3667	吵晕	chao3 yun1	0
3668	抽晕	chou1 yun1	0
3669	颠晕	dian1 yun1	0
3670	搞晕	gao3 yun1	0
3671	看晕	kan4 yun1	0
3672	累晕	lei4 yun1	0
3673	气晕	qi4 yun1	0
3674	呛晕	qiang1/4 yun1	0
3675	热晕	re4 yun1	0

Seq No.	Compound	Pinyin	Tokens
3676	晒晕	shai4 yun1	0
3677	躺晕	tang3 yun1	0
3678	震晕	zhen4 yun1	0
3679	支使晕	zhi1 shi3 yun1	0
3680	转晕	zhuan4 yun1	0
3681	坐晕	zuo4 yun1	0
3682	打晕	da3 yun1	0
3683	摔晕	shuai1 yun1	0
3684	吓晕	xia4 yun1	0
3685	砸晕	za2 yun1	0
3686	撞晕	zhuang4 yun1	0
3687	拌匀	ban4 yun2	0
3688	播匀	bo4 yun2	0
3689	抹匀	mo4 yun2	0
3690	铺匀	pu1 yun2	0
3691	染匀	ran3 yun2	0
3692	撒匀	sa3 yun2	0
3693	涂匀	tu2 yun2	0
3694	摆匀称	bai3 yun2 cheng1	0
3695	写匀称	xie3 yun2 cheng1	0
3696	看晕	kan4 yun4	0
3697	办砸	ban4 za2	1
3698	唱砸	chang4 za2	0
3699	讲砸	jiang3 za2	0
3700	考砸	kao3 za2	0
3701	弄砸	nong4 za2	0
3702	演砸	yan3 za2	0
3703	做砸	zuo4 za2	0
3704	安在	an1 zai4	3
3705	安插在	an1 cha1 zai4	1
3706	安排在	an1 pai2 zai4	0
3707	安置在	an1 zhi4 zai4	0
3708	摆在	bai3 zai4	24
3709	包在	bao1 zai4	7
3710	包括在	bao1 gua1 zai4	2
3711	保持在	bao3 chi2 zai4	0
3712	保存在	bao3 cun2 zai4	0
3713	抱在	bao4 zai4	2
3714	奔驰在	ben1 chi2 zai4	0
3715	编在	bian1 zai4	0
3716	别在	bie2 zai4	6
3717	踩在	cai3 zai4	6
3718	插在	cha1 zai4	14
3719	抄在	chao1 zai4	0
3720	陈列在	chen2 lie4 zai4	0
3721	盛在	cheng2 zai4	0
3722	出在	chu1 zai4	2
3723	出生在	chu1 sheng1 zai4	0
3724	出现在	chu1 xian4 zai4	18
3725	处在	chu4 zai4	0
3726	凑在	cou4 zai4	7
3727	揣在	chuai1 zai4	3
3728	存在	cun2 zai4	47
3729	打在	da3 zai3	16
3730	呆在	ai2 zai4	11
3731	带在	dai4 zai4	2
3732	戴在	dai4 zai4	0
3733	垫在	dian4 zai4	4
3734	叼在	diao1 zai4	3
3735	掉在	diao4 zai4	8
3736	钉在	ding1 zai4	12
3737	丢在	diu1 zai4	2
3738	发表在	fa1 biao3 zai4	0
3739	发生在	fa1 sheng1 zai4	7
3740	放在	fang4 zai4	144
3741	改在	gai3 zai4	1
3742	跟在	gen1 zai4	29
3743	箍在	gu1 zai4	0
3744	固定在	gu4 ding4 zai4	0
3745	关在	guan1 zai4	24
3746	跪在	gui4 zai4	16
3747	含在	han2 zai4	6
3748	花在	hua1 zai4	4
3749	集合在	ji2 he2 zai4	2
3750	挤在	ji3 zai4	21
3751	寄托在	ji4 tuo1 zai4	0
3752	降落在	jiang4 luo4 zai4	1
3753	聚在	ju4 zai4	3
3754	聚集在	ju4 ji2 zai4	0
3755	刊登在	kan1 deng1 zai4	0
3756	扛在	kang2 zai4	2
3757	靠在	kao4 zai4	9
3758	磕在	ke1 zai4	2
3759	刻在	ke4 zai4	4
3760	扣在	kou4 zai4	4
3761	捆在	kun3 zai4	2
3762	落在	luo4 zai4	0
3763	赖在	lai4 zai4	1
3764	晾在	liang4 zai4	4
3765	流传在	liu2 chuan2 zai4	0
3766	留在	liu2 zai4	25
3767	搂在	lou3 zai4	8

Seq No.	Compound	Pinyin	Tokens
3768	落在	luo4 zai4	55
3769	埋在	mai2 zai4	13
3770	闷在	men1 zai4	6
3771	蒙在	meng2 zai4	3
3772	铭记在	ming2 ji4 zai4	0
3773	拧在	ning2 zai4	3
3774	扭在	niu3 zai4	0
3775	趴在	pa1 zai4	27
3776	跑在	pao3 zai4	3
3777	泡在	pao4 zai4	6
3778	偏重在	pian1 zhong4 zai4	0
3779	漂在	piao1 zai4	1
3780	泼在	po1 zai4	3
3781	铺在	pu1 zai4	1
3782	卡在	qia3 zai4	4
3783	圈在	quan1 zai4	10
3784	扔在	reng1 zai4	21
3785	撒在	sa3 zai4	2
3786	设在	she4 zai4	1
3787	守在	shou3 zai4	5
3788	甩在	shuai3 zai4	1
3789	拴在	shuan1 zai4	11
3790	睡在	shui4 zai4	8
3791	死在	si3 zai4	46
3792	锁在	suo3 zai4	5
3793	摊在	tan1 zai4	2
3794	躺在	tang3 zai4	76
3795	套在	tao4 zai4	5
3796	踢在	ti1 zai4	1
3797	贴在	tie1 zai4	24
3798	停在	ting2 zai4	18
3799	吐在	tu3 zai4	2
3800	围在	wei2 zai4	8
3801	卧在	wo4 zai4	5
3802	牺牲在	xi1 sheng1 zai4	0
3803	限制在	xian4 zhi4 zai4	0
3804	镶在	xiang1 zai4	1
3805	消磨在	xiao1 mo2 zai4	2
3806	压在	ya1 zai4	17
3807	依偎在	yi1 wei1 zai4	0
3808	晕在	yun1 zai4	1
3809	砸在	za2 zai4	6
3810	栽在	zai1 zai4	1
3811	战斗在	zhan4 dou3 zai4	0
3812	站在	zhan4 zai4	120
3813	枕在	zhen3 zai4	0
3814	挣扎在	zheng1 zha1 zai4	0

Seq No.	Compound	Pinyin	Tokens
3815	住在	zhu4 zai4	57
3816	装在	zhuang1 zai4	7
3817	撞在	zhuang4 zai4	1
3818	走在	zou3 zai4	17
3819	坐在	zuo4 zai4	208
3820	坐落在	zuo4 luo4 zai4	1
3821	擦脏	ca1 zang1	1
3822	踩脏	cai3 zang1	0
3823	蹭脏	ceng4 zang1	0
3824	穿脏	chuan1 zang1	0
3825	戴脏	dai4 zang1	0
3826	蹬脏	deng4 zang1	0
3827	翻脏	fan1 zang1	0
3828	挂脏	gua4 zang1	0
3829	滚脏	gun3 zang1	0
3830	靠脏	kao4 zang1	0
3831	摸脏	mo1 zang1	0
3832	铺脏	pu1 zang1	0
3833	骑脏	qi2 zang1	0
3834	拖脏	tuo1 zang1	0
3835	用脏	yong4 zang1	0
3836	坐脏	zuo4 zang1	0
3837	沤糟	ou4 zao1	0
3838	泡糟	pao4 zao1	0
3839	煮糟	zhu3 zao1	0
3840	办糟	ban4 zao1	0
3841	搞糟	gao3 zao1	0
3842	考糟	kao3 zao1	0
3843	弄糟	nong4 zao1	0
3844	熬早	ao2 zao3	0
3845	拔早	ba2 zao3	0
3846	办早	ban4 zao3	0
3847	播早	bo4 zao3	0
3848	吃早	chi1 zao3	7
3849	调早	diao4 zao3	0
3850	放早	fang4 zao3	0
3851	叫早	jiao4 zao3	0
3852	来早	lai2 zao3	0
3853	买早	mai3 zao3	0
3854	卖早	mai4 zao3	0
3855	起早	qi3 zao3	2
3856	去早	qu4 zao3	0
3857	热早	re4 zao3	0
3858	上早	shang4 zao3	0
3859	送早	song4 zao3	0
3860	说早	shuo1 zao3	0
3861	跳早	tiao4 zao3	0

Seq No.	Compound	Pinyin	Tokens
3862	醒早	xing3 zao3	0
3863	走早	zou3 zao3	0
3864	打扎实	da3 zha1 shi	0
3865	学扎实	xue2 zha1 shi2	0
3866	气炸	qi4 zha4	1
3867	搭窄	da1 zhai3	0
3868	叠窄	die2 zhai3	0
3869	锯窄	ju4 zhai3	0
3870	留窄	liu2 zhai3	0
3871	撕窄	si1 zhai3	0
3872	挖窄	wa1 zhai3	0
3873	修窄	xiu1 zhai3	0
3874	吃胀	chi1 zhang4	0
3875	泡胀	pao4 zhang4	0
3876	崩着	beng1 zhao2	0
3877	查着	cha2 zhao2	0
3878	打着	da3 zhao2	2
3879	得着	de2 zhao2	15
3880	逮着	dai4 zhao2	1
3881	等着	deng3 zhao2	1
3882	钓着	diao4 zhao2	0
3883	订着	ding4 zhao2	0
3884	堵着	du3 zhao2	0
3885	翻着	fan1 zhao2	0
3886	雇着	gu4 zhao2	0
3887	见着	jian4 zhao2	15
3888	接着	jie1 zhao2	1
3889	借着	jie4 zhao2	0
3890	砍着	kan3 zhao2	0
3891	捞着	lao1 zhao2	0
3892	买着	mai3 zhao2	0
3893	摸着	mo1 zhao2	1
3894	弄着	nong4 zhao2	1
3895	晒着	shai4 zhao2	0
3896	射着	she4 zhao2	0
3897	掏着	tao1 zhao2	0
3898	套着	tao4 zhao2	0
3899	踢着	ti1 zhao2	0
3900	闻着	wen2 zhao2	0
3901	问着	wen4 zhao2	0
3902	要着	yao4 zhao2	0
3903	迎着	ying2 zhao2	0
3904	找着	zhao3 zhao2	5
3905	抓着	zhua1 zhao2	0
3906	追着	zhui1 zhao2	1
3907	租着	zu1 zhao2	0

Seq No.	Compound	Pinyin	Tokens
3908	碍着	ai4 zhao2	0
3909	踩着	cai3 zhao2	1
3910	蹭着	ceng4 zhao2	0
3911	电着	dian4 zhao2	0
3912	冻着	dong4 zhao2	1
3913	叮着	ding1 zhao2	0
3914	顶着	ding3 zhao2	0
3915	够着	gou4 zhao2	4
3916	挤着	ji3 zhao2	0
3917	磕着	ke1 zhao2	3
3918	拉着	la2 zhao2	0
3919	淋着	lin2 zhao2	0
3920	碰着	peng4 zhao2	7
3921	切着	qie1 zhao2	0
3922	求着	qiu2 zhao2	0
3923	惹着	re3 zhao2	0
3924	摔着	shuai1 zhao2	0
3925	烫着	tang4 zhao2	0
3926	挖着	wa1 zhao2	0
3927	熏着	xun1 zhao2	0
3928	轧着	ya4 zhao2	0
3929	咬着	yao3 zhao2	0
3930	遇着	yu4 zhao2	0
3931	砸着	za2 zhao2	0
3932	蜇着	zhe1 zhao2	0
3933	撞着	zhuang4 zhao2	0
3934	坐着	zuo4 zhao2	0
3935	点着	dian3 zhao2	2
3936	划着	hua2 zhao2	0
3937	烧着	shao1 zhao2	0
3938	哄着	hong3 zhao2	0
3939	睡着	shui4 zhao2	32
3940	摆整齐	bai3 zheng3 qi2	0
3941	穿整齐	chuan1 zheng3 qi2	0
3942	叠整齐	die2 zheng3 qi2	0
3943	放整齐	fang4 zheng3 qi2	1
3944	收拾整齐	shou1 shi2 zheng3 qi2	0
3945	摆正	bai3 zheng4	2
3946	戴正	dai4 zheng4	0
3947	对正	dui4 zheng4	0
3948	裁直	cai2 zhi2	0
3949	分直	fen1 zhi2	0
3950	扶直	fu2 zhi2	0
3951	画直	hua4 zhi2	0
3952	剪直	jian3 zhi2	0
3953	锯直	ju4 zhi2	0

Seq No.	Compound	Pinyin	Tokens
3954	拉直	la1 zhi2	1
3955	伸直	shen1 zhi2	4
3956	烫直	tang4 zhi2	0
3957	挖直	wa1 zhi2	0
3958	窝直	wo1 zhi2	0
3959	栽直	zai1 zhi2	0
3960	站直	zhan4 zhi2	1
3961	坐直	zuo4 zhi2	1
3962	打肿	da3 zhong3	0
3963	夹肿	jia1 zhong3	0
3964	磕肿	ke1 zhong3	0
3965	哭肿	ku1 zhong3	2
3966	碰肿	peng4 zhong3	0
3967	拍肿	pai1 zhong3	0
3968	砸肿	za2 zhong3	0
3969	刺中	ci4 zhong1	0
3970	打中	da3 zhong4	13
3971	罚中	fa2 zhong1	0
3972	击中	ji2 zhong1	2
3973	看中	kan4 zhong4	6
3974	射中	she4 zhong1	0
3975	挑中	tiao1 zhong1	0
3976	投中	tou2 zhong1	0
3977	相中	xiang1 zhong1	1
3978	选中	xuan3 zhong1	1
3979	批评重	pi1 ping2 zhong4	0
3980	说重	shuo1 zhong4	0
3981	摔重	shuai1 zhong4	0
3982	考虑周到	kao3 lv4 zhou1 dao4	0
3983	计划周到	ji4 hua2 zhou1 dao4	0
3984	想周到	xiang3 zhou1 dao4	0
3985	穿皱	chuan1 zhou4	0
3986	吹皱	chui1 zhou4	0
3987	弄皱	nong4 zhou4	0
3988	揉皱	rou2 zhou4	0
3989	压皱	ya1 zhou4	0
3990	坐皱	zuo4 zhou4	0
3991	扒住	ba1 zhu4	1
3992	把住	ba3 zhu4	2
3993	把持住	ba3 chi2 zhu4	0
3994	把握住	ba3 wo4 zhu4	3
3995	抱住	bao4 zhu4	23
3996	缠住	chan2 zhu4	1
3997	逮住	dai4 zhu4	4
3998	戴住	dai4 zhu4	0
3999	盯住	cheng2 zhu4	17

Seq No.	Compound	Pinyin	Tokens
4000	钉住	ding1 zhu4	3
4001	端住	duan1 zhu4	0
4002	摁住	en4 zhu4	0
4003	扶住	fu2 zhu4	16
4004	钩住	gou1 zhu4	0
4005	糊住	hu2 zhu4	0
4006	记住	ji4 zhu4	35
4007	夹住	jia1 zhu4	4
4008	接住	jie1 zhu4	4
4009	揪住	jiu1 zhu4	6
4010	看住	kan4 zhu4	1
4011	扣住	kou4 zhu4	4
4012	捆住	kun3 zhu4	1
4013	拉住	la1 zhu4	37
4014	搂住	lou3 zhu4	8
4015	拿住	na2 zhu4	5
4016	捏住	nie1 zhu4	2
4017	围住	wei2 zhu4	12
4018	粘住	nian2 zhu4	0
4019	抓住	zhua1 zhu4	62
4020	拽住	zhuai4 zhu4	2
4021	捉住	zhuo1 zhu4	12
4022	坐住	zuo4 zhu4	0
4023	憋住	bie1 zhu4	0
4024	挡住	dang3 zhu4	17
4025	堵住	du3 zhu4	14
4026	喊住	han3 zhu4	0
4027	哄住	hong3 zhu4	3
4028	叫住	jiao4 zhu4	11
4029	考住	kao3 zhu4	0
4030	克制住	ke4 zhi4 zhu4	1
4031	拦住	lan2 zhu4	33
4032	勒住	le4 zhu4	1
4033	愣住	leng4 zhu4	2
4034	瞒住	man2 zhu4	1
4035	难住	nan2 zhu4	1
4036	卡住	qia3 zhu4	1
4037	劝住	quan4 zhu4	3
4038	煞住	sha4 zhu4	0
4039	收住	shou1 zhu4	14
4040	拴住	shuan1 zhu4	4
4041	停住	ting2 zhu4	30
4042	拖住	tuo1 zhu4	0
4043	问住	wen4 zhu4	1
4044	捂住	wu3 zhu4	6
4045	吸引住	xi1 yin3 zhu4	2

Seq No.	Compound	Pinyin	Tokens
4046	降住	xiang2 zhu4	0
4047	抑制住	yi4 zhi4 zhu4	0
4048	遮住	zhe1 zhu4	19
4049	止住	zhi3 zhu4	13
4050	制止住	zhi4 zhi3 zhu4	0
4051	吹转	chui1 zhuan3	0
4052	长壮实	zhang3 zhuang4 shi2	0
4053	对准	dui4 zhun3	8
4054	发准	fa1 zhun3	0
4055	看准	kan4 zhun3	6
4056	瞄准	miao2 zhun3	3
4057	说准	shuo1 zhun3	2
4058	瞧准	qiao2 zhun3	0
4059	说准确	shuo1 zhun3 que4	0
4060	看仔细	kan4 zi3 xi4	1
4061	憋紫	bie1 zi3	1
4062	冻紫	dong4 zi3	0
4063	夹紫	jia1 zi3	0
4064	掐紫	qia1 zi3	0
4065	踢紫	ti1 zi3	0
4066	砸紫	za2 zi3	0
4067	搬走	ban1 zou3	4
4068	绑走	bang3 zou3	1
4069	抱走	bao4 zou3	0
4070	逼走	bi1 zou3	0
4071	撤走	che4 zou3	0
4072	冲走	chong1 zou3	2
4073	穿走	chuan1 zou3	0
4074	带走	dai4 zou3	11
4075	戴走	dai4 zou3	0
4076	叼走	diao1 zou3	0
4077	调走	diao4 zou3	0
4078	端走	duan1 zou3	0
4079	放走	fang4 zou3	7
4080	飞走	fei1 zou3	7
4081	赶走	gan3 zou3	6
4082	拐走	guai3 zou3	1
4083	轰走	hong1 zou3	0
4084	换走	huan4 zou3	0
4085	挤走	ji3 zou3	1
4086	寄走	ji4 zou3	1
4087	架走	jia4 zou3	0
4088	捡走	jian3 zou3	0
4089	叫走	jiao4 zou3	0
4090	借走	jie4 zou3	0
4091	倔走	jue4 zou3	0
4092	开走	kai1 zou3	0
4093	领走	ling3 zou3	2
4094	溜走	liu1 zou3	0
4095	买走	mai3 zou3	1
4096	拿走	na2 zou3	9
4097	撵走	nian3 zou3	1
4098	捧走	peng3 zou3	0
4099	骗走	pian4 zou3	0
4100	飘走	piao1 zou3	1
4101	骑走	qi2 zou3	0
4102	气走	qi4 zou3	3
4103	抢走	qiang3 zou3	1
4104	请走	qing3 zou3	1
4105	取走	qu1 zou3	0
4106	劝走	quan4 zou3	1
4107	送走	song4 zou3	1
4108	抬走	tai2 zou3	3
4109	逃走	tao2 zou3	27
4110	挑走	tiao1 zou3	2
4111	偷走	tou1 zou3	4
4112	推走	tui1 zou3	3
4113	要走	yao4 zou3	16
4114	运走	yun4 zou3	2
4115	支走	zhi1 zou3	0
4116	装走	zhuang1 zou3	1
4117	唱走调儿	chang4 zou3 diao4 er2	0
4118	说走样儿	shuo1 zou3 yang2 er2	0
4119	说走嘴	shuo1 zou3 zui3	0
4120	憋足	bie1 zu2	0
4121	吃足	chi1 zu2	0
4122	喝足	he1 zu2	2
4123	开足	kai1 zu2	1
4124	买足	mai3 zu2	0
4125	睡足	shui4 zu2	0
4126	赚足	zhuan4 zu2	0
4127	灌醉	guan4 zui4	0
4128	喝醉	he1 zui4	6

Appendix C4

Examples of V2 and Semantic Types

Seq No.	V2	Comp	C_seq	V2 status	V2 type	English
1	矮	安矮	1	R	SDM	short
2	安定	过安定	19	R	STA	stable
3	安稳	睡安稳	21	R	MNR	smoothly
4	暗	变暗	23	R	STA	dark
5	白	变白	25	R	COL	white
6	白	念白	39	R	COL	incorrectly
7	薄	刨薄	40	R	SHP	thin
8	饱	尝饱	60	R	SNS	full
9	饱满	长饱满	67	R	SHP	plump
10	爆	吹爆	68	R	STA	burst
11	崩	吹崩	70	R	STA	burst
12	绷	剁绷	73	R	STA	spring/bounce
13	扁	按扁	76	R	SHP	flat
14	遍	查遍	91	R	EXS	all over
15	瘪	踩瘪	130	R	STA	shriveled
16	病	憋病	140	R	STA	sick
17	残	打残	152	R	STA	injured/damaged
18	残废	打残废	162	R	STA	disable
19	惨	丢惨	166	R	DGR	to a serious degree
20	草	写草	177	R	MNR	careless/rough
21	差	穿差	178	R	MNR	wrong
22	岔气	跑岔气	189	R	SNS	feel a pain in the chest
23	馋	吃馋	192	R	CHR	greedy
24	长	裁长	194	R	SDM	long
25	潮	弄潮	225	R	STA	dampy
26	彻底	改革彻底	227	R	DGR	through
27	沉	打沉	229	R	STA	sink
28	成	安装成	233	CMP	Cheng	become
29	成熟	考虑成熟	363	R	STA	mature
30	迟	办迟	366	R	TIM	late
31	充分	摆充分	369	R	DGR	enough
32	重(chong2)	包重	372	R	MNR	repeat
33	抽	洗抽	380	R	STA	shrink
34	稠	熬稠	381	R	STA	thick
35	臭	放臭	385	R	SNS	stink
36	出	搬出	390	D	Chu	outward
37	出	熬出	450	D	Chu	appear/achieve
38	出格儿	闹出格儿	514	R	DGR	exceed the proper level
39	出圈儿	管出圈儿	518	R	DGR	go to far
40	穿	叉穿	523	R	STA	penetrate
41	蠢	干蠢	541	R	CHR	stupid
42	粗	变粗	542	R	SHP	thick
43	粗	变粗	549	R	STA-PRP	coarse/rough
44	粗	变粗	552	R	STA-PRP	gruff/husky

45	错	安错	553	PHS/R	EVL	wrong
46	大	编大	673	R	SDM	large
47	呆	变呆	707	R	SNS	show an empty
48	倒(dao3)	按倒	714	R	CFG	fall/topple
49	到	安到	766	D/PHS	Dao	Result
50	到底	帮到底	1054	R	DGR	to the end
51	到家	说到家	1062	R	EVL	excellent
52	到手	分到手	1065	R	STA	obtained
53	到头	熬到头	1077	R	DGR	to the end
54	倒(dao4)	摆倒	1089	R	CFG	invert
55	得	熬得	1096	PHS/CMP	De	(complement marker)
56	低	安低	1110	R	SDM	low
57	嘀咕	犯嘀咕	1117	R	MNT	have something on one's mind
58	颠倒	安颠倒	1118	R	CFG	put upside down
59	掉	拨掉	1127	PHS/R	STA	detached/off/fall
60	定	打定	1207	R	STA	fixed
61	丢	搬丢	1218	R	STA	lost
62	懂	搞懂	1226	R	MNT	clear/understood
63	动	按动	1232	R	STA	move
64	端正	写端正	1244	R	MNR	regular/upright
65	短	裁短	1246	R	SDM	short
66	断	拔断	1256	R	STA	cut off
67	对	摆对	1283	PHS/R	EVL	right
68	钝	使钝	1301	R	SHP	dull
69	多	熬多	1303	R	QTY	more than
70	翻	踩翻	1347	R	CFG	turn over
71	烦	背烦	1356	R	PSY	annoyed
72	反	安反	1361	R	CFG	turn over
73	飞	吓飞	1370	R	STA	fly
74	飞	炸飞	1371	R	STA	hover
75	肥	喂肥	1372	R	SHP	fat
76	肥	织肥	1374	R	SHP	loose-fitting
77	丰满	长丰满	1376	R	SHP	full and round
78	疯	逼疯	1377	R	CHR	crazy
79	服	说服	1381	R	STA	obey
80	复杂	改复杂	1384	R	PRP	complicated
81	富	变富	1387	R	STA	rich
82	干	熬干 (ao2)	1389	R	STA	dry
83	干净	擦干净	1408	R	STA	clean
84	干净	拨干净	1418	R	DGR	completely
85	高	安高	1434	R	SDM	high
86	高兴	玩高兴	1454	R	PSY	happy
87	给	掰给	1455	CMP	Gei	give
88	够	盛够	1502	R	QTY	enough
89	够	吃够	1518	R	QTY	having had too
90	鼓	吃鼓	1535	R	STA	swell
91	惯	熬惯	1538	R	PSY	accustomed

92	光	拨光	1560	PHS	Guang	consumed
93	过	搬过	1584	D/PHS	Guo	past/through
94	过	熬过 (ao2)	1591	D/PHS	Guo	exceed
95	过火儿	熬过火儿	1602	R	DGR	go to far
96	过头	花过头	1604	R	DGR	go beyond the limit
97	寒心	说寒心	1609	R	PSY	be bitterly disappointed
98	好	安好	1610	PHS/R	EVL	well
99	黑	擦黑	1708	R	COL	black
100	红	熬红	1716	R	COL	red
101	红	唱红	1736	R	COL	become popular
102	厚	垫厚	1737	R	SHP	thick
103	糊	炒糊	1744	R	STA	burnt
104	糊涂	催糊涂	1750	R	SNS	muddled
105	花	抹花	1767	R	STA	multicolored/variegated
106	花眼	看花眼	1775	R	SNS	dazzled
107	滑	磨滑	1777	R	STA-PRP	smooth
108	猾	变猾	1778	R	CHR	shrewd
109	化	熬化	1780	R	STA	melt/dissolve
110	坏	熬坏 (ao2)	1783	R	STA	damaged/ruined
111	坏	拨坏	1845	R	EVL	fail/fall/make worse
112	坏	憋坏	1863	R	DGR	badly
113	坏	宠坏	1882	R	STA-PRP	spoil
114	慌	发慌	1887	R	PSY	flurried
115	黄	变黄	1888	R	COL	yellow
116	灰心	说灰心	1893	R	PSY	lose heart/discouraged
117	会	背会	1894	R	EVL	capable
118	昏	打昏	1899	R	SNS	faint
119	浑	搅浑	1904	R	STA-PRP	muddy
120	混	搞混	1906	R	STA	mixed
121	豁	扒豁	1910	R	STA	split
122	活	搞活	1911	R	STA-PRP	vivid
123	活	救活	1915	R	STA	alive
124	活	说活	1917	R	STA	moving
125	活动	打活动	1918	R	STA	shaky
126	火	骂火	1922	R	PSY	angry
127	机灵	变机灵	1927	R	CHR	clever
128	急	逼急	1929	R	PSY	irritated
129	寂莫	呆寂莫	1934	R	PSY	lonely
130	尖	熬尖	1936	R	SHP	pointed
131	尖锐	提尖锐	1939	R	SHP-#PR	sharp
132	简单	办简单	1940	R	PRP	simple
133	见	看见	1945	R	SNS	sense
134	僵	搞僵	1953	R	STA	deadlocked
135	僵	冻僵	1956	R	SNS	numb
136	焦	烤焦	1957	R	STA	burnt
137	结实	安结实	1959	R	STA-PRP	solid
138	紧	挨紧	1974	R	STA-PRP	close/tight
139	紧凑	安排紧凑	1988	R	PRP	compact/well-knit

140	尽	吃尽	1990	PHS	STA	exhausted
141	进	搬进	1999	D	Jin	into
142	近	挨近	2031	R	SDM	near
143	精	变精	2036	R	CHR	clever
144	精确	计算精确	2038	R	MNR	accurate
145	净	簸净	2040	R	DGR	completely
146	净	擦净	2054	R	STA	clean
147	久	摆久	2056	R	TIM	long
148	旧	穿旧	2066	R	STA-PRP	used/worn/old
149	就绪	准备就绪	2072	R	STA	in order/ready
150	具体	说具体	2073	R	PRP	concrete
151	卷	揣卷	2075	R	STA	rolled up
152	绝	办绝	2078	R	STA	exhausted/used up
153	均匀	分均匀	2083	R	STA	well-distributed
154	开	扒开	2084	D/R	STA	separate/away from
155	开	掰开	2132	D/R	STA	open
156	开	巴结开	2155	D/R	STA	advanced/continued
157	开	传开	2188	D/R	STA	expand/develop
158	开	烧开	2193	D/R	STA	boiling
159	开	泡开	2195	D/R	STA	infused
160	开	陈列开	2197	D/R	STA	have enough room
161	开	摆开	2199	D/R	STA	assuming
162	渴	吃渴	2200	R	SNS	thirsty
163	空	搬空	2204	R	STA	empty
164	空	踩空	2211	R	MNR	not solid
165	哭	打哭	2214	R	ACT	cry
166	苦	害苦	2222	R	SNS	suffering
167	垮	冲垮	2226	R	STA	collapse
168	快	拨快	2233	R	TIM	fast
169	快	磨快	2243	R	TIM	sharp
170	宽	裁宽	2244	R	SDM	wide
171	宽敞	盖宽敞	2253	R	SDM	spacious
172	困	等困	2254	R	SNS	sleepy
173	落	背落	2261	R	STA	leave out/missing
174	烂	熬烂	2266	R	STA-PRP	rotten
175	烂	放烂	2269	R	STA	rot/fester
176	烂	扒拉烂	2274	R	STA	worn-out
177	老	变老	2289	R	STA	old
178	累	拨累	2293	R	SNS	tired
179	冷	变冷	2326	R	TMP	cool
180	愣	打愣	2327	R	STA	distracted
181	利害	变利害	2332	R	STA	terrible
182	利索	办利索	2335	R	STA	settled/finished/neat
183	凉	冰凉	2339	R	TMP	cool
184	亮	拨亮	2342	R	STA	bright
185	裂	冻裂	2347	R	STA	split
186	流血	叮流血	2357	R	STA	bleed
187	聋	变聋	2366	R	STA	deaf

188	漏	踩漏	2370	R	STA	leak
189	绿	变绿	2373	R	COL	green
190	乱	搬乱	2376	R	STA	in disorder
191	麻	蹲麻	2392	R	SNS	numb
192	满	安满	2395	R	STA	full
193	慢	吃慢	2474	R	TIM	slow
194	没	喝没	2485	R	STA-QTY	not have
195	蒙	打蒙	2489	R	SNS	unconscious/senseless
196	猛	使猛	2492	R	MNR	suddenly
197	迷糊	灌迷糊	2493	R	PSY	dazed/confused
198	密	摆密	2496	R	STA-PRP	dense
199	灭	踩灭	2501	R	STA	go out
200	明	讲明	2512	R	STA-PRP	clear/plain
201	明白	查明白	2518	R	MNT	clear
202	模糊	蹭模糊	2529	R	SNS	blurred/dim
203	木	冻木	2532	R	SNS	numb
204	难	出难	2533	R	PRP	difficult/hard
205	恼	惹恼	2534	R	PSY	angry/irritated
206	嫩	炒嫩	2536	R	STA-PRP	tender
207	腻	剥腻	2538	R	PSY	be tired of
208	蔫	变蔫	2570	R	STA	spiritless
209	黏	弄黏	2573	R	STA	sticky
210	拧	弄拧	2574	R	EVL	wrong/mistaken
211	暖和	变暖和	2576	R	TMP	warm
212	趴下	累趴下	2584	R	CFG	lie down
213	怕	打怕	2585	R	PSY	feared
214	胖	吃胖	2594	R	SHP	fat
215	跑	蹦跑	2598	R	STA	away
216	赔	卖赔	2615	R	ACT	stand a loss
217	披	踩披	2616	R	STA	split/open
218	皮	打皮	2618	R	CHR	casehardened
219	皮	放皮	2621	R	STA	become soft and soggy
220	偏	挂偏	2623	R	STA	inclined to one side
221	便宜	买便宜	2627	R	PRP	cheap
222	平	刨平	2629	R	SHP	flat
223	平均	分平均	2642	R	MNR	equally
224	平稳	放平稳	2643	R	STA	smooth and steady
225	破	擦破	2645	R	STA	broken
226	齐	摆齐	2676	R	STA	neat
227	齐	备齐	2683	R	STA	all ready
228	齐全	买齐全	2696	R	STA-EVL	all prepared
229	起	背起	2699	D/PHS	Qi	up
230	起	搭起	2713	D/PHS	Qi	complete
231	起	吹起	2717	D/PHS	Qi	starting
232	浅	变浅	2728	R	SDM	shallow
233	浅	编浅	2731	R	SDM	simple
234	巧	来巧	2732	R	MNR	opportunely
235	青	憋青	2736	R	COL	blue

236	轻	放轻	2746	R	MNR	gently
237	轻	批评轻	2747	R	DGR	small in degree
238	清	辨清	2749	R	STA	distinct
239	清楚	标清楚	2767	R	STA	clear
240	清醒	吹清醒	2785	R	SNS	clear-headed
241	晴	刮晴	2786	R	STA	fine/clear
242	穷	变穷	2787	R	STA	poor
243	全	编全	2791	R	EVL	complete
244	瘸	打瘸	2800	R	STA	limp (by getting injured)
245	确实	打听确实	2805	R	PRP	true/reliable
246	热	搓热	2806	R	TMP	hot
247	入迷	搞入迷	2820	R	PSY	fascinated
248	软	和软	2824	R	STA-PRP	soft
249	软	吓软	2828	R	STA-PRP	weak/feeble
250	洒	[手+屯]洒	2829	R	STA	sprinkle
251	散(san3)	颠散	2837	R	STA	come loose/fall apart
252	散架	搬散架	2843	R	STA	fall apart
253	散(san4)	冲散	2847	R	EXS	disperse
254	傻	变傻	2853	R	CHR	stupid
255	傻	看傻	2856	R	PSY	dumbfounded
256	伤	崩伤	2859	R	STA	injured
257	伤	吃伤	2875	R	PSY	get sick of
258	上	插上	2877	D	Shang	high
259	上	挨上	2886	D	Shang	starting
260	上	安上	2910	D	Shang	finished
261	上当	吃上当	3005	R	STA	deceived
262	上瘾	吃上瘾	3009	R	STA	addicted
263	少	备少	3021	R	QTY	a little/a few
264	折(she2)	掰折	3033	R	STA	break
265	深	打深	3061	R	SDM	deep
266	深	漆深	3064	R	COL	dark
267	神	说神	3066	R	EVL	smart/clever
268	剩下	吃剩下	3067	R	QTY	left
269	湿	擦湿	3074	R	STA	wet
270	瘦	熬瘦	3085	R	SHP	thin
271	舒服	吃舒服	3090	R	SNS	comfortable
272	输	打输	3092	R	STA	lose
273	熟	背熟	3095	R	STA-PRP	skilled
274	熟	呆熟	3108	R	STA	familiar
275	熟	熬熟	3115	R	STA	cooked
276	睡	哄睡	3125	R	ACT	sleep
277	顺	摆顺	3126	R	CFG	in the same direction
278	顺	改顺	3129	R	CFG	put in order
279	顺口	说顺口	3131	R	MNR	say offhandedly
280	顺手	做顺手	3132	R	MNR	smoothly
281	撕	剐撕	3133	R	STA	torn
282	死	崩死	3137	R	STA	dead
283	死	顶死	3177	R	STA	fixed/rigid

284	死	堵死	3182	R	STA	closed/impassable
285	馊	放馊	3184	R	STA	sour/spoiled
286	酥	炸酥	3187	R	STA-PRP	crisp
287	酸	蹬酸	3188	R	SNS	tingle/ache
288	碎	崩碎	3201	R	STA	smashed
289	碎	操碎	3217	R	PSY	care-laded
290	塌	踩塌	3218	R	STA	collapse
291	太平	过太平	3223	R	MNR	peaceful
292	淘气	学淘气	3224	R	CHR	naughty
293	疼	掰疼	3225	R	SNS	ache
294	疼	刺疼	3245	R	SNS	cause to feel regret
295	通	拨通	3246	R	STA	through
296	通顺	写通顺	3258	R	EVL	clear and coherent
297	痛快	打痛快	3259	R	PSY	delightful
298	透	出透	3262	R	DGR	fully
299	透	揣摩透	3271	R	DGR	thoroughly
300	透	穿透	3278	R	STA	pass through
301	秃	磨秃	3284	R	STA	blunt
302	歪	安歪	3286	R	CFG	askew
303	弯	钉弯	3303	R	SHP	bent
304	完	扒完	3310	PHS	Wan	finished
305	完全	答完全	3414	R	EVL	complete
306	晚	拔晚	3416	R	TIM	late
307	旺	烧旺	3442	R	STA	rigorous
308	温	对温	3444	R	TMP	warm
309	稳	垫稳	3446	R	STA	steady
310	稀	缝稀	3449	R	EXS	sparse
311	稀	熬稀	3453	R	STA-PRP	watery/thin
312	习惯	吃习惯	3454	R	PSY	accustomed
313	细	变细	3476	R	SHP	fine/thin
314	细	磨细	3482	R	SHP	in small particles
315	细致	做细致	3483	R	PRP	meticulous
316	瞎	崩瞎	3484	R	STA	blind
317	瞎	弄瞎	3494	R	STA	become tangled
318	下	垂下	3496	D	Xia	down
319	下	包下	3511	D	Xia	completed
320	下	摆下	3532	D	Xia	having the capacity to
321	咸	拌咸	3537	R	SNS	salty
322	详细	答详细	3542	R	PRP	detailed
323	响	踩响	3551	R	SNS	echo
324	小	变小	3558	R	SDM	small
325	笑	逗笑	3571	R	ACT	laugh
326	斜	摆斜	3573	R	CFG	oblique
327	兴奋	喝兴奋	3582	R	PSY	excited
328	醒	扒拉醒	3583	R	SNS	awake
329	絮烦	讲絮烦	3611	R	PSY	wordy
330	哑	唱哑	3613	R	STA	hoarse
331	严	把严	3618	R	STA	tight

332	严	管严	3628	R	MNR	strict
333	严实	盖严实	3629	R	STA	tight
334	厌烦	呆厌烦	3631	R	PSY	annoyed
335	野	逛野	3635	R	STA	unrestricted
336	赢	打赢	3637	R	STA	win
337	硬	变硬	3642	R	STA-PRP	hard/stiff
338	愚蠢	办愚蠢	3647	R	CHR	stupid
339	冤	花冤	3648	R	STA	loss
340	圆	瞪圆	3649	R	SHP	round
341	远	搬远	3653	R	SDM	far
342	晕	吵晕	3667	R	SNS	dizzy
343	晕	打晕	3682	R	SNS	faint
344	匀	拌匀	3687	R	STA	even
345	匀称	摆匀称	3694	R	STA	well-balanced
346	晕	看晕	3696	R	SNS	dizzy
347	砸	办砸	3697	R	QTY	fail
348	在	安在	3704	CMP	Zai	at/in/on
349	脏	擦脏	3821	R	STA	dirty
350	糟	沤糟	3837	R	STA	rotten
351	早	熬早	3844	R	TIM	early
352	扎实	打扎实	3864	R	MNR	solid/down to earth
353	炸	气炸	3866	R	PSY	go into a rage
354	窄	搭窄	3867	R	SDM	narrow/small
355	胀	吃胀	3874	R	STA	swollen
356	着(zhao2)	崩着	3876	PHS	Zhao	achieve a goal
357	着(zhao2)	碍着	3908	PHS	Zhao	touch
358	着(zhao2)	点着	3935	PHS	Zhao	burn
359	着(zhao2)	哄着	3938	PHS	Zhao	asleep
360	整齐	摆整齐	3940	R	STA	clean and tidy
361	正	摆正	3945	R	MNR	correct
362	直	裁直	3948	R	SHP	straight
363	肿	打肿	3962	R	STA	swollen
364	中	刺中	3969	R	MNR	hit exactly
365	重(zhong4)	批评重	3979	R	PRP	go too far
366	重(zhong4)	摔重	3981	R	PRP	serious
367	周到	考虑周到	3982	R	MNR	thoughtful
368	皱	穿皱	3985	R	STA	wrinkled
369	住	扒住	3991	PHS	Zhu	steady
370	住	憋住	4023	PHS	Zhu	stop
371	转	吹转	4051	R	CFG	turn
372	壮实	长壮实	4052	R	STA-PRP	sturdy/robust
373	准	对准	4053	R	MNR	correct
374	准	说准	4057	R	STA-PRP	clear
375	准确	说准确	4059	R	MNR	exactly
376	仔细	看仔细	4060	R	MNR	careful
377	紫	憋紫	4061	R	COL	purple
378	走	搬走	4067	R	STA	away
379	走调儿	唱走调儿	4117	R	STA	out of tune

380	走样儿	说走样儿	4118	R	EVL	different from how it is expected
381	走嘴	说走嘴	4119	R	MNR	make a slip of one's
382	足	憋足	4120	R	QTY	sufficient
383	醉	灌醉	4127	R	SNS	drunk

Fields

1 Seq No.: Sequential number of V2 examples
2 V2: V2
3 Comp: Compound examples
4 C_seq: Sequential number of compounds
5 V2 status: Grammatical status of V2
R: Resultative
PHS: Phrasal verbs
D: Directional
CMP: Complement marker
6 V2 type: Semantic types of V2

ACT	Activity	PRP	Property
CFG	Configuration	PSY	Psychological
Cheng	Become	Qi	Directional: upwards
CHR	Personal character	QTY	Quantity
Chu	Directional: out	SDM	Spatial dimension
COL	Color	Shang	Directional upwards
Dao	Phrasal verb: achievement	SHP	Shape
De	Complement marker	SNS	Sensation
DGR	Degree	STA	State
EVL	Evaluation	TIM	Time
EXS	Existence	TMP	Temperature
Gei	Benefactive marker: to/for	Wan	Phasal verb: perfect
Guang	Phasal verb: used up	Xia	Directional: down
Guo	Directional past	Zai	Locative marker: at/in/on
Jin	Directional: go into	Zhao	Phasal verb: accomplishment
MNR	Manner	Zhu	Phasal verb: firmness
MNT	Mental activity		

7 English: English translation

Appendix C5

Examples of V1 and Semantic Classes

Seq No	V1	V1 Semantic Class	Comp	C Seq No.
1	挨	V of motion	挨近	2031
2	呆	STAT	呆久	2059
3	爱	PSY	爱上	2887
4	碍	V of contact	碍着	3908
5	腌	Cook	腌成	336
6	安	V of put	安好	1610
7	按	V of exert force: push	按倒	714
8	熬	Cook	熬化	1780
9	扒	Change of state	扒完	3310
10	拔	Change of state	拔完	3311
11	把	V of hold & keep	把住	3992
12	罢	Activity	罢到	895
13	掰	V of cut	掰成	237
14	摆	V of put	摆下	3532
15	败	Defeat*	败给	1456
16	搬	V of send & carry	搬完	3312
17	扮	V of groom: dress	扮成	238
18	绊	Change of state	绊倒	717
19	拌	V of transform	拌多	1304
20	办	Do*	办完	3313
21	帮	Help*	帮到底	1054
22	绑	V of combine	绑好	1616
23	包	V of put	包下	3511
24	爆	Change of state	爆出	453
25	抱	V of hold & keep	抱好	1620
26	刨	V of create: dig	刨浅	2730
27	报	V of communicate	报上	2917
28	背	Ment*	背会	1894
29	备	Prepare	备完	3315
30	奔	V of motion: manner	奔到	773
31	绷	V of motion: manner	绷到	774
32	崩	Contact by impact: hit	崩死	3137
33	蹦	Contact by impact: kick	蹦高	1435
34	逼	V of rush	逼急	1929
35	比	V of judge & assess	比完	3317
36	避	Avoid	避开	2088
37	闭	Change of state	闭上	2918
38	编	V of create	编完	3318
39	贬	V of judge & assess	贬到	1021
40	变	Change of state	变暗	23
41	辨	V of judge & assess	辨清	2749
42	标	V of create	标清楚	2767
43	裱	V of transform	裱坏	1789
44	憋	Bodily process	憋紫	4061

45	别	V of combine	别好	1622
46	冰	Change of state	冰凉	2339
47	病	STAT	病久	2057
48	剥	V of remove	剥干净	1419
49	拨	Set*	拨快	2233
50	驳	V of communicate	驳倒	761
51	播	V of communicate	播出	398
52	簸	V of separate	簸净	2040
53	扑	Contact by impact: hit	扑倒	748
54	补	V of combine	补完	3321
55	擦	V of contact	擦干	1390
56	猜	Ment*	猜出	459
57	裁	V of cut	裁好	1624
58	踩	V of exert force: push	踩空	2211
59	藏	V of conceal	藏到	778
60	操	PSY	操碎	3217
61	蹭	Change of state	蹭上	2921
62	插	V of put: fill	插在	3718
63	搽	V of transform: paint	搽错	564
64	查	V of judge & assess	查完	3323
65	岔	Direct*	岔开	2091
66	叉	Poke	叉穿	523
67	拆	Change of state	拆完	3324
68	搀	V of hold & keep	搀到	781
69	缠	V of combine	缠好	1626
70	铲	V of remove	铲成	249
71	长	Change of state	长饱满	67
72	尝	V of ingest	尝遍	92
73	长	Change of state	长好	1699
74	敞	Change of state	敞开	2092
75	唱	Bodily action	唱完	3325
76	抄	V of create	抄完	3326
77	吵	V of communicate	吵完	3327
78	炒	Cook	炒完	3328
79	车	V of transform: carve	车坏	1793
80	扯	V of cut	扯下	3512
81	撤	V of motion: manner	撤走	4071
82	沉	Change of state	沉到	782
83	瞠	Bodily action	瞠大	680
84	撑	Change of state	撑死	3140
85	称	Measure	称完	3329
86	乘	V of motion: vehicle	乘到头	1079
87	盯	Perception	盯住	3999
88	吃	V of ingest	吃快	2234
89	离	V of motion	离远	3661
90	冲	V of remove	冲完	3331
91	种	V of put	种稀	3452
92	宠	PSY	宠坏	1882

93	抽	V of remove	抽干	1391
94	愁	PSY	愁坏	1797
95	出	V of motion	出在	3722
96	锄	V of transform	锄干净	1422
97	处	V of put	处在	3725
98	揣	V of put, V of conceal	揣在	3727
99	踹	Contact by impact: kick	踹倒	725
100	穿	V of groom: dress	穿久	2058
101	传	V of communicate	传出	403
102	喘	Bodily action	喘开	2162
103	串	V of motion	串遍	95
104	闯	V of motion: manner	闯下	3513
105	创	V of create	创出	460
106	吹	Bodily action	吹干	1392
107	垂	V of put: specified direction	垂下	3496
108	戳	Body damage	戳疼	3227
109	刺	Poke	刺穿	524
110	刺	Poke	刺死	3141
111	凑	V of motion	凑近	2032
112	促	Promote*	促成	355
113	蹿	V of motion: manner	蹿到	791
114	催	V of rush	催糊涂	1750
115	存	V of put	存好	1632
116	搓	V of contact	搓成	256
117	撮	Change of pos: obtain	撮到	1041
118	搭	V of create: build	搭起	2713
119	达	Achieve*	达到	968
120	答	V of communicate	答完全	3414
121	打	Contact by impact: hit	打下	3514
122	带	V of send & carry	带好	1637
123	戴	V of groom: dress	戴久	2060
124	逮	V of pos	逮住	3997
125	掸	V of remove	掸干净	1411
126	弹	Perform	弹完	3391
127	当	Become*	当好	1639
128	挡	V of conceal	挡住	4024
129	倒	V of put: pour	倒干净	1423
130	盗	Change of pos: obtain	盗空	2205
131	到	Deic motion	到齐	2686
132	得	V of pos	得着	3879
133	登	V of motion: directed motion	登上	2878
134	等	Activity	等急	1933
135	蹬	V of exert force: push	蹬空	2212
136	瞪	Bodily action	瞪圆	3649
137	滴	V of motion	滴穿	526
138	低	V of put: specified direction	低下	3497
139	递	Change of pos: give	递上	2879
140	颠	V of motion: manner	颠散	2837

141	踮	V of exist: spatial config	踮起	2700
142	点	Change of state	点起	2715
143	垫	V of put: fill	垫厚	1737
144	电	Perception	电死	3143
145	叼	V of hold & keep	叼在	3734
146	吊	V of put: spatial config	吊高	1437
147	钓	V of pos	钓完	3338
148	掉	V of motion	掉在	3735
149	调	V of send & carry	调早	3849
150	跌	V of motion	跌断	1262
151	叠	V of transform	叠好	1643
152	钉	V of combine	钉在	3736
153	叮	Poke	叮着	3913
154	顶	Poke	顶死	3145
155	订	V of pos: obtain	订好	1644
156	定	Set*	定死	3178
157	丢	V of pos	丢光	1562
158	动	V of motion	动乱	2380
159	冻	Change of state, SENS*	冻硬	3643
160	抖	V of exert force: shake	抖掉	1180
161	逗	PSY	逗急	1930
162	毒	V of kill	毒死	3148
163	读	V of communicate	读完	3337
164	赌	Activity	赌到	908
165	堵	V of put: fill	堵好	1646
166	端	V of hold & keep	端好	1645
167	堆	V of put: spatial config	堆到	803
168	对	V of combine	对温	3444
169	蹲	V of exist: spatial config	蹲下	3498
170	扽	Bodily process	扽醒	3587
171	多	STAT	多出	464
172	躲	Avoid	躲到	805
173	垛	V of put: spatial config	垛歪	3290
174	踱	V of motion: manner	踱到	804
175	跺	V of exert force	跺掉	1144
176	剁	V of cut	剁酸	3189
177	饿	SENS*	饿昏	1900
178	摁	V of exert force: push	摁住	4002
179	发	Change of pos: give	发完	3339
180	罚	V of judge & assess	罚中	3971
181	翻	Change of state	翻旧	2068
182	犯	Do*	犯嘀咕	1117
183	放	V of put: specified direction	放下	3499
184	飞	V of motion: manner	飞上	2880
185	费	V of consume	费尽	1992
186	分	V of separate	分完	3343
187	封	V of put	封好	1649
188	缝	V of combine	缝完	3344

189	服	V of ingest	服错	590
190	扶	V of exist: contiguous location	扶好	1651
191	俯	V of exist: spatial config	俯下	3500
192	付	Change of pos: give	付完	3345
193	改	Change of state	改完	3346
194	盖	V of create	盖完	3347
195	干	Do*	干完	3348
196	擀	V of transform	擀厚	1739
197	赶	V of motion	赶上	2939
198	高	STAT	高出	469
199	搞	CS	搞活	1911
200	告	V of communicate	告到	815
201	搁	V of put	搁皮	2622
202	割	V of cut	割完	3349
203	隔	V of separate	隔成	269
204	给	Change of pos: give	给重	376
205	跟	V of motion	跟在	3742
206	拱	V of create: dig	拱洒	2832
207	勾	CS	勾起	2718
208	钩	V of combine	钩住	4004
209	够	V of pos: obtain	够着	3915
210	箍	V of combine	箍在	3743
211	雇	Hire*	雇上	2940
212	刮	V of remove	刮干净	1424
213	剐	V of cut	剐折	3043
214	挂	V of put: spatial config	挂完	3350
215	拐	V of pos: obtain	拐走	4082
216	关	Change of state	关好	1655
217	管	Control*	管出圈儿	518
218	惯	PSY	惯成	271
219	灌	V of put: pour	灌完	3351
220	逛	V of motion: manner	逛完	3352
221	跪	V of exist: spatial config	跪下	3501
222	滚	V of motion: manner	滚到	823
223	裹	V of put	裹严	3625
224	过	V of motion	过安定	19
225	害	Damage*	害苦	2222
226	含	V of hold & keep	含在	3747
227	喊	V of communicate: Manner of speak	喊干	1394
228	焊	V of combine	焊坏	1852
229	旱	Weather	旱死	3152
230	嚎	V of communicate: manner of speak	嚎开	2169
231	好	STAT	好上	2896
232	耗	Consume*	耗干	1395
233	喝	V of ingest	喝完	3353
234	和	V of combine: mix	和硬	3645
235	烘	Change of state	烘干	1396
236	轰	V of emission: sound	轰散	2850

237	哄	Cheat*	哄住	4027
238	红	Change of state	红到	825
239	触	V of contact	触到	966
240	糊	V of combine	糊住	4005
241	花	Consume*	花完	3354
242	划	Change of pos: give	划完	3355
243	滑	V of motion: manner	滑完	3356
244	画	V of create	画成	357
245	画	V of create	画活	1913
246	化	V of transform	化开	2101
247	还	Change of pos: give	还清	2765
248	换	Change of pos	换完	3357
249	晃	V of motion: manner	晃倒	737
250	回	V of motion: directed motion	回到	830
251	昏	SENS*	昏倒	738
252	混	Consume*	混熟	3109
253	活	V of exist	活到	919
254	激	Change of state	激病	145
255	急	PSY	急成	276
256	击	Contact by impact	击中	3972
257	挤	V of exert force	挤干	1397
258	记	Ment*	记串	536
259	寄	Change of pos: give	寄完	3359
260	夹	V of put	夹好	1660
261	加	V of combine	加快	2235
262	嫁	V of social interaction	嫁到	833
263	架	V of put: spatial config	架高	1439
264	煎	Cook	煎糊	1745
265	煎	Cook	煎熟	3118
266	减	Change of state	减错	615
267	捡	Change of pos: obtain	捡干净	1425
268	建	V of create: build	建成	280
269	溅	V of motion: manner	溅到	836
270	见	Perception	见着	3887
271	奖	Change of pos: give	奖给	1474
272	讲	V of communicate	讲活	1912
273	降	Defeat*	降住	4046
274	浇	V of put: pour	浇惨	169
275	交	Change of pos: give	交上	2948
276	嚼	V of ingest	嚼碎	3207
277	搅	V of transform	搅黄	1892
278	铰	V of cut	铰折	3044
279	教	V of communicate	教会	1895
280	叫	V of communicate	叫醒	3593
281	叫	V of communicate	叫哑	3615
282	叫	CS	叫住	4028
283	揭	V of remove	揭坏	1807
284	接	Change of pos: obtain	接住	4008

285	截	V of conceal	截断	1267
286	结	V of combine	结下	3515
287	解	V of separate	解开	2105
288	借	Change of pos: obtain	借重	377
289	尽	Achieve*	尽到	984
290	揪	V of hold & keep	揪住	4009
291	救	Help*	救活	1915
292	举	V of put: specified direction	举起	2701
293	锯	V of cut	锯完	3363
294	聚	V of exist	聚在	3753
295	卷	Change of state	卷起	2702
296	撅	Change of state, V of separate	撅成	289
297	决	V of judge & assess	决出	476
298	倔	Adj*	倔走	4091
299	开	V of motion: vehicle	开快	2236
300	砍	V of cut	砍光	1566
301	看	Perception	看花眼	1775
302	扛	V of hold & keep	扛在	3756
303	烤	Cook	烤化	1781
304	考	V of judge & assess	考完	3367
305	靠	V of assume position	靠近	2033
306	铐	V of combine	铐上	2954
307	磕	Contact by impact: hit	磕在	3758
308	渴	SENS*	渴坏	1872
309	刻	V of transform: carve	刻在	3759
310	啃	V of ingest: chew	啃剩下	3070
311	坑	Damage*	坑坏	1873
312	抠	Poke	抠懂	1229
313	扣	V of hold & keep	扣下	3516
314	哭	Bodily action	哭干	1398
315	挎	V of hold & keep	挎上	2956
316	跨	V of exist: spatial config	跨上	2957
317	捆	V of put	捆完	3368
318	困	PSY	困坏	1874
319	拉	V of communicate	拉起	2721
320	辣	SENS*	辣坏	1875
321	来	Deic motion	来巧	2732
322	赖	?	赖在	3763
323	拦	V of conceal	拦住	4031
324	烂	Change of state	烂掉	1190
325	捞	Change of pos: obtain	捞干净	1426
326	老	STAT	老死	3153
327	捋	V of contact	捋平	2634
328	勒	V of exert force: pull	勒住	4032
329	垒	V of put: spatial config	垒高	1442
330	累	STAT	累糊涂	1755
331	愣	PSY	愣住	4033
332	冷	STAT	冷多	1339

333	理	V of groom	理完	3370
334	立	V of create	立下	3518
335	练	Activity	练会	1897
336	凉	STAT	凉多	1341
337	惊	PSY	惊醒	3594
338	亮	STAT	亮多	1342
339	晾	Change of state	晾干	1399
340	量	Measure	量完	3372
341	撩	V of put: specified direction	撩到	844
342	聊	V of communicate	聊上	2902
343	咧	Bodily action	咧开	2146
344	列	V of put: spatial config	列出	480
345	裂	V of cut	裂开	2109
346	淋	Change of state	淋湿	3077
347	领	V of send & carry	领走	4093
348	溜	V of motion: manner	溜走	4094
349	遛	V of motion: manner	遛到	931
350	流	V of motion: manner	流干	1400
351	留	V of exist	留下	3519
352	馏	Cook	馏透	3265
353	拢	Change of pos: obtain	拢到	1047
354	搂	V of hold & keep	搂在	3767
355	漏	V of emission	漏光	1569
356	露	V of appear	露出	415
357	录	?	录好	1671
358	乱	Change of state	乱成	296
359	轮	V of motion: mode of motion	轮到	846
360	摞	V of put: spatial config	摞成	297
361	烙	Cook	烙厚	1740
362	硌	SENS*	硌坏	1868
363	落	V of motion	落下	3502
364	撂	Change of state	撂倒	745
365	码	V of put: spatial config	码高	1443
366	骂	V of communicate	骂火	1922
367	埋	V of conceal	埋好	1672
368	买	Change of pos: obtain	买下	3520
369	迈	V of motion: manner	迈出	416
370	卖	Change of pos: give	卖完	3374
371	瞒	Cheat*	瞒住	4034
372	忙	STAT	忙完	3375
373	焖	Cook	焖熟	3120
374	闷	PSY	闷在	3770
375	蒙	STAT	蒙在	3771
376	梦	SENS*	梦见	1946
377	描	V of create	描粗	545
378	瞄	V of put: specified direction	瞄准	4056
379	摸	PSY	摸熟	3110
380	磨	V of transform: carve	磨快	2243

381	抹	V of color, V of transform	抹花	1767
382	冒	V of emission	冒出	418
383	拿	V of hold & keep	拿起	2703
384	难	PSY	难住	4035
385	挠	V of remove	挠破	2660
386	闹	CS	闹出	484
387	拟	V of create	拟完	3376
388	粘	V of combine	粘好	1697
389	捻	V of transform	捻死	3156
390	撵	V of remove	撵走	4097
391	念	V of communicate	念快	2237
392	酿	V of create	酿成	301
393	尿	Bodily process	尿湿	3078
394	捏	V of hold & keep	捏死	3157
395	拧	V of transform	拧干	1401
396	扭	V of hold & keep	扭在	3774
397	弄	CS	弄火	1923
398	挪	V of motion	挪到	852
399	沤	V of put	沤成	306
400	趴	V of exist: spatial config	趴下	3503
401	爬	V of motion: manner	爬上	2883
402	拍	Contact by impact: hit	拍死	3158
403	排	V of put: spatial config	排好	1674
404	派	V of send & carry	派出	421
405	盼	V of desire	盼到	993
406	判	V of judge & assess	判完	3378
407	胖	STAT	胖成	308
408	抛	V of throw	抛到	855
409	跑	V of motion: manner	跑快	2238
410	泡	V of put: pour	泡好	1675
411	陪	V of accompany	陪到	937
412	配	V of pos: obtain	配完	3380
413	喷	V of emission	喷成	309
414	喷	V of emission	喷湿	3080
415	捧	V of hold & keep	捧走	4098
416	碰	Contact by impact: hit	碰残	155
417	批	V of create	批给	1485
418	披	V of groom: dress	披上	2969
419	劈	Contact by impact: hit	劈死	3159
420	骗	Cheat*	骗走	4099
421	漂	V of motion: manner	漂在	3779
422	飘	V of motion: manner	飘走	4100
423	撇	V of pos	撇下	3521
424	拼	V of put	拼到	1049
425	品	V of judge & assess	品出	488
426	评	V of judge & assess	评完	3381
427	泼	V of put	泼在	3780
428	铺	Change of state	铺厚	1741

429	漆	V of color, V of transform	漆上	2974
430	骑	V of motion: vehicle, V of exist: spatial config	骑快	2239
431	起	ASP	起高	1444
432	砌	V of create: build	砌好	1677
433	气	PSY	气火	1924
434	掐	V of hold & keep	掐死	3161
435	卡	V of exist	卡在	3782
436	签	V of create	签上	2978
437	欠	V of exist: spatial config	欠起	2704
438	呛	Bodily action	呛死	3162
439	抢	Change of pos: obtain	抢空	2206
440	敲	Contact by impact: hit	敲醒	3599
441	瞧	V of judge & assess	瞧准	4058
442	撬	V of separate	撬活动	1921
443	切	V of cut	切厚	1742
444	沏	V of put: pour	沏上	2973
445	沁	V of emission	沁出	425
446	请	Request*	请走	4104
447	穷	STAT	穷怕	2591
448	求	V of desire	求完	3383
449	驱	V of motion: manner	驱散	2851
450	取	Change of pos: obtain	取完	3384
451	去	V of motion	去下	3522
452	圈	V of exist	圈在	3783
453	劝	Persuade	劝住	4037
454	染	V of color, V of transform	染花	1768
455	嚷	V of communicate	嚷上	2904
456	让	Change of pos	让出	428
457	绕	V of put: coil	绕成	316
458	惹	CS	惹火	1925
459	热	Change of state	热完	3385
460	认	V of judge & assess	认出	491
461	扔	V of throw	扔下	3504
462	揉	V of transform: knead	揉成	317
463	洒	V of put	洒满	2444
464	撒	V of put	撒下	3505
465	塞	V of put: fill	塞上	2981
466	赛	Activity	赛赢	3639
467	散	V of separate	散开	2117
468	臊	PSY	臊红	1729
469	扫	V of remove	扫干净	1413
470	杀	V of kill	杀光	1574
471	煞	Asp	煞住	4038
472	晒	V of put	晒黄	1889
473	删	V of remove	删掉	1200
474	闪	Avoid	闪开	2118
475	赏	Change of pos: give	赏给	1490
476	上	V of put: spatial config	上够	1510

477	上	Change of state	上紧	1985
478	上	Change of state	上满	2448
479	上	Attend*	上腻	2558
480	上	Change of state	上上	2982
481	上	V of send & carry	上早	3858
482	烧	Change of state	烧旺	3442
483	少	STAT	少多	1344
484	射	Contact by impact: hit	射死	3165
485	设	V of put	设在	3786
486	伸	Change of state	伸出	432
487	渗	V of appear	渗出	433
488	抻	V of exert force: pull	抻细	3477
489	升	V of put: specified direction	升高	1445
490	生	V of appear	生下	3523
491	省	Save*	省下	3524
492	剩	V of exist	剩下	3525
493	盛	V of put: specified direction	盛下	3533
494	湿	Change of state	湿透	3267
495	拾	Change of pos: obtain	拾到	999
496	使	Use*	使尽	1995
497	试	V of judge & assess	试好	1681
498	收	V of pos: obtain	收下	3526
499	熟	Change of state	熟透	3268
500	守	Defend	守好	1684
501	受	Change of state	受潮	226
502	瘦	STAT	瘦成	320
503	售	Change of pos: give	售完	3388
504	梳	V of groom	梳成	321
505	输	Defeat*	输火	1926
506	数	Ment*	数糊涂	1761
507	竖	V of put: spatial config	竖起	2705
508	刷	V of remove	刷干净	1415
509	耍	Use*	耍遍	118
510	摔	Contact by impact: hit	摔活动	1919
511	甩	V of throw	甩干	1404
512	拴	V of combine	拴在	3789
513	涮	V of remove	涮干净	1427
514	睡	SENS*	睡安稳	21
515	说	V of communicate	说下	3527
516	撕	V of cut	撕窄	3871
517	死	Change of state	死光	1576
518	松	V of separate	松开	2121
519	送	V of send & carry	送熟	3112
520	搜	V of search	搜遍	119
521	算	Ment*	算糊涂	1762
522	锁	V of combine	锁好	1687
523	踏	V of exert force: press	踏上	2884
524	抬	V of put: specified direction	抬起	2706

525	摊	Change of state	摊在	3793
526	谈	V of communicate	谈完	3390
527	蹚	V of exert force	蹚浑	1905
528	躺	V of exist: spatial config	躺下	3506
529	烫	Body damage	烫死	3167
530	叨	V of hold & keep	叨到	797
531	掏	V of exert force: pull	掏干净	1428
532	淘	V of remove	淘完	3392
533	逃	V of motion	逃走	4109
534	套	V of put: spatial config	套在	3795
535	腾	V of remove	腾空	2207
536	疼	PSY	疼醒	3602
537	剔	Change of pos: obtain	剔干净	1429
538	踢	Contact by impact: kick	踢高	1447
539	提	V of put: specified direction	提高	1448
540	剃	V of remove	剃干净	1430
541	替	V of pos	替下	3528
542	添	V of combine	添满	2451
543	填	V of put: fill	填完	3394
544	舔	V of ingest	舔干净	1431
545	挑	Choose*	挑花眼	1776
546	跳	V of motion: manner	跳早	3861
547	贴	V of put	贴高	1449
548	听	Perception	听完	3396
549	停	Asp	停在	3798
550	挺	V of exist: spatial config	挺起	2708
551	通	V of motion	通到	948
552	捅	Poke	捅旺	3443
553	偷	Change of pos: obtain	偷走	4111
554	投	V of throw	投中	3976
555	透	V of appear	透出	440
556	涂	V of color, V of transform	涂上	2992
557	吐	Bodily action	吐空	2208
558	团	Change of state	团成	329
559	推	V of exert force: push	推醒	3603
560	退	V of motion: mode of motion	退到	878
561	煺	Cook	煺干净	1432
562	炖	Cook	炖熟	3117
563	脱	V of separate	脱光	1578
564	拖	V of exert force: pull	拖住	4042
565	拓	V of create	拓坏	1831
566	挖	V of create	挖空	2209
567	弯	V of exist: spatial config	弯下	3507
568	玩	Activity	玩完	3397
569	挽	V of exert force: pull	挽起	2709
570	忘	Ment*	忘光	1579
571	围	V of combine	围好	1690
572	喂	V of ingest	喂肥	1372

573	温	Change of state	温热	2816
574	闻	Perception	闻出	498
575	问	V of communicate	问起	2725
576	窝	Change of state	窝直	3958
577	握	V of hold & keep	握紧	1987
578	卧	V of exist: spatial config	卧在	3801
579	捂	V of conceal	捂臭	387
580	悟	PSY	悟出	499
581	焐	Change of state	焐暖和	2583
582	吸	V of remove	吸干	1406
583	洗	V of remove	洗花	1770
584	系	V of combine	系上	2946
585	下	V of judge & assess	下定	1214
586	吓	PSY	吓糊涂	1764
587	下	Weather	下湿	3082
588	下	Perform	下赢	3640
589	掀	V of put: specified direction	掀翻	1351
590	献	Change of pos: give	献给	1495
591	陷	V of motion: inherently directed motion	陷进	2026
592	限	Control*	限死	3180
593	镶	V of put	镶在	3804
594	相	V of judge & assess	相中	3977
595	想	Ment*	想具体	2074
596	响	V of emission: sound	响起	2726
597	销	V of pos: sell	销出	443
598	笑	Bodily action: laugh	笑糊涂	1765
599	歇	Rest*	歇到	953
600	写	V of create	写快	2241
601	卸	V of put: specified direction	卸完	3401
602	兴	Change of state	兴上	2906
603	擤	Bodily action	擤疼	3239
604	醒	SENS*	醒早	3862
605	修	V of create	修窄	3873
606	绣	V of image creation	绣矮	14
607	锈	Change of state	锈死	3181
608	絮	V of put: fill	絮厚	1743
609	旋	V of transform: carve	旋细	3481
610	选	Choose*	选出	504
611	削	V of transform: carve	削完	3399
612	学	Learn	学会	1898
613	熏	Cook	熏黄	1890
614	训	V of communicate	训完	3404
615	押	V of exert force: push	押到	883
616	压	V of exert force: push	压下	3529
617	轧	V of exert force: push	轧残	159
618	淹	Bodily process	淹死	3171
619	研	V of transform	研好	1692
620	演	Perform	演活	1914

621	养	Rear*	养活	1916
622	咬	V of ingest	咬死	3172
623	要	Request*	要走	4113
624	倚	V of exist: spatial config	倚到	880
625	译	V of transform	译成	338
626	掖	V of combine	掖好	1695
627	引	V of exert force: pull	引到	881
628	印	V of create	印成	339
629	迎	V of social interaction	迎着	3903
630	涌	V of appear	涌出	446
631	用	Use*	用完	3406
632	游	V of motion: manner	游出	506
633	遇	Encounter*	遇上	2997
634	约	Reserve*	约好	1696
635	越	V of motion	越过	1599
636	乐	PSY	乐坏	1876
637	晕	SENS*	晕在	3808
638	熨	V of transform	熨干	1407
639	运	V of send & carry	运走	4114
640	砸	Contact by impact	砸在	3809
641	栽	V of cut	栽稀	3451
642	攒	Save*	攒下	3530
643	脏	STAT	脏到	1038
644	遭	Encounter*	遭到	1015
645	凿	V of create: dig	凿小	3570
646	造	V of create	造成	342
647	赠	Change of pos: give	赠给	1498
648	扎	V of create	扎出	507
649	扎	V of combine	扎结实	1972
650	炸	Cook	炸黄	1891
651	摘	V of separate	摘下	3508
652	沾	Change of state	沾满	2458
653	展	V of put	展出	508
654	站	V of exist: spatial config	站久	2063
655	蘸	V of put	蘸湿	3083
656	战	V of social interaction	战死	3174
657	张	V of communicate	张大	696
658	涨	V of put: pour	涨高	1451
659	胀	Change of state	胀大	697
660	招	Hire*	招完	3408
661	找	V of search	找着	3904
662	照	Activity	照完	3409
663	遮	V of conceal	遮暗	24
664	折	V of separate	折断	1280
665	蜇	Poke	蜇死	3175
666	蜇	Poke	蜇着	3932
667	斟	V of put: pour	斟满	2462
668	枕	V of put	枕高	1452

669	震	V of exert force: shake	震醒	3610
670	挣	Contact by impact	挣断	1281
671	睁	Bodily action	睁开	2153
672	蒸	Cook	蒸熟	3121
673	整	PSY	整苦	2225
674	支	V of exist: contiguous location	支好	1700
675	织	V of create	织完	3411
676	直	V of exist: spatial config	直起	2711
677	指	V of communicate	指出	510
678	止	ASP	止住	4049
679	制	Control*	制服	1383
680	治	Change of state	治好	1702
681	置	V of pos: buy	置齐	2694
682	皱	Change of state	皱起	2727
683	煮	Cook	煮熟	3122
684	住	Lodge	住安定	20
685	铸	V of create	铸成	346
686	蛀	V of ingest	蛀空	2210
687	驻	V of exist	驻满	2465
688	抓	V of hold & keep	抓起	2712
689	拽	V of exert force: pull	拽下	3509
690	转	Direct*	转嫁给	1499
691	赚	V of pos: obtain	赚足	4126
692	装	V of put	装下	3535
693	撞	Contact by impact: hit	撞在	3817
694	追	V of motion	追上	3003
695	捉	V of hold & keep	捉住	4021
696	焯	Cook	焯过火儿	1603
697	走	V of motion: manner	走快	2242
698	揍	Contact by impact	揍死	3176
699	租	V of pos: obtain	租着	3907
700	攥	V of hold & keep	攥成	351
701	钻	V of transform: carve	钻深	3063
702	醉	Change of state	醉成	352
703	坐	V of exist: spatial config	坐安稳	22
704	作	V of create	作出	513
705	做	Do*	做完	3413

Fields

Seq No.:	Sequential No. of V1
V1 Semantic Class	Semantic class of V1
Comp:	Compound example (For class symbols, see below.)
C Seq No.:	Sequential No. of compound

Semantic class symbols

Achieve*	Achievement verbs
Activity	Activity verbs
Adj*	Adjective

ASP	Aspectual verbs
Attend*	Attend verbs
Avoid	Avoid verbs
Become*	Become verbs
Bodily action	Verbs of bodily action
Bodily process	Verbs of bodily process
Body damage	Verbs of body damage
Change of pos	Verbs of change of possession
Change of state	Verbs of change of state
Cheat*	Cheat verbs
Choose*	Choose verbs
Consume*	Consumption verbs
Contact by impact	Verbs of contact by impact
Control*	Control verbs
Cook	Cook verbs
CS	Verbs of causation
Damage*	Damage verbs
Defeat*	Defeat verbs
Defend	Defend verbs
Deic motion	Verbs of deictic motion
Direct*	Verbs of directing an object
Do*	Do verbs
Encounter*	Encounter verbs
Help*	Help verbs
Hire*	Hire verbs
Learn	Learn verbs
Lodge	Lodge verbs
Measure	Measure verbs
Ment*	Verbs of mental activity
Perception	Verbs of perception
Perform	Perform verbs
Persuade	Persuade verbs
Poke	Poke verbs
Prepare	Prepare verbs
Promote*	Promote verbs
PSY	Psych-verbs
Rear*	Rear verbs
Request*	Request verbs
Reserve*	Reserve verbs
Rest*	Rest verbs
Save*	Save verbs
SENS*	Verbs of sensation
Set*	Set verbs
STAT	State verbs
Use*	User verbs
V of accompany	Verbs of accompanying
V of appear	Verbs of appearance
V of assume position	Verbs of assuming position

V of color	Verbs of color
V of combine	Verbs of combining
V of communicate	Verbs of communication
V of conceal	Verbs of concealing
V of consume	Verbs of consume
V of contact	Verbs of contact
V of create	Verbs of creation
V of cut	Verbs of cutting
V of desire	Verbs of desire
V of emission	Verbs of emission
V of exert force	Verbs of exerting force
V of exist	Verbs of existence
V of groom	Verbs of grooming
V of hold & keep	Verbs of holding & keeping
V of image creation	Verbs of image creation
V of ingest	Verbs of ingesting
V of judge & assess	Verbs of judging & assessing
V of kill	Verbs of killing
V of motion	Verbs of motion
V of pos	Verbs of possession
V of put	Verbs of putting
V of remove	Verbs of removing
V of rush	Verbs of rushing
V of search	Verbs of searching
V of send & carry	Verbs of sending & carrying
V of separate	Verbs of separation
V of social interaction	Verbs of social interaction
V of throw	Verbs of throwing
V of transform	Verbs of transformation
Weather	Weather verbs
?	Unknown

1. Labels provided after a colon are subclasses. For example, the subclass *spatial config* means spatial configuration.
2. The above semantic classes are based on Levin's (1993) verb classification although some class names are partially different from the original class label in Levin's list.
3. Symbols marked with an asterisk are not included in Levin's class list.

Appendix C6

Verb Class Distribution of V1 in CNC & CRD

No.	Verb Class	CNC tokens	CNC %	CRD tokens	CRD %
1	Verbs of putting	42	8.1%	222	8.2%
2	Verbs of intransitive motion	41	7.9%	179	6.6%
3	Verbs of change of state	38	7.3%	202	7.4%
4	Verbs of communication	35	6.7%	157	5.8%
5	Verbs of contact by impact	33	6.4%	153	5.6%
6	Psychology verbs	27	5.2%	65	2.4%
7	Perception verbs	26	5.0%	72	2.6%
8	Do verbs	20	3.9%	96	3.5%
9	Verbs of exerting force	20	3.9%	101	3.7%
10	Verbs of ingesting	20	3.9%	68	2.5%
11	Verbs of change of possession	19	3.7%	105	3.9%
12	Verbs of bodily process	17	3.3%	71	2.6%
13	Verbs of creation & transformation	16	3.1%	223	8.2%
14	Verbs of cutting	12	2.3%	90	3.3%
15	Verbs of existence	12	2.3%	56	2.1%
16	Verbs of removing	12	2.3%	70	2.6%
17	Verbs of mental process	10	1.9%	24	0.9%
18	Verbs of sending & carrying	9	1.7%	43	1.6%
19	Hold & keep verbs	8	1.5%	70	2.6%
20	Verbs of body state & damage to the	7	1.3%	32	1.2%
21	Verbs of combining & attaching	7	1.3%	66	2.4%
22	Verbs of contact	7	1.3%	31	1.1%
23	Activity verbs	6	1.2%	35	1.3%
24	Verbs of grooming	6	1.2%	43	1.6%
25	Verbs of judgment & assessment	6	1.2%	24	0.9%
26	Learn verbs	5	1.0%	31	1.1%
27	Use verbs	4	0.8%	24	0.9%
28	Verbs of emission	4	0.8%	10	0.4%
29	Verbs of performance	4	0.8%	22	0.8%
30	Verbs of separating & disassembling	4	0.8%	21	0.8%
31	Aspectual verbs	3	0.6%	5	0.2%
32	Choose verbs	3	0.6%	6	0.2%
33	Engender verbs	3	0.6%	7	0.3%
34	Lodge verbs	3	0.6%	24	0.9%
35	State predicates	3	0.6%	30	1.1%
36	Verbs of consumption	3	0.6%	6	0.2%
37	Verbs of killing	3	0.6%	3	0.1%
38	Help verbs	2	0.4%	3	0.1%
39	Poke verbs	2	0.4%	20	0.7%
40	Verbs of adjustment & arrangement	2	0.4%	8	0.3%
41	Verbs of rushing	2	0.4%	5	0.2%
42	Verbs of searching	2	0.4%	8	0.3%
43	Verbs of throwing	2	0.4%	13	0.5%
44	Control verbs	1	0.2%	7	0.3%

45	Cook verbs	1	0.2%	63	2.3%
46	Defend verbs	1	0.2%	1	0.0%
47	Encounter verbs	1	0.2%	1	0.0%
48	Fix verbs	1	0.2%	2	0.1%
49	Persuade verbs	1	0.2%	2	0.1%
50	Verbs of assuming a position	1	0.2%	3	0.1%
51	Verbs of social interaction	1	0.2%	4	0.1%
52	Attain verbs	0	0.0%	0	0.0%
53	Attend verbs	0	0.0%	1	0.0%
54	Avoid verbs	0	0.0%	5	0.2%
55	Cheat verbs	0	0.0%	3	0.1%
56	Coax verbs	0	0.0%	2	0.1%
57	Damage verbs	0	0.0%	2	0.1%
58	Defeat verbs	0	0.0%	4	0.1%
59	Deny verbs	0	0.0%	1	0.0%
60	Hire	0	0.0%	2	0.1%
61	Invitation verbs	0	0.0%	0	0.0%
62	Measure verbs	0	0.0%	7	0.3%
63	Miss verbs	0	0.0%	1	0.0%
64	Promotion verbs	0	0.0%	0	0.0%
65	Record verbs	0	0.0%	3	0.1%
66	Save verbs	0	0.0%	4	0.1%
67	Verbs of appearance & disappearance	0	0.0%	0	0.0%
68	Verbs of characterizing	0	0.0%	0	0.0%
69	Verbs of color; verbs of creation & transformation	0	0.0%	10	0.4%
70	Verbs of concealment	0	0.0%	14	0.5%
71	Verbs of desire	0	0.0%	1	0.0%
72	Verbs of entity-specific modes of	0	0.0%	5	0.2%
73	Verbs of image creation	0	0.0%	2	0.1%
74	Verbs of motion; verbs of existence	0	0.0%	9	0.3%
75	Verbs of request & order	0	0.0%	3	0.1%
76	Verbs of sending & carrying; verbs of concealment	0	0.0%	2	0.1%
77	Weather verbs	0	0.0%	13	0.5%
	TOTAL	518		2721	