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A Lexicon-Grammar Analysis of "away" Expressions

Sydney G. La Valley

Florida International University, slava004@fiu.edu

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FLORIDA INTERNATIONAL UNIVERSITY

Miami, Florida

A LEXICON-GRAMMAR ANALYSIS OF *AWAY* EXPRESSIONS

A project submitted in partial fulfillment of

the requirements for the degree of

MASTER OF ARTS

in

LINGUISTICS

by

Sydney La Valley

2020

FIU LINGUISTICS PROGRAM
MA PROJECT
FINAL SUBMISSION

To: Director, Linguistics Program
College of Arts, Sciences and Education

This MA Project, written by Sydney La Valley, and entitled “A Lexicon-Grammar Analysis of *away* Expressions”, having been approved in respect to style and intellectual content, is referred to you for judgment.

We have read this MA Project and recommend that it be approved.

Dr. Ellen Thompson, Committee Member

Dr. Tometro Hopkins, Committee Member

Dr. Peter Machonis, Major Professor

Date of Defense: April 17, 2020

The MA Project of Sydney La Valley is approved.

Prof. Ellen Thompson
Director, Linguistics
College of Arts, Sciences, and Education

Florida International University, 2020

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DEDICATION

I dedicate this research project to my wonderful family, who have always offered endless support, encouragement, and love, even from far away. Mom & Dad, thanks for nourishing my curiosity and love of learning; Maddy, thanks for always lending an ear and being understanding; Will, thanks for being so positive and flexible.

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I would also like to thank my peers from the linguistics lab for all the pep talks, the coffee, and the laughs during my time in the FIU Linguistics MA Program. I'll always cherish these memories and friendships.

ABSTRACT OF THE PROJECT

A LEXICON-GRAMMAR ANALYSIS OF *AWAY* EXPRESSIONS

by

Sydney La Valley

Florida International University, 2020

Miami, Florida

Professor Peter Machonis, Major Professor

The goal of a Lexicon-Grammar is to systematically compose an exhaustive collection of particular linguistic structures to more accurately reveal patterns of language. Recent lexicon-grammar analyses such as “Transitive verbs with the particle *out* : a lexicon-grammar analysis” by Michelle Garcia-Vega (2011) and “Disambiguating phrasal verbs” by Dr. Peter Machonis (2008) respectively contain a plethora of entries for their particles. However, formal lexicon models would benefit from more in-depth exploration of *away* expressions. This research consists of collection, classification, and analysis of phrasal verbs with the particle *away*, following the lexicon-grammar model outlined by Maurice Gross in “The argument structure of elementary sentences” (1992). These tables include information about the morpho-syntactic and structural properties of each expression as well as examples of each construction’s use in a sentence. The large-scale collection of examples makes it possible to analyze these expressions and gain insight into their syntactic combinations and lexical variation.

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I. INTRODUCTION

Verb-particle constructions are a complex and fascinating linguistic phenomenon in English. These structures are highly productive and pose challenges for second language learners and researchers alike. Much research has been done on verb-particle constructions in general; however analysis with special attention to expressions with the particle *away* would be a useful addition to the literature. Furthermore, the construction of thorough lexicon-grammar tables for this particle could aid in future research projects using NooJ analysis software.

II. LITERATURE REVIEW

Verb-Particle Constructions in English

Verb-particle constructions, also referred to as multiword expressions, phrasal verbs, separable verbs or particle verbs, consist of a verb and a particle which is generally homonymous with a preposition or a spatial adverb (Fraser, 1976; Machonis, 1985, 2004; Thim, 2012; Tiv et al., 2019). Particles are invariable words which do not fit into one of the main classes of words, and usually serve a grammatical or pragmatic purpose, such as *up*, *out*, and *away*. Phrasal verbs can be transitive, intransitive, or still more complex, as shown in examples (1)-(3) (Bolinger, 1971; Dehe, 2002; Fraser, 1976; Machonis, 2008; Sag et al., 2002, Thim 2012).

(1) Transitive Constructions

- a. Alex *bartered away* his possessions
- b. He *filed away* the bills
- c. Alex *bartered* his possessions *away*
- d. He *filed* the bills *away*

(2) Intransitive Constructions

- a. If you have a question, *fire away*
- b. He *went away*

(3) Phrasal-Prepositional Constructions

- a. Alex *chipped away at* his opponent
- b. He chose to *do away with* junk food

According to Tiv et al. (2019), English has over three thousand phrasal verbs, often expressing figurative or metaphorical meanings. Syntactically, transitive phrasal verbs in English can appear in two alternating orders, referred to as continuous and discontinuous (Dehe, 2002; Machonis, 2008). In continuous constructions, the particle appears alongside the verb, before the complement as shown in (1a) and (1b). In discontinuous constructions, the particle follows the complement of the verb as can be seen in examples (1c) and (1d).

Awareness of these structures highlights the difference between phrasal verb particles and prepositions or simple adverbs. Prepositions occur before noun phrase complements, forming a structure which expresses a relationship to another unit, such as *up*, *out*, *in*, or *off*. Simple adverbs modify verbs, adjectives, determiners, or whole clauses, for example *away*, *back*, or *together*. Although these three phenomena often appear to be identical in form, they behave differently within a sentence and carry semantic nuances .

Semantic & Syntactic Patterns

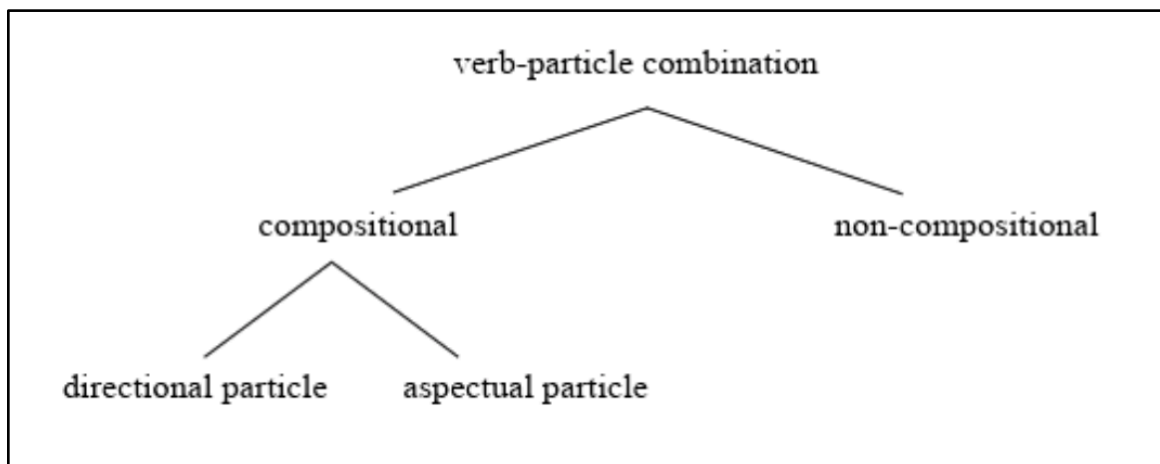
Verb-particle constructions in English frequently shift in meaning across various phrases and contexts. For example, compare the unmistakable difference in meaning for *blow away* across the four sentences below.

- (4) a. *The wind blew away the leaves*
 b. *The performance blew away the spectators*
 c. *The gunman blew away the gangster*
 d. *The FIU panthers blew away the other team*

Semantic variations like those shown above, typically differ on a scale from idiomatic, to completely compositional (Thim, 2012). In this context, *compositional* means that the meaning of the phrase can be derived from the sum of the verb-particle construction's parts. One can test a construction for this by performing particle deletion; if the expression retains a similar meaning without the particle, the construction can be classified as compositional. In the example above, sentence (4a) would be considered compositional, while (4b-d) would be considered non-compositional.

The figure below illustrates the relationships between compositional, directional, and aspectual verb-particle constructions. With non-compositional expressions, it is impossible to specify the exact meaning the particle contributes to the phrase (Thim, 2012); however, with compositional expressions, the particle usually lends a directional or aspectual meaning (Machonis, 2008; 2009; 2010).

*Figure 1 : "Semantic classification of phrasal verbs"
 (Retrieved from Thim, 2012)*



Lexicon-Grammar Framework

One approach to studying phrasal verbs is the Lexicon-Grammar framework. This methodology involves systematic collection and categorization of linguistic phenomena, with the goal to accurately reveal classes or patterns of usage. This methodology was developed after unsuccessful attempts at building a large-scale generative grammar of French, when researchers reasoned that in order to make broad generalizations, a significant survey of a language's lexical items was needed (Gross, 1979; Gross, 1992).

The foundation of the Lexicon-Grammar approach is built on the principle that meaning is stored at the phrase-level, rather than the word level. These lexical items are entered into a comprehensive list in their most basic syntactical surroundings, where they are classified by properties and undergo transformations. These transformations are judged by native speakers with a straight-forward acceptability value (Gross, 1996).

Lexicon-Grammar Tables & NLP

Lexicon-Grammar tables are often used in conjunction with NooJ, a free linguistic analysis software which parses text using exhaustive dictionaries and grammars; allowing researchers to formally describe phenomena and apply these descriptions to corpora. Lexicon-grammar tables can be adapted into the dictionary component of NooJ's analysis, allowing the software to identify occurrences of phenomena within a imported texts.

For example, during a search for phrasal verbs with the particle *away* within a specific text, NooJ would use an attached dictionary with data on that specific particle to confirm that matching strings within the text are indeed the same linguistic phenomenon.

The data within that dictionary would allow NooJ to verify that the particle is actually part of a phrasal verb expression, rather than a preposition or adverb (Machonis, 2010).

- (5) a. *The floods washed away the bridge*
 b. *Go away and don't come back*
 c. *Leo walked away from the kitchen*

In other words, the lexicon-grammar table included in this example, would allow NooJ's software to yield the string in (5a) as a phrasal verb construction, while avoiding the strings shown in (5b) and (5c).

In Machonis' 2010 study of transitive phrasal verbs, he constructed a lexicon-grammar table consisting of over seven hundred entries of phrasal verbs with the particle *up*, two hundred entries of phrasal verbs with the particle *out* one hundred entries with the particle *down*, ninety entries with *off*, and a sampling of phrasal verbs with the particles *away*, *back*, *in*, *on*, *out*, *over*, etc. Using the linguistic development environment NooJ, with the previously mentioned lexicon-grammar tables, he was able to identify almost six hundred phrasal verb constructions in *Portrait of a Lady* by Henry James with about 97% accuracy. Similarly to Dehe (2001a), this study also showed significantly higher frequencies of continuous constructions than discontinuous constructions (Machonis, 2010).

Away Expressions

Comprehensive lexicon-grammars have been built and analyzed for high frequency particles like *up* (Machonis, 2009) and *out* (Garcia-Vega, 2011); however, a gap exists for such an analysis of verb-particle expressions with the particle *away*.

Historical linguists have reported that *away* is a mid-frequency particle. In his 1994 study of phrasal verbs, Hiltunen compared occurrences of expressions with the particles *away*, *back*, *down*, *forth*, *off*, *out*, and *up* both in Early Modern English and Present-day English. The table below shows Hiltunen’s data for these particles’ frequencies in Early Modern English across several genres of text.

*Table 1 : “The distribution of tokens”
(Retrieved from Hiltunen, 1994)*

	CorO	Stat	Serm	CorP	Tri	Bible	Fict	Handb	Total (No. and %)
<i>back</i>	—	—	3	3	8	3	2	2	21 2.4
<i>off</i>	1	—	4	5	3	1	3	40	57 6.7
<i>forth</i>	4	5	6	6	5	19	15	24	84 9.9
<i>down</i>	2	4	14	29	13	22	26	15	125 14.7
<i>away</i>	4	18	10	11	20	17	29	18	127 14.9
<i>out</i>	9	13	22	19	27	30	44	45	209 24.6
<i>up</i>	5	21	24	25	26	54	34	39	228 26.8
Total	25	61	83	98	102	146	153	183	851
%	2.9	7.2	9.7	11.5	12.0	17.2	18.0	21.5	100.0

(Abbreviations: CorO = official correspondence, Stat = statutes, Serm = sermons, CorP = private correspondence, Tri = trials, Fict = fiction, Handb = handbooks)

He explains that this data shows the particles under observation falling into three sections based on their occurrences. Particles *back*, *off*, and *forth* could be considered low-frequency with less than 100 tokens; *down* and *away* have over 100 tokens and could be considered mid-frequency; and the high-frequency particles *out* and *up* each have over 200 occurrences.

Considering Table 1, along with the fact that Machonis (2009) was able to collect over 700 entries in his lexicon-grammar table for the particle *up*, and Garcia-Vega (2011) was able to collect over 550 entries in her table for the transitive expressions with the particle *out*, highlights the need to construct an extensive collection of *away* expressions.

More recently, Ishizaki compared *out* and *away* in his 2012 study, where he examined the historical development of phrasal verbs with these particles. Explaining the similarities between *away* and *out* as aspectual markers in present-day English, Ishizaki provides a clear description of telicity in *away* expressions. The particle *away* allows for an iterative reading of the writing event in sentence (6), and for a continuative reading of the working event in sentence (7).

(6) *Keep writing away and soon enough you'll have a book*

(7) *Maddy worked away at the table she was building*

Neither of these verb-particle constructions carry a sense of an approaching endpoint, and can thus be described as *atelic*. However, some verb-particle constructions, like those in example (8), do have a sense of an endpoint to the verbal action, and are thus referred to as *telic* (Ishizaki, 2012).

- (8) a. *Bill slept the afternoon away*
b. *We're twisting the night away*

(Jackendoff 2010: 250)
(Retrieved from Ishizaki, 2012)

These specific telic expressions retain an interpretation where it is understood that time is being wasted; these have been referred to as *time-away* constructions in previous literature (Ishizaki, 2012; Jackendoff, 2010).

III. MATERIALS & METHODS

Data collection for this study began with searching through several dictionaries for *away*-expressions. Specifically, the dictionaries below provided most of the *away*-expressions in this study's data.

- *Collins English dictionary. [electronic resource]* (5th ed.). (2000).
- *Longman Phrasal Verbs Dictionary.* (2000).
- *McGraw-Hill's Dictionary of American Idioms and Phrasal Verbs.* (2005).
- *The Penguin complete English dictionary.* (2nd ed.). (2006).

Some expressions were also collected from appendices within Fraser's book, "The Verb-Particle Construction in English" (1976), and thirty-seven expressions were handed down from Dr. Machonis' research. These expressions were added to one of three tables depending on their structure: transitive, intransitive, or phrasal-prepositional.

Within these tables, noun phrases are numbered from left to right beginning with zero, following the tradition of this methodology. Thus, N_0 is a subject and N_1 is the complement of the verb. When dictionary entries for expressions did not include sample sentences, or when native speaker judgements were fuzzy, searches through Google web, Google books, or COCA: the Corpus of Contemporary American English (Davies 2008-), provided examples for many constructions as well as N_0 and N_1 values. Figure one below shows a sample of entries from a transitive Lexicon-grammar table of *away*-expressions, in order to illustrate the structure of these tables.

Table 2 : A sample Lexicon-Grammar table

$N_0 =:$ Nhum	$N_0 =:$ N-hum	Verb	Particle	N_1	$N_1 =:$ Nhum	$N_1 =:$ N-hum	$N_0 V N_1$	$N_1 V$ Part	$N_1 V$	Synonym/ Definition
+	-	blink	away	the dust	-	+	-	+	-	to remove by blinking
+	-	block	away	the memories	-	+	+	-	-	to hide away
-	+	blow	away	the leaves	+	+	+	+	-	blow
+	+	blow	away	the spectators	+	+	-	-	-	overwhelm/impress
+	-	blow	away	the gangster	+	+	-	-	-	kill with gun
+	-	blow	away	the other team	+	-	-	-	-	defeat decisively
+	+	boil	away	the water	-	+	+	+	+	to boil a liquid until it is completely gone
+	-	box	away	the clothes	-	+	-	-	-	to pack into a box
+	+	break	away	the rock	-	+	+	+	+	remove by breaking
+	-	brush	away	the criticism	-	+	-	-	-	to dismiss
+	-	brush	away	the dust	-	+	-	+	-	to clean by brushing
+	+	buff	away	the ridges	-	+	+	+	-	to remove by buffing

Columns with binary values (+/-) represent properties of the expression which could codify discriminating qualities between entries. For example, the first two columns in the above table moving from left to right, formalize *subject is human* and *subject is not human* respectively. The N_1 column houses objects of each verb, and the next two columns to its right formalize whether that object can be human or non-human.

The next three columns are used to classify the syntactic behaviors of each phrasal verb entry. The first of these, $N_0 V N_1$ represents the possibility of the verb retaining a similar meaning after particle deletion. A plus symbol in this column can be used to indicate that the phrasal verb is compositional. Example (9) below illustrates why *blink away* has a minus in this column, and example (10) illustrates why *block away* has a plus.

- (9) a. *Will blinked away the dust that fell from the ceiling*
 b. **Will blinked the dust that fell from the ceiling*
- (10) a. *Leo blocked away his memories associated with the hurricane*
 b. *Leo blocked his memories associated with the hurricane*

The next column, *N_I V Part* asks whether the verb can be used in intransitive constructions in addition to transitive constructions; we consider entries with a plus in this column to be neutral. Examples (11) and (12) shows why *boil away* is marked as neutral, and *box away* is not.

- (11) a. *The chef boiled away the water*
 b. *The water boiled away*
- (12) a. *Maddy boxed away her summer clothes*
 b. **The clothes boxed away*

N_I V represents the possibility of neutrality without the particle present. Examples (13) and (14) are meant to explain why *break away* is marked with a plus in this column, but *buff away* is marked with a minus.

- (13) a. *The blast broke away the rock*
 b. *The rock broke*
- (14) a. *Will buffed away the scratches*
 b. **The scratches buffed*

Finally, the right-most column offers a synonym or paraphrased definition for each entry. It is important to note that expressions which appear homonymous, but can carry varying meanings, are recorded as multiple entries. Thus, there are four different entries for *blow away* and two separate entries for *brush away* in the table above.

In each table, the classifying columns vary depending on the syntactic properties of the construction under investigation, as well as the behaviors that could make distinctions between entries or reveal interesting patterns of use. In this study, the table of

phrasal-prepositional expressions included a few columns in addition to those present in the table for transitive expressions. The table of intransitive expressions included significantly fewer columns compared to the transitive table.

Specifically, the table of phrasal-prepositional expressions employed two new columns in addition to those present in the transitive table, allowing classification according to particle and preposition deletion. The first of these new columns, $N_0 V part N_1$, asks whether the expression retains a similar meaning without the preposition present. Example (15) shows why *do away with* would be marked with a minus in this column, and (16) shows why *eat away at* would be marked with a plus in this column.

- (15) a. *Maddy did away with distractions*
b. **Maddy did away distractions*

- (16) a. *The negative feedback ate away at his confidence*
b. *The negative feedback ate away his confidence*

The second new column, $N_0 V prep N_1$, asks whether the expression retains a similar meaning when the preposition is present, but the particle is not. See the examples below for expressions which would be marked with a plus and a minus in this column respectively.

- (17) a. *The caterpillars gnawed away at the crops*
b. *The caterpillars gnawed at the crops*

- (18) a. *Will's busy plugging away at the puzzle*
b. **Will's busy plugging at the puzzle*

The table of intransitive expressions only included one column for syntactic classification, $N_0 V$. This column asked whether the expression would retain a similar meaning after particle deletion, or in other words, whether the verb-particle construction is compositional or not.

IV. RESULTS & DISCUSSION

In the end, the three tables revealed both challenging finds and interesting patterns regarding neutrality, compositionality, and semantic classes. At the end of this study, the table of transitive expressions included 202 entries, the table of phrasal-prepositional expressions included 133 entries, and the table of intransitive expressions included 83 entries. Sample sections of entries from each table are available for review in the sections below.

Transitive Expressions

The table of transitive expressions with *away* was the largest of the three tables, and also the most straight-forward collection for analysis. Sample entries from this data table are available in Table 3.

First, entries were sorted by column $N_0 V N_I$, to compare compositional and non-compositional expressions. About 57% of the 202 transitive expressions with *away* were compositional. A sample of compositional transitive entries can be seen in table 4.

Table 3 : A selection of transitive away expressions

N_0 =: Nhum	N_0 =: N-hum	Verb	Particle	N_1	N_1 =: Nhum	N_1 =: N-hum	N_0 V N_1	N_1 V Part	N_1 V	Synonym/ Definition
+	-	barter	away	his possessions	-	+	+	-	-	to trade away
+	-	blast	away	the enemy	+	-	-	-	-	to kill by shooting
+	-	block	away	the memories	-	+	+	-	-	to hide away
+	+	boil	away	the water	-	+	+	+	+	to boil
+	-	brush	away	the criticism	-	+	-	-	-	to dismiss
+	+	bury	away	the shells	+	+	+	-	-	to bury or hide
+	-	cart	away	the rubble	+	+	-	-	-	to remove by cart
+	-	dream	away	the afternoon	-	+	-	-	-	to dream continuously
+	-	explain	away	the trouble	-	+	+	-	-	to answer by explanation
+	+	fan	away	the smoke	-	+	+	-	-	to remove by fanning
+	-	fold	away	the chairs	-	+	+	-	+	to fold for storage
+	-	fritter	away	the time	-	+	-	+	-	to goof off
+	-	gamble	away	their fortunes	-	+	+	-	-	to lose by gambling
+	+	hide	away	the treasure	+	+	+	-	+	to hide
+	+	lock	away	secrets	+	+	-	-	-	to hide away
+	-	pack	away	the clothes	-	+	+	-	-	to pack for storage
+	+	peel	away	the layers	-	+	+	+	+	to peel
+	+	pluck	away	the feathers	-	+	+	-	-	to pluck
+	-	pour	away	the milk	-	+	+	-	+	to get rid of by pouring
+	+	pull	away	the layers	+	+	-	+	-	to remove with pulling motion
+	-	rinse	away	the soap	-	+	+	+	+	to remove by rinsing
+	+	sand	away	the scratches	-	+	+	+	-	to remove by sanding
+	+	shave	away	the hairs	-	+	+	-	-	to remove by shaving
+	+	shoo	away	the birds	+	+	+	-	-	to drive away
+	-	sign	away	his rights	-	+	-	-	-	to release by written agreement
+	+	smooth	away	the wrinkles	-	+	+	+	+	to remove
+	-	throw	away	the newspaper	-	+	+	-	-	dispose
+	-	toss	away	the papers	-	+	+	-	-	throw away
+	+	tow	away	the car	+	+	+	-	-	tow
+	-	trim	away	the excess	-	+	+	-	-	to cut
+	+	ward	away	spirits	+	+	-	-	-	to defend against
-	+	wash	away	the bridge	+	+	-	+	-	destroy
+	-	while / wile	away	your days	-	+	-	+	-	to spend time relaxing

Table 4 : A selection of compositional away expressions

$N_0 =: N_{hum}$	$N_0 =: N_{-hum}$	Verb	Particle	N_1	$N_1 =: N_{hum}$	$N_1 =: N_{-hum}$	$N_0 V N_1$	$N_1 V$ Part	$N_1 V$	Synonym/ Definition
+	-	barter	away	his possessions	-	+	+	-	-	to trade away
+	-	block	away	the memories	-	+	+	-	-	to hide away
+	+	boil	away	the water	-	+	+	+	+	to boil a liquid until it is completely gone
+	+	bury	away	the shells	+	+	+	-	-	to bury or hide
+	-	explain	away	the trouble	-	+	+	-	-	to answer by explanation
+	+	fan	away	the smoke	-	+	+	-	-	to remove by fanning
+	-	fold	away	the chairs	-	+	+	-	+	to fold for storage
+	-	gamble	away	their fortunes	-	+	+	-	-	to lose by gambling
+	+	hide	away	the treasure	+	+	+	-	+	to hide
+	-	pack	away	the clothes	-	+	+	-	-	to pack for storage
+	+	peel	away	the layers	-	+	+	+	+	to peel
+	+	pluck	away	the feathers	-	+	+	-	-	to pluck
+	-	pour	away	the milk	-	+	+	-	+	to get rid of by pouring
+	-	rinse	away	the soap	-	+	+	+	+	to remove by rinsing
+	+	sand	away	the scratches	-	+	+	+	-	to remove by sanding
+	+	shave	away	the hairs	-	+	+	-	-	to remove by shaving
+	+	shoo	away	the birds	+	+	+	-	-	to drive away
+	+	smooth	away	the wrinkles	-	+	+	+	+	to remove
+	-	throw	away	the newspaper	-	+	+	-	-	dispose
+	-	toss	away	the papers	-	+	+	-	-	throw away
+	+	tow	away	the car	+	+	+	-	-	tow
+	-	trim	away	the excess	-	+	+	-	-	to cut

Next, entries were sorted by column $N_1 V$ part, to organize by neutrality. In the end, 33% of the collected transitive expressions were neutral. A portion of neutral expressions is available in table 5. Then, sorting entries by column $N_1 V$ revealed that 15% of the collected transitive entries were neutral, even without the particle *away* present. One expression like this is *boil away*, as shown below.

- (19) a. *Boil away the water*
 b. *The water boiled away*
 c. *The water boiled*

Table 5 : A selection of neutral away expressions

$N_0 =:$ Nhum	$N_0 =:$ N-hum	Verb	Particle	N_1	$N_1 =:$ Nhum	$N_1 =:$ N-hum	$N_0 V N_1$	$N_1 V$ Part	$N_1 V$	Synonym/ Definition
+	+	boil	away	the water	-	+	+	+	+	to boil a liquid until it is completely gone
+	-	fritter	away	the time	-	+	-	+	-	to goof off
+	+	peel	away	the layers	-	+	+	+	+	to peel
+	+	pull	away	the layers	+	+	-	+	-	to remove with pulling motion
+	-	rinse	away	the soap	-	+	-	+	+	to remove by rinsing
+	+	sand	away	the scratches	-	+	-	+	-	to remove by sanding
+	+	smooth	away	the wrinkles	-	+	+	+	+	to remove
-	+	wash	away	the bridge	+	+	-	+	-	destroy
+	-	while / wile	away	your days	-	+	-	+	-	to spend time relaxing

Another interesting finding in the set of neutral transitive expressions, was that in some cases, verbs that were not typically neutral, became neutral with the particle *away*. The examples below show that the verbs *pull*, *sand*, and *wash* became neutral when followed by *away*.

- (20) a. **The layers pull*
b. *The layers pull away*
- (21) a. **The scratches sand*
b. *The scratches sand away*
- (22) a. **The bridge washed*
b. *The bridge washed away*

Additionally, the transitive expressions collected in this table showcase several further examples of the telic *time-away* constructions discussed by Y. Ishizaki (2012), some of which are listed below.

- (23) a. *Dwindle the time away*
b. *Chat the evening away*
c. *Dream the afternoon away*
d. *Fret my years away*
e. *Fritter the time away*
f. *Idle the morning away*
g. *Wile your days away*

Similarly, the data in these tables also show several examples of telic *away* expressions, where the meaning extends from wastefulness of time to wastefulness of other resources, like money or property. A few examples of these expressions are shown in the example below.

- (24) a. *Sign away one's rights*
b. *Squander away one's fortune*
c. *Gamble away one's savings*

Another interesting find within the table of transitive *away* expressions collected during this study, was an instance of an immoveable particle. This entry is shown in the example below.

- (25) a. *Get Max away*
b. **Get away Max*

The reason why this particle cannot be separated from the verb in this example, probably has something to do with the verb *get*. However, it is difficult to make powerful statements about this structure, since it is the only entry with an immoveable particle in this study. Other examples of *away* expressions with immoveable particles likely exist, but the data collection methods used in this study were not favorable for their inclusion. In an effort to avoid recording prepositional and adverbial *away* expressions, examples were tested with movement. For this reason, constructions with immoveable particles like that in (25) were likely excluded during the data collection process.

Intransitive & Phrasal-Prepositional Expressions

Sample sections of Lexicon-Grammar tables for intransitive and phrasal-prepositional expressions with the particle *away* are shown in Table 6 and Table 7 respectively. However, due to time constraints, these tables were not analyzed as thoroughly as the transitive expressions.

Table 6 : A selection of intransitive away expressions

N_0 =: Nhum	N_0 =: N-hum	Verb	Particle	N_0 V	Synonym/ Definition
+	-	beaver	away	-	to work hard at something
-	+	blare	away	+	to play noise loudly
+	+	blast	away	+	to play music loudly
-	+	blaze	away	+	to burn strong
+	-	chat	away	+	chat continuously
-	+	crumble	away	+	to disintegrate
-	+	die	away	+	to lessen gradually
+	+	dwindle	away	+	to waste
+	+	ebb	away	+	to gradually become weaker until it disappears
+	+	faint	away	+	to faint
+	+	fall	away	+	to break away
+	-	gabble	away	+	to talk continuously
+	-	hammer	away	+	to hit something continuously, making a loud noise
+	-	jabber	away	+	to talk quickly and continuously
-	+	melt	away	+	to gradually disappear
+	-	peg	away	-	to work consistently
+	+	rot	away	+	to decay by a gradual natural process until it disappears
-	+	rust	away	+	to deteriorate through rusting
+	-	slog	away	-	to work hard at something for a long time
-	+	slope	away	+	to tilt downwards
+	-	toil	away	+	to work hard for a long period of time
-	+	trail	away	+	to gradually become quieter before stopping
+	-	type	away	+	to type continuously
+	+	whittle	away	+	to gradually reduce in amount, value, or effectiveness
+	+	wither	away	+	to shrivel
+	+	work	away	+	to keep working hard for a long time

Table 7 : A selection of phrasal-prepositional away expressions

N ₀ =: Nhum	N ₀ =: N-hum	Verb	Particle	Prep	N ₁	N ₁ =: Nhum	N ₁ =: N-hum	N ₀ V part N ₁	N ₀ V prep N ₁	N ₀ V N ₁	N ₁ V Part	N ₁ V	Synonym/ Definition
+	-	bang	away	at	the keyboard	-	+	-	+	+	-	-	to hit repeatedly, causing harm or making noise
+	-	beaver	away	at	new projects	-	+	-	-	-	-	-	to work hard at something
+	-	blast	away	at	the president	+	+	-	-	+	-	-	to criticize
+	+	blaze	away	at	the deer	+	+	+	-	-	-	-	Shoot quickly
+	+	chip	away	at	the list	+	+	+	+	-	-	-	to gradually reduce or make disappear
+	+	do	away	with	distractions	+	+	-	-	-	-	-	to remove
+	+	eat	away	at	his confidence	+	+	+	+	-	+	-	to erode
+	+	gnaw	away	at	the crops	-	+	+	+	+	-	-	to chew away
+	+	grind	away	at	the enamel	-	+	+	-	+	+	-	wear out
+	+	hack	away	at	the overgrowth	-	+	+	+	-	-	-	to cut with repeated movements
+	-	hammer	away	at	the paper	-	+	-	-	-	-	-	to work hard at something for a long time
+	+	nibble	away	at	our savings	+	+	+	+	-	-	-	to gradually reduce
+	-	peg	away	at	the work	-	+	-	-	-	-	-	to work consistently
+	-	plug	away	at	the puzzle	-	+	-	-	-	-	-	to work consistently
+	-	slog	away	at	the job	-	+	-	-	-	-	-	to work hard at something for a long time
+	-	toil	away	at	the budget	-	+	-	-	-	-	-	to work hard at something for a long time
+	-	whittle	away	at	their habitat	-	+	+	+	-	+	-	to gradually reduce in amount, value, or effectiveness
+	+	work	away	at	the table	-	+	-	+	-	-	-	to keep working hard for a long time

All in all, this research illustrates how productive the particle *away* is in English; this productivity is illustrated both by the particle's compositionality and frequency of use.

Further Research

Moving forward, these Lexicon-Grammar tables will be maintained for future analysis. This maintenance includes continuing to collect more entries of *away* expressions, and adding supplemental columns to further categorize and analyze entries. Thorough analysis of phrasal-prepositional and intransitive tables would be worthwhile for improved description of this particle.

Additionally, continuation of this research should seek to further describe cases of immoveable *away* particles within phrasal verb expressions. The potential for analysis with the free parsing software, NooJ, is also sure to be a rewarding extension of this research.

LIST OF REFERENCES

- Allen, R. E. (2006). *The Penguin Complete English Dictionary*. [electronic resource] (2nd ed.). Penguin.
- Bolinger, D. (1971). *The Phrasal Verb in English*. Cambridge, Massachusetts: Harvard University Press.
- Davies, Mark. (2008-) *The Corpus of Contemporary American English (COCA): 600 million words, 1990-present*. Available online at <https://www.english-corpora.org/coca/>.
- Dehe, N. (2001a). Transitive particle verbs in English: The neutral order. Evidence from speech production. In N. Dehe, & A. Wanner, *Structural Aspects of Semantically Complex Verbs* (pp. 165-189). Berlin/Frankfurt/New York: Peter Lang.
- Dehe, N. (2002). *Particle Verbs in English: Syntax, information structure and intonation* (Vol. 59). Amsterdam/Philadelphia: Linguistik Aktuell/Linguistics Today.
- Fraser, B. (1976). *The Verb-Particle Combination in English*. Cambridge, Massachusetts: Academic Press.
- Garcia-Vega, M. (2011). Transitive phrasal verbs with the particle *out*: A lexicon-grammar analysis. *Southern Journal of Linguistics*, 75-110.
- Gross, M. (1979, December). On the failure of generative grammar. *Language*, 55(4), 859-885.
- Gross, M. (1992). The argument structure of elementary sentences. *Language Research*, 28(4), 699-716.
- Gross, M. (1996). Lexicon Grammar. *Concise encyclopedia of syntactic theories*, 244-258.
- Hiltunen, R. (n.d.). On phrasal verbs in Early Modern English: Notes on lexis and style. In D. Kastovsky (Ed.), *Studies in Early Modern English* (pp. 129-140). Berlin and New York: Mouton de Gruyter.
- Ishizaki, Y. (2012). A usage-based analysis of phrasal verbs in Early and Late Modern English. *English Language and Linguistics*, 16(2), 241-260.
- Jackendoff, R. (2002). Chapter 6: Lexical storage versus online construction. In *Foundations of language: Brain, meaning, grammar, evolution* (pp. 152-195). Oxford, New York: Oxford University Press.

- Jackendoff, R. (2010). *Meaning and the lexicon: The parallel architecture, 1975-2010*. New York: Oxford University Press.
- Machonis, P. (2018). Linguistic resources for phrasal verb identification. *The 27th international conference on computational linguistics: Proceedings of the first workshop on linguistic resources for natural language processing* (pp. 18-27). Santa Fe, New Mexico: The Association for Computational Linguistics.
- Machonis, P. A. (1985). Transformations of verb phrase idioms: Passivization, particle movement, dative shift. *American Speech*, 60(4), 291-308.
- Machonis, P. A. (2004). Syntax of Idioms. *Journal of Applied Linguistics, Special Issue on Lexicon-Grammar*, 94-109.
- Machonis, P. A. (2008). Disambiguating phrasal verbs. *Linguisticæ Investigationes*, 31(2), 200-212.
- Machonis, P. A. (2009). Compositional phrasal verbs with up: Direction, aspect, intensity. *Linguisticæ Investigationes*, 32(2), 253-264.
- Machonis, P. A. (2010). English Phrasal Verbs: from Lexicon-Grammar to Natural Language Processing. *Southern Journal of Linguistics*, 34(1), 21-48.
- Olson, S. (2000). Against incorporation. *Linguistische Arbeitsberichte*, (74), 149-172.
- Sag, I. A., Baldwin, T., Bond, F., Copestake, A., & Flickinger, D. (2002). Multiword Expressions: A Pain in the Neck for NLP. *Proceedings of the Third International Conference on Intelligent Text Processing and Computational Linguistics*, 1-15. Mexico City: Cicing.
- Silberztein, M. (2016). *Formalizing natural languages: The NooJ approach*. Hoboken, New Jersey: John Wiley & Sons, Inc.
- Thim, S. (2012). *Phrasal Verbs: The English Verb-Particle Construction and its History*. Berlin: De Gruyter Mouton.
- Tiv, M., Gonnerman, L., Whitford, V., Friesen, D., Jared, D., & Titone, D. (2019). Figuring Out How Verb-Particle Constructions are Understood During L1 and L2 Reading. *Frontiers in Psychology*, 10(1733).