Prolepsis and Resultativity in Latin

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Contents

1 Introduction

Resultatives are a grammatical phenomenon at the crossroads of syntax and semantics which appear in a wide variety of languages, and are notable for their idiosyncratic behaviour[1]. Proleptic adjectives, on the other hand, are a construction described by (Kühner 1879) and others as a semantic oddity in Latin and Greek.

We will argue for the claim that in many cases, prolepsis is none other than resultativity in disguise. The equivalence of the two, briefly suggested by (Pinkster 1990) and as we shall see, the commentaries of Servius, merits attention. This is both because it demonstrates that Latin has adjectival resultatives at all, and because it provides a new way of understanding prolepsis.

The thesis will be structured as follows: we will begin by defining prolepsis and resultativity, and introducing the evidence for viewing cases of the former as cases of the latter. We will then discuss a number of the relevant examples of prolepsis in further detail. Since a modern linguistic perspective is required to define and discuss the resultative, a section will then be dedicated to setting up the theoretical apparatus necessary for discussing the resultative more accurately. The framework used is Construction Grammar (c.f. section 3.1), for reasons discussed in section 3.1.6.

With this framework in hand, we will proceed to a number of important questions, concerning the features of the Latin resultative and their respective causes. This will lead to a discussion of linguistic typology, a field where the resultative plays a central part. Finally, we will consider a lexical semantic phenomenon that encompasses the resultative, and show how it accounts for another Latin idiosyncrasy, the internal accusative.

English will be used to provide examples of resultativity throughout. While it is not necessarily the case that Latin behaves in the same way as English with respect to the resultatives, cross-linguistic studies have shown the phenomenon to obey similar constraints in a number of languages, and as such, it provides fairly representative examples.

Before beginning, it is worth laying out some of the central questions to be addressed in the

[1] See section 2.2 and then section 3.1 for definitions.

coming sections:

- Can prolepsis be understood in terms of resultativity?
- What are the restrictions governing the usage of resultatives and prolepsis in Latin? How do they compare to the constraints on resultativity found in other languages?
- Are Classical Latin resultatives productive?

2 Prolepsis and Resultativity

2.1 So what *is* prolepsis?

Prolepsis develops a number of senses in both the Classical and modern tradition of grammatical commentary on Greek and Latin texts (c.f. Gonda (1958). pp1). The sense of prolepsis with which we are concerned is that used originally by Kühner (1879) and his contemporaries. It describes the situation where an adjective qualifies a noun with a property that the noun does not yet possess at the temporal reference point of modification. To clarify, consider:

(1) a. "tum *sterilis* exurere Sirius agros..." *Aeneid 3.141*

b. tum sterilis exurere Sirius agros
then barren.ACC burn.INF Sirius.NOM fields.ACC
c. "Then Sirius burnt the *barren* fields..."

(2) a. "Sol ruit interea et montes umbrantur opaci" *Aeneid 3.508*

b. Sol ruit interea et montes umbrantur
sun.NOM set.3RD meanwhile and mountains.NOM shadow.PASSIVE.PRESENT
opaci
black.NOM
c. "Meanwhile the sun set and the *dark* mountains were shadowed."

The adjective "sterilis" in (1), which agrees with "agros" in case and gender, seems to designate a state of the fields after the event of the verb. In other words, we would expect the fields to be barren only after they have been burnt. Likewise in (2), "opaci" is presumably a quality of the mountains after the shadowing ("umbrantur") has taken place. The other possibility is that "dark" is simply an attribute of the mountains generally, but given that they are being shadowed, it seems like it would be a confusing epithet to choose in this instance. Moreover, Kuhner (1898) notes the parallel phrase in Greek. We therefore describe "sterilis" and "opaci" as *proleptic* adjectives, in reference to their anticipation of the verb.

The reason "proleptic" adjectives are noteworthy at all is that, when normally used, adjectives have a temporal reference of the noun they qualify preceding the verbal event. For instance, in the sentence

(3) John scrubbed the dirty table.

it is understood that "dirty" describes the state of the table before the event of scrubbing. Hence, to say

(4) John scrubbed the clean table

would imply that the table was clean to start with, if we interpreted the adjective in the normal way.

2.2 A first look at resultatives

How then should we translate a phrase such as (1)? We suggest an alternative interpretation, hinted at both by Pinkster (1990, Chapter 8.3.3 on prolepsis) and, as we shall see, by the commentaries of Servius. This is the idea that proleptic adjectives are in fact resultative predicates.

Rather than say "Sirius scorched the barren fields", we should instead translate the phrase as "Sirius scorched the fields barren". This construction is called the resultative, because the adjective (here, "barren") denotes the result of the verbal event. English examples include the following:

(5) *John* scrubbed the *table clean*.

(6) John kicked the ball *down the hill*.

(7) *The pond* froze *solid*.

(8) John drank the *pub dry*.

(9) John sang *himself hoarse*.

In each of the above cases, the italicised adjective is the *resultative predicate* (henceforth RP). Consider (5) for instance. By contrast to (4), "clean" here describes the table, but only *after*, not before it has been scrubbed. Moreover, the table is clean as a *result* of being scrubbed.

In English, the RP need not be an adjective, but can also be a prepositional phrase, as shown above. The resultatives which are relevant for prolepsis, however, are those where the RP is an adjectival phrase[2] (henceforth AP resultative).

The sister phenomenon to the resultative is the depictive, as in:

(10) John drank the coffee cold.

Here, "cold" describes the coffee at the time at which it is drunk, and not, for example, as it was when first made. Resultative and depictive predicates as a class are known as secondary predicates. In examples (11), (12), "was happy" and "slept" respectively function as primary predicates, whereas in (13), "be happy" is a depictive secondary predicate.

(11) She was happy.

(12) She slept.

(13) She slept happy.

The consequence of claiming that proleptic adjectives are really RPs is that a new class of resultatives are found in Latin, namely AP resultatives, which otherwise do not seem to appear in the language. This is particularly significant given the contradictory view of (Acedo-Matellán 2009), which we shall discuss in section 4.1.

One might wonder whether this is simply a rebranding of proleptic adjectives, and has no substantial impact for their interpretation. This is not the case, since the resultative interpretation adds a new element of meaning, namely that the new state of the noun is the result of the verbal event. Moreover, the resultative is a heavily researched phenomenon, and to identify it with prolepsis sheds new light on the Latin data. One of the key questions we will ask is whether generalisations about resultatives in other languages also hold in Latin. Before this, however, we will examine and analyse a number of examples of prolepsis in Latin.

[2]An example of an RP being an adjectival *phrase* rather than a single adjective is, "He beat them *completely senseless*".

2.3 The Latin Data

The data, i.e. the examples of prolepsis in Latin, consist firstly of the examples provided by (Kühner 1879). To these are added examples found by my own reading of Latin poetry, as well as Virgilian examples found with the help of Servius' commentaries (see section 2.3.6 below for details). The following is a brief survey of potential AP resultatives in Latin, from those three sources.

2.3.1 Examples from (Kühner 1879)

(14) a. "...premit placida aequora pontus" *Aeneid 10.103*

b. "The sea smoothed the waters calm."

c. premit placida aequora pontus
push.PAST calm.ACC waters.ACC sea.NOM

d. Servius' commentary: "id est, premendo reddit placida." ("That is, by pressing it made it calm.")

This sentence is called proleptic in reference to the adjective "placida". Our reason for thinking that it is not acting normally is quite simple: it wouldn't make sense to smooth the sea if it were already calm. Instead, "placida" must describe the state of the waters after they have been smoothed ("premit"). More generally, our procedure for identifying a proleptic adjective will be to claim that the straightforward interpretation does not make sense pragmatically. We will see this pattern again and again.

We can go further, however, and also claim that the sentence is a resultative: the fact that the sea is calm seems to follow from its being smoothed. So, we can unite prolepsis with a modern linguistic concept, and by so doing, add significant clarity. The first point to note is that in calling the above sentence a resultative, we are claiming that "placida" is the resultative predicate (RP), and describes the effect of smoothing on the rough water. That is to say, the sea is only calm after it has been

pressed.

There is more evidence for the resultative interpretation of prolepsis apart from its explanatory power, however. In his Virgilian commentaries, Servius (*SERVII GRAMMATICI IN VERGILII AENEIDOS LIBRUM PRIMUM COMMENTARIUS*), a 4th century AD grammarian, gives the analysis of (14) seen above: "id est: premendo reddit placida". Servius' commentary confirms what we have hypothesised, that resultativity is the best interpretation.

As we can see from the translation of Servius' commentary, the same paraphrase is available in English for the resultative, i.e. "He made X to be Y by [VERB]ing.". The English gerund is parallelled in the Latin by a gerund, and the verb "reddere" parallels "to make". As we shall see in the following data, Servius' remarks often come in handy, and are discussed in detail in section 2.3.6.

(15) a. "Sol ruit interea et montes umbrantur opaci" *Aeneid 3.508*

b. "Meanwhile the sun rushed on and shadowed the mountains black."

c. Sol ruit interea et montes
sun.NOM rush.PAST meanwhile and mountains.NOM.PL
umbrantur opaci
shadow.PASSIVE.PRESENT black.NOM.PL

We have already encountered this example in section 2.1. Again, a resultative interpretation is motivated by the fact that "opaci" appears to describe the state of the mountains after the event denoted by "umbrantur". Moreover, the shadowing seems to be the *cause* of the mountains being "black". "opaci" can therefore be interpreted as the resultative predicate (RP) of a resultative construction here. Hence we have the above translation, rather than "The black mountains are shadowed."

Unlike (14), the RP here, "opaci", describes the subject ("montes"), since the verb, "umbrantur", is in the passive, and has no object.

(16) a. "Adspicit Alphenor laniataque pectora plangens/ advolat..." *Metamorphoses 6.248-9*

b. "...Alphenor saw and beating his chest bloody, ran over..."

c. laniataque pectora
mangle.PASTPART.ACC.PL.NEUT chest.PL.NEUT
plangens
beat.PRESENT-PART.NOM.SIN

Here, the proposed RP is a participle. This is noteworthy, given the English constraint against participial RPs (e.g. *"He hammered the nail flattened"). Despite this, a resultative interpretation, as above, is semantically the most likely option.

The alternative is to render the phrase as "...beating his already bloody chest, Alphenor ran over.". Judging whether this is a reasonable interpretation relies on the context; is Alphenor's chest plausibly already bloody? Since his name only appears once in the book, this question is hard to answer.

(17) a. "...ut attonitos formidine terreat hostes...sustinet angues..." *Metamorphoses 4.802*

b. "...in order to terrify her enemies numb with fear, she wears a snake..."

c. attonitos formidine terreat hostes
scared.ACC.PL fear.ABL.SING scare.SUBJ.3RD.PRES.PL enemies.ACC.PL

This example introduces an added complexity: the RP, "attonitos" is itself modified by "formidine". This is the reason we were careful to note that the RP could be an adjectival *phrase*, rather than just an adjective. This is a rather convincing example of prolepsis, since one would not have to terrify one's enemies if they were already "numb with fear", as the attributive reading of "attonitos" would suggest.

2.3.2 Other examples from poetry

(18) a. "Pastorem, Tityre, pinguis pascere oportet ouis..." *Virgil, Eclogues 1.3-4*

b. "It is fitting, Tityrus, for a shepherd to graze the sheep fat..."

c. pinguis pascere oportet ovis
fat.ACC.PL graze.INF fitting.IMPERS sheep.ACC.PL

The reason to suspect this of being a resultative is that, semantically, a natural result of grazing one's flock is that they become fat. Servius supports this reading, though without his characteristic paraphrase, by saying: " id est pascere ut pinguescant." ("That is, they graze so that they become fat"). The position of the RP directly before the verb phrase is common in resultatives, as well as depictives in Latin, though this is beyond the scope of the present study.

(19) a. "...cum tibi provectas auferet unda rates." *Propertius, 1.8.14*

b. "...Since the waves carry your boat away, along with you"

c. provectas auferet unda rates
advanced.ACC.PL carry-away.3RD.SING wave.NOM.SING boats.ACC.PL

The RP here, "provectas" could be a participle, but is also used adjectivally in Latin. Thus this sentence does not force us to conclude that participial RPs are present in Latin.

2.3.3 Indirect object

(20) a. "...qua centum quisque parabat inicere anguipedum captivo bracchia caelo" *Ovid Met 1.185*

b. "...when each of the snake-footed giants prepared to throw his hundred arms around the sky and imprison it."

c. qua centum quisque parabat inicere anguipedum
when hundred each.NOM prepare.IMP throw.INF snake-footed-ones.PART-GEN
captivo bracchia caelo
captive.DAT.SING arms.ACC sky.DAT

"*captivo*" is considered to be proleptic since the sky only becomes captive after the arms have been thrown around it. The giants' aim was the capture of the sky, and this is the *reason* they throw their arms around it. Hence the temporal reference of "captivo" appears to be subsequent to the event of the verb: after they throw their arms, the sky will be captive.

Whether we can interpret this as a resultative, however, is harder to say. This is because of a cross-linguistic property of the resultative in most languages (see (Giannakidou and Merchant 1999)), that stipulates that the RP cannot be an indirect object of the verb. For instance, one can "rob someone penniless", but not *"steal from someone penniless".

However, it may be the case that this rule does not hold for Latin, and that (20) is indeed a resultative. We return to this issue in section 5.

2.3.4 General Remarks

Looking at the data, it seems that there are enough convincing examples to demonstrate that the AP resultative is present in Latin. However, since examples appear predominantly in poetry, we will assume that it is part of a poetic register, and perhaps not part of the everyday grammar of Latin. There are, however, a few prose examples, as in:

(21) a. "...Ita pacis commoda hoste hortato maiores augebantur copiae..." *De Bello Hispaniensi 1*

b. "...thus encouraged by the comfort of peace, their forces were increased to a greater size..."

c. maiores augebantur copiae
greater.FEM.NOM.PL increase.PASS.IMPERF.3RD.PL forces.NOM.PL

Here, "maiores" is the proposed RP, a word in agreement with the subject of the sentence, "copiae". "maiores" is clearly not describing the forces ("copiae") as they are before the event of the verb, but rather is the result of "augebantur". This is a case of an intransitive resultative.

However, prose examples appear to be quite rare. It is also worth noting the frequency of AP resultatives in descriptions of the sea, and storms, perhaps suggesting a poetic *topos* associated with the phenomenon. Examples include:

(22) a. "Quod si concussas Triton exasperet undas..." *De Bello Hispaniensi 1*

b. “But if Triton roughens the waves restless...”

c. concussas Triton exasperet undas
shaken.ACC.NEUT.PL Triton.NOM roughens.3RD waves.ACC.NEUT.PL

(23) a. “horrificans Zephyrus proclivas incitat undas” *Catullus 64.270*

b. “The terrible east wind stirs the waves forward...”

c. horrificans Zephyrus proclivas incitat
terrible.NOM.SING Zephyr. forward-leaning.ACC.NEUT.PL stir.PRES.3RD
undas
waves.ACC.NEUT.PL

A further question to consider is whether resultatives are a stylistic device borrowed from Greek. The AP resultative is not significantly more common in Greek[3] than Latin, and it is not straightforward to demonstrate that it is borrowed. Even supposing we accepted that the resultatives in Latin were in fact Greek borrowings, it still seems possible to maintain that they consequently came to exist in Latin, as a result of this borrowing. It is important at this point to clarify what we mean when we say that resultatives *exist* in a given language. This rests on the concept of productivity.

A phenomenon is said to be productive in a given language if it can be used to produce potentially unlimited new utterances. For instance, we say that resultativity is productive in English because a whole host of different resultatives can be generated on the spot from a general pattern. Each occurrence of a resultative in English is not itself a separate idiom which has to be learnt, but rather an instance of a more general pattern.

Certain phenomena, however, cease to be productive in a given language, yet still leave traces. For instance, Latin had at one stage a productive system of prefixation to form new verbs, from which “intro”, “impello” and “inficio”, among other verbs, were created.

English inherits many of these words (c.f. “enter”, “impel” and “infect”) and yet we cannot create neologisms like *“in-go” productively. The verbs prefixed with “in” in English are therefore relics of a former stage of productivity, from Latin. Latin resultatives, likewise, could in fact be fossilised idioms, with no internal structure or productivity. We assess this possibility in more

[3]Examples are provided by (Kuhner 1898).

detail in section 5.2.

2.3.5 Methodology

Latin, a non-configurational language, does not have a special syntax for the resultative, unlike English. As a consequence, when claiming that a given adjective is functioning as an RP, it is necessary to use semantic means to establish that the adjective is not acting attributively. For instance, consider the following case:

(24) a. "Iam fulgor armorum fugacis terret equos..." *Horace, Car. 2.1.17*

b. "Now the gleam of the armour terrifies the horses into flight."

c. Iam fulgor armorum fugacis terret equos
Now gleam.NOM armour.GEN terrified.ACC frighten.PRESENT horses.ACC

The above translation of (24) takes a resultative interpretation, with "fugacis" as the RP. However, another interpretation is available; as Nutting (1926) points out, "fugacis" can be read as "likely to flee". We would then translate the sentence as "The gleam of the weapons frightened the flighty horses.". In other words, there is a plausible interpretation of (24) in which there is no resultative construction present, and "fugacis" behaves as a normal attributive adjective. This must be taken into account when assessing the plausibility of a resultative interpretation for (24).

However, in compensation for the loss of syntactic information, Latin provides us with case-marking which allows us to tell clearly which NP a given RP qualifies. This is useful in cases with a transitive verb, where an ambiguity might arise. For instance, in the sentence "John cooked the dinner angry", English relies on semantics to determine that "angry" qualifies "John" and not "dinner", while Latin can turn to case agreement for the same purpose.

Another factor to consider when positing a resultative interpretation for a phrase is whether another construction can better explain the semantics. For example, consider the following example, identified by Kühner (1879) as prolepsis:

(25) a. "...incute vim ventis submersasque obrue puppes..." *Aeneid 1.69*

b. submersas obrue puppes
sunk.PASTPART.FEM.ACC.PL sink.IMP.SING ships.PL.ACC

c. Servius: "ordo est inversus in sensu; ante enim est ut obruantur fluctibus, et sic submerguntur...id est obrue, ut submergas." ("The order is opposite to the meaning; for first it is overturned by the wave, then sunk...that is, "overturn, so that you sink..." ")

As Nutting (1926) points out, the difficulty here is establishing whether this is simply an instance of Latin's common abbreviation of two main verbs by the use of a participle, as seen in Ovid, Met.2.686, where prolepsis is clearly not a possibility:

(26) a. "...memorantur...processisse boves...arte sua silvis occultat *abactas...*"

b. "He drove them [the cows] to the woods and hid them there."

c. silvis occultat abactas
woods.ABL.PL hide.PRES.3RD.SING drive.PASSIVE.PAST.PART

This "telescoping" technique is common in Latin and is clearly not the resultative. As ever, the key to the question is whether "submersas" can plausibly be an RP. As Nutting points out, "obruo" can translate as "bury", allowing for the translation: "Sink and then bury the ships."

Servius' commentary (see above) supports the resultative interpretation; however it is worth noting that his normal syntax for paraphrasing resultatives (the gerund + "reddere" as seen in his commentary on (14)) is absent. Instead, he notes that the order is reversed ("ordo est inversus"), a phrase usually reserved for hypallage. In summary, caution must be taken in differentiating resultatives from Latin's "telescoping" participles.

2.3.6 Servius

One result of our examination of the (Kühner 1879) data was the usefulness of Servius' commentaries, which provided strong evidence for the resultative interpretation of many of the examples.

Due to the fixed format he uses to describe the resultative (i.e. gerund + "reddere"), it was easy to perform a search on Servius' commentaries of Virgil's works in order to find further examples of resultativity in Latin. We performed this search on Perseus' online commentaries of Servius[4]. This was carried out by hand searching a mechanically assembled list of all occurrences of the string "ndo" (the ending of the Latin masculine singular ablative gerund). This proved very useful in finding about a dozen new examples, all of which are of course accompanied by Servius' paraphrase, such as the following:

(27) a. "nam primi cuneis scindebant fissile lignum." *Georgics 1.144*

b. "For the first men tore the wood apart with wedges..."

c. scindebant fissile lignum
tore.IMPERF.3RD asunder.NEUT.SING wood.NEUT.SING

Servius offers two possible interpretations, one resultative and one not: "aut scindendo fissile faciebant, aut ibi scindebant, ubi fissile erat.". The first possibility is a straightforward resultative, of the kind seen in the above data. The second explains "fissile" by taking it in its other sense, of "easily splittable" rather than "split" and treats it as a normal attributive adjective. As we can see, Servius is taking into account the same sorts of semantic arguments that we have been, for instance in (24). He often provides more than one possible interpretation, and whether or not any particular sentence is indeed a resultative, he clearly regards it as a possibility in Latin. Moreover, the fact that Servius felt the need to paraphrase the resultative at all is very telling. We will return to this point when discussing whether the Latin resultative is productive, in section 5.2.

[4]The XML texts can be found on Perseus' online edition of Servius at `http://www.perseus.tufts.edu/hopper/text?doc=Perseus%3Atext%3A1999.02.0053&redirect=true`

2.3.7 Examples found from Servius

(28) a. "tu facito mox cum matura adoleverit aetas..." *Aeneid 12.438*

b. "Make sure that soon, when your age grows ready..."

c. matura adoleverit aetas
ripe.NOM grow.FUT-PERF.3RD age.NOM

Like (15), this example is intransitive. Accordingly, Servius does not paraphrase with the transitive verb "facere", but rather as follows: "adulescendo matura esse coeperit.". This indicates that he sees "matura" as the result of the process of growing ("adolescendo").

3 Linguistic Analysis

3.1 The Appropriate Framework

As we have seen, a number of questions regarding the status of resultatives in Latin have been raised, in particular:

- Do Latin resultatives behave as in other languages?
- Which restrictions govern the use of resultatives in Latin?
- Are Latin resultatives productive?

To attempt an answer to these and similar questions, it is necessary to lay out a more precise notion of what the resultative is.

Resultatives happen to be a particularly interesting linguistic phenomenon, and are the focus of much attention in recent linguistic research. In particular, they lie at the centre of many debates over the distinctions between syntax and semantics, and are approachable from the perspectives of many different linguistic theories. Useful summaries of the different approaches can be found in (Zhang Jun 2009) and (Napoli 1992).

These various theories can be divided into two categories, which differ on the basis of whether they attempt to account for the distribution of resultatives based on syntax[5], or instead introduce semantic primitives[6] to capture them.

Following (Goldberg and Jackendoff 2004), I have chosen to use a semantic approach, namely Construction Grammar. It has several advantages, including its intuitive simplicity, descriptive power and allowance for consideration of event semantics (as outlined in section 3.1.2). Moreover, resultatives are one of the flagship cases of the construction based approach, and as we shall see are particularly well-suited to it.

The following sections provide a brief introduction to the construction based framework; for a more in-depth overview, the reader is directed to (Goldberg 2003) or (Jackendoff 2003), chapter 6. Readers already familiar with construction grammar can skip to section 3.1.3.

3.1.1 An introduction to construction

Construction based approaches attempt to represent our knowledge of a language as a set of form-meaning pairings. Traditionally, the form-meaning pairings of a language are seen to be the words in the lexicon, with the semantic structure of the sentence being composed from the meanings of the words. For instance, the meaning of "The house is on fire" is composed from the meanings of the constituent words. This means that we do not need to have its meaning stated explicitly in our knowledge of English; it follows from the meanings of its parts.

The motivation for Construction Grammar is the fact that semantics is not always compositional on the basis of words alone. That is to say, the meanings of the parts of a phrase or sentence do not always determine the sentence's meaning. This is evidenced by idioms like "let the cat out of the bag", among others. If we tried to understand this phrase's meaning in terms of the individual words, we would end up with a literal interpretation, but not the idiomatic meaning of the phrase, i.e. "to make a secret known". Therefore, in our knowledge of English, we need

[5] As in (Jaume Mateu Fontanals 2000).

[6] One concrete consequence of the difference is in whether we attribute to depictives and resultatives different syntactic forms; for instance, is the difference between "eat it hot" and "heat it hot" entirely semantic?

to include the mapping between this phrase and its meaning; its meaning does *not* simply follow from the meanings of its parts.

A slightly more abstract example of an idiom, i.e. a phrase whose meaning is not composed from the meanings of its parts, is the complex predicate "look forward", meaning "to be excited about". This is more abstract because "look forward" can appear in different tenses. Thus, it is not so much an idiom as a set of idioms. The question, then, is how do we represent the knowledge that every English speaker has of what each of these different occurrences ("looked forward", "looking forward", etc.) means?

The troubles really start when we encounter yet *more* abstract idioms, such as "[VERB] one's way across America", as found in sentences such as "He battled his way across America.", "He juggled his way across America."

By instantiating any number of verbs ("juggle", "dance", "parade") one can create novel idioms from the abstract scheme. Even "across America" can be replaced by any number of PPs to produce new idioms in a productive fashion. Clearly, then, we do not want to provide a separate idiom in our lexicon for each of these related sentences.

The construction based approach is inspired by this problem, and attempts to solve it by allowing mappings not only between words and meaning, but between syntactic forms and meaning. In other words, rather than have a mapping in the lexicon between a whole number of related expressions (as in "[dance/juggle/hop] one's way across America") we instead have a mapping from the general schema "[VERB] one's way across America." to a semantic unit consisting roughly of "make one's way across America while/by [VERB]ing". Goldberg (2003) and others continue even further on this path of generalisation, until even phrase structure rules become part of the lexicon. In this view, the whole language resides in the lexicon, consisting of this variety of form-meaning mappings, which are known as constructions.

As a further example, consider the idiom schema "[VERB] a hole in [NOUN]", as found in "Burn a hole in the carpet" and "Drill a hole in the wall".

The construction representing this pattern would informally look as follows:

"[VERB] a hole in [NOUN]" goes to "Make a hole in [NOUN] by [VERB]ing."

Of course, we cannot simply plug any verbs and nouns into the free argument slots; one cannot "climb a hole in the wall" (under a resultative reading), but nevertheless, the construction is capable of producing a host of entirely new idioms. Chances are that the reader has never encountered the phrase "to butter a hole in one's toast", and yet can understand its meaning instantly.

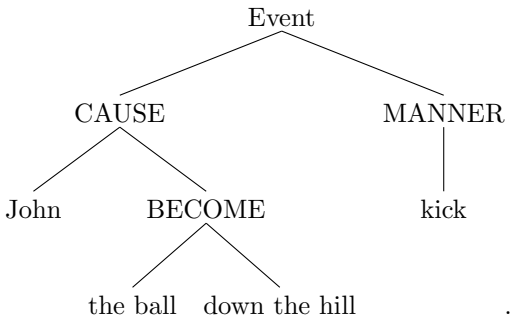
As the reader may have already surmised, the resultative can be treated as just such an idiom schema. Before setting this out in more detail however (see section 3.1.6), we need to add some precision to our notion of semantics.

3.1.2 Event Semantics

Natural language semantics is a complex area in its own right, beyond the scope of this document. The key idea, however, is that sentences in natural language can be translated into a more formal language that capture their meaning. Following the Davidsonian approach (Davidson 2001) we take events to be semantic primitives. This means that a sentence such as "John ran quickly" is rendered semantically as, roughly speaking, "There was an event of running, by John, that was quick."

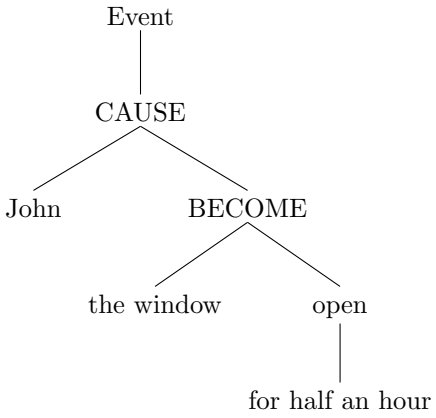
Following Jackendoff, we then enrich Davidson's model by allowing these events to have types, such as CAUSE, MOTION or STATE[7]. Furthermore, we allow the events to have events as arguments, so that our semantic representation ends up with a branching structure reminiscent of a syntactic tree. For instance, the sentence "John kicked the ball down the hill" is represented semantically as

[7] "He entered the room" would denoted a simple MOTION event, while "He is ill" would be a STATE event. We follow Jackendoff's convention in using all-capitals to designate such event types.



We have significantly modified and simplified Jackendoff's model, in order to avoid the use of lambda extraction (for the original, see (Jackendoff 2002), chapter 12.2), and therefore the picture we present is somewhat informal. The general idea, however, is that, the above tree denotes an event composed of two subevents, of which the left describes how John causes the ball to go down the hill, and the right tells us how, namely by kicking it.

As a brief example of how event structure can be useful, we borrow an example from (Wechsler and Noh 2001) of the sentence "John opened the window *for half an hour*." We would ordinarily expect the PP (here italicised) to modify the event denoted by the verb, but it is obvious that the process of opening the window does not itself last for half an hour. So what does the PP semantically modify? The answer is that it modifies the result of the event, which though implicit in the syntactic form, is stated in the semantics. In other words, the verb "open" is taken to have a semantic structure of "cause to be open". Thus, the semantic structure of the whole verb phrase resembles:



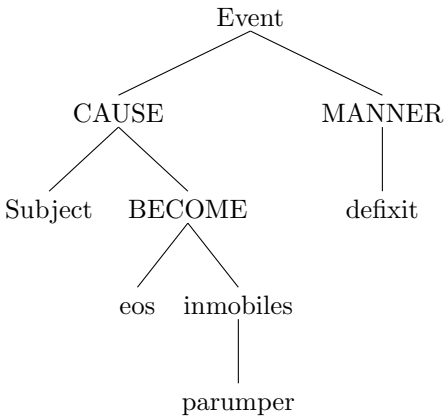
This situation is found in none other than a Latin example of resultativity , as follows:

(29) a. "...utraque simul obiecta res oculis animisque inmobiles parumper eos defixit..." *Ab Urbe Condita 21.33.3*

b. "...The double impression made on their eyes and imagination fixed them motionless for a short while..."

c. inmobiles parumper eos defixit
motionless.ACC.PL.MASC briefly.ADV them.ACC.PL.MASC fix.PAST.3RD.SING

Here, we have the phrase "...inmobiles parumper eos defixit..." ("It fixed them motionless for a while"). The temporal adverb "parumper" does not modify the verb "defixit" but rather the stative event *inside* the main event. Hence we have "inmobiles parumper eos defixit" represented as



3.1.3 Productivity

The notion of productivity, which we outlined in section 2.3, is particularly easy to capture within the framework of Construction Grammar. In this context, to say that an idiom is productive is to say that there exists a construction for it, rather than separate constructions for each of its instances. For example, the idiom "the [X]er the [Y]er" can be instantiated with a variety of adjectives, yielding "the more, the merrier", "the faster the better", etc. The idiom is considered productive because there is a single construction rather than individual constructions for each of the instances.

So, in the case of the Latin AP resultative, the question is whether each instance has its own construction, or whether a single general construction serves all the different instances. If the latter is the case, then the AP resultative is productive in Latin. We shall return to this question in section 5.

3.1.4 Complexity

Before tackling the resultative, an important distinction must be made. As our notion of the resultative stands, it is no different from sentences containing factitive verbs, such as "He made the cake better". Latin contains equivalent factative verbs, such as "ago" ("make") and "facio" ("make"), as in "...mota quod obscuras ungula fecit aquas." *Ovid, Fasti 4.758* ("that trampling hooves have muddied your waters").

However, there seems to be a difference between factitives like "John made the mushrooms black." and "true" resultatives. The distinction can be brought out by the intuitive paraphrase of resultatives – the very one which Servius suggests in his commentary (see section 2.3). This rephrases a resultative of the form "He [VERB]s [NOUN] [RESULT]" as "He caused [NOUN] to become [RESULT] by [VERB]ing it."

(30) He caused the mushrooms to become black by cooking them.

(31) *He caused the mushrooms to become black by making them.

As we can see, no resultative with "make" as the main verb is grammatical under this paraphrase. The difference between the two verbs seems to be that "cook" adds a *manner* component that "make" lacks.

Therefore, we will consider complex resultatives to be ones where there is not only an event of CAUSE, but a manner in which it happens, in the semantic structure. We shall refer to resultatives without any manner component as simple resultatives and to the verbs in them (such as "make" and "render") as "light verbs". The presence of a simple resultative in Latin

has never been in doubt; it is present in factative verbs such as “facio” and “ago”. It is the complex resultative, with adjectival phrase results, that is our object of interest.

With this in mind, we should modify our above question to the following: does Latin have a productive complex AP resultative?

3.1.5 Variation

Goldberg and Jackendoff (2004) note a number of axes of variation within the complex AP resultative. Two key modes of variation are as follows:

- transitive vs intransitive:

  “She hammered the nail flat.”

  “The lake froze solid.”

- selected vs unselected:

  “He hammered the nail flat.”

  “They drank the pub dry.”

Our brief survey of the (Kühner 1879) data has shown both transitive and intransitive resultatives to be present in Latin. The second axis of variation, however, is of particular interest as regards the construction based approach. Unselected resultatives employ verbs which are either intransitive or unable to select the given object outside of the resultative construction. That is, one can “drink the pub dry” and “sing oneself hoarse” but can neither *“drink a pub” nor *“sing oneself”. Advocates of the construction based approach see this as evidence for viewing the object (i.e. the noun phrase to which the RP belongs) as not the object of the verb, but rather as an argument of the construction.

For largely these reasons, a distinction is often drawn between selected and unselected resultatives in cross-linguistic studies, with the latter tending to be less common (c.f. Washio (1997)). As

such, one question to consider is whether AP resultatives can be unselected in Latin. None of the data of AP resultatives seem to suggest that they can. However, when we look at pre-verb resultatives in section 3.2.1, we will see that these *can* be unselected.

3.1.6 The Resultative Construction

It is finally time to put together these frameworks, and pin down the resultative. Our semantic model, which is adapted from (Jackendoff 2003) is straightforward, and essentially follows Servius' paraphrase. The resultative construction shows how the syntactic structure maps to the semantic one, and as such, consists of two co-indexed trees. Since Latin has no fixed word order, we take the syntactic trees to represent no particular linear order. The following is the transitive resultative construction:

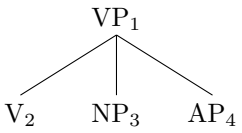


Figure 1: Syntax

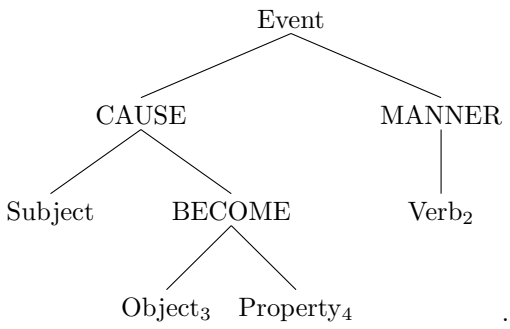


Figure 2: Semantics

We have skimmed over some of the semantic details in Jackendoff's analysis in the interest of simplicity, but the overall picture is clear: the resultative construction translates the syntactic form into a semantic structure in which the RP is the result of a CAUSE event, and the verb conveys a manner event. The subscript numbers indicate which parts of the syntactic structure correspond to which parts of the semantics. The unsubscripted "Subject" is the free argument of the construction, which the syntactic subject corresponding to the VP will agree with.

3.2 Returning to Latin

Armed with a more precise understanding of resultatives, we can now attempt to answer some of key questions raised by the Latin data, with consideration of the data from the appendix.

3.2.1 What sorts of resultative does Latin have?

Our discussion so far has been focused on AP resultatives, but it is worth considering whether resultatives with any other sort of RP are present in Latin. In fact there are, in the form of preverb resultatives[8].

(32) a. "Serpentes putamina *ex*tussuint" *Pliny, Nat. 10.197*

b. "Snakes cough the egg shells *out*."

c. Serpentes putamina ex tussiunt
Snakes.NOM.PL eggshells.ACC out coughed.PERF.3RD

(33) a. "*E*dormi crapulam, inquam." *Cic.Phil. 2, 30*

b. "Sleep *off* that hangover, I said."

c. e dormi crapulam
off sleep.IMP hangover.ACC

(34) a. "Veniebat...ut sudorem illic *ab*lueret." *Sen, Epist. 86.11*

b. "He used to go there to wash his sweat *off*."

c. sudorem illic ab lueret
sweat.ACC there off wash.IMPERF-SUBJ.3RD

Latin resultative pre-verbs are in fact extremely common; other examples include common compound verbs such as "congredior" ("meet": literally "with-go") and "inno" ("swim towards": literally "to-swim")[9]. However, in many cases, the compound verb has lexicalized, so that the preverb and verb are taken as a single fixed unit in the lexicon. by contrast, the above examples

[8]The following are taken from Acedo-Matellán and Mateu (2013)

[9]Although a more detailed consideration is merited, it seems reasonable to suggest that the pre-verbs forming the first element of compound verbs in Latin are always either depictive or resultative predicates.

appear to be productive, so that the general resultative *construction* is employed to create new preverb-verb compounds. Moreover, the reason the three above examples have been chosen is that they are all unselected, in the sense defined in section 3.1.6. That is, the simple versions of the verbs in question, "tussio", "dormio" and "luo" are all intransitive. Hence, *"ego eum tussio" is ungrammatical, and so on.

The compound verbs seen in (32), (33) and (34), however, are transitive. Given the importance placed on "strong" resultatives by Washio (1997) and others, this is an important feature of Latin. Moreover, these clear examples of pre-verb resultative predicates prove an important point: whether or not *AP* resultatives are a indigenous feature of the language, Latin *does* already have one form of resultativity.

Moving on from preverb RPs, another category to note are PP resultative predicates. English examples include:

(35) He kicked the ball out of the room.

(36) The snowman melted into a puddle.

Although these PP resultatives are outside the focus of this dissertation, it is worth noting that examples are indeed present in Latin, as in:

(37) a. "...in frondem crines, in ramos bracchia crescunt." *Ovid Met. 1.550*

b. "Their arms grew into branches - their hair into leaves."

(38) a. "...liquitur in lacrimas..." *Met. 15.549*

b. "She melted away into tears."

3.2.2 Does Latin have participial RPs?

English disallows participles from being RPs, as the following ungrammatical sentences demonstrate:

(39) *He drained the lake dried.

(40) *He eats himself sickened.

This even extends to simple resultatives, such as

(41) *Make a nail flattened.

Another reason for suspicion of the apparent participial RPs in Latin is that non-resultative interpretations are often available for these data. For instance, the following is cited as an example of prolepsis by (Kühner 1879):

(42) a. "tum litore funem deripere *excussosque iubet laxare rudentis*." *Aeneid 1.266-7*

b. excussos iubet laxare rudentis
shaken.PAST-PART.ACC ordered.PERF.3RD release.INF ropes.ACC

At first glance, "excussos" appears to be an RP, since it describes the state of the sails after they are unfurled ("laxare"). We might try to translate the relevant phrase as "loosen the sails unfurled" or the like. However, the participle is much more likely to be an instance of Latin's method of avoiding two main verbs, as discussed in the case of (25). With this in mind, we could abandon our resultative interpretation, and instead give the participle and main verb equal roles in the sentence, as in "He ordered them...to loosen and unfurl the sails."

An example of a case where a resultative interpretation is even more problematic is:

1. "...quo simul ac venit, frenatos curribus angues iungit..." *Fasti 4, 497-8*
2. "...As soon as she came, she yoked snakes fast to her chariot..."
3. frenatos curribus angues
restrain.PAST.PART.MASC.ACC.PL chariot.DAT.PL snakes.ACC.PL
iungit
yoke.PRES.3RD.SING

In order for this to be a resultative, "frenatos" would have plausibly to be the result of "iungit". This, however, is problematic, since "iungo" translates to "yoke" and "freno" to "bridle". Therefore it is much more likely that the correct translation is "She...bridled the snakes and yoked

them to the chariot." In summary, the various difficulties over past-participial RPs raise doubt over their existence in Latin.

Present participle RPs, however, seem to found in Latin, though perhaps in an adjectival role:

(43) a. "...alli stridentia tingunt aera lacu." *Aeneid 8.450-1*

b. "...others dipped the bronze in the lake, making it screech."

c. stridentia tingunt aera
screeching.PL.ACC dip.PERF.3RD bronze.PL.ACC

Here, "stridentia" certainly seems to anticipate the verbal event (i.e. the bronze being dipped in the lake), and Servius notes: "tingendo stridere facuint". This example is of semantic interest since, unlike most of the data, the AP (here a present participle) does not describe a state but an event; the bronze screeching. This is mirrored by the fact that Servius uses a verb, "stridere", rather than an adjective, in his paraphrase. In English, a resultative of this sort would be expressed with an infinitive, as in the translation of (43) or the sentence "John made Alice go." (rather than *"John made Alice going.").

Servius gives two other examples of present participles as RPs in his commentaries:

(44) a. "solus hic inflexit sensus animumque labantem inpulit." *Aeneid 4.22-23*

b. "...He alone stirred my senses and drove my mind weak."

c. animum que labantem inpulit
mind.ACC and.ENCLITIC slipping.ACC drove.3RD.PERF

Servius mentions this line in his commentary of *Aeneid 1.9*, saying: "hoc est inpellendo fecit labantem" ("That is, by pressing [the mind], he made it weak." This seems to support a resultative reading, however in his commentary on the line itself, he paraphrases: "id est inpulit et labare fecit." ("That is: He pressed and made it waver."). The key difference, is that the first paraphrase uses "labantem" (the present participle) to convey the result, while the second uses an infinitive, as in (43). It seems that once again, the RP here conveys an action, not a state.

(45) a. "...Cupido...donisque furentem incendat reginam..." *Aeneid 1.658-60*

b. "...Cupid incites the queen to madness with gifts."

c. furentem incendat reginam
raging.ACC incite.PERF.3RD queen.ACC

Here, Servius notes: "incendat et furere faciat, ut "animumque labantem inpulit" " ("He incites and makes her rage, as in "animumque labantem inpulit." "). Servius uses the verbal translation and compares the example to the one we discussed previously. It seems, therefore, that Latin allows the use of present participles as RPs in Latin, but with a different meaning, namely to convey resultant events, not states. In this respect, it differs from English.

We can now turn to a more general line of inquiry, investigating what we can learn about the semantics of Latin, based on the presence of the resultative.

4 Typology

4.1 Satellite-Framed Languages

As it so happens, the resultative turns out to be very relevant to discussions of cross-linguistic typology, the field which aims to categorise languages according to their properties.

The presence of AP resultatives in Latin, therefore, may tell us about other properties of the language, at least within the poetic register. We will look in particular at the satellite-framed/verb-framed distinction introduced by Talmy in (Talmy 1987).

This distinction concerns the way in which different languages express "motion events", i.e. situations where an object moves, or is caused to move, from one place to another.

Talmy notes the difference between the English

"The ball floated into the cave."

and the Spanish

"La pelota entró corriendo a la cueva."

He notes that in English, the "manner" of motion, i.e. the way that the object moves (which in this case is by floating) is expressed by the verb ("floated") whereas in Spanish, a participle modifying the subject is used ("corriendo").

Talmy terms the way in which Spanish captures the event as "verb-framing" and the English as "satellite-framing". As it turns out, all Romance languages (with various oft discussed exceptions) seem to verb-frame, whereas Germanic languages satellite-frame. The idea, therefore, is that different languages employ different strategies to encode the same semantic concepts (in this case, motion events) into a syntactic form.

The crucial semantic insight as regards the resultative is to view it as a metaphorical extension of satellite-framed motion events (see (Talmy 1987)). The result is simply the destination of the motion, which we have already designated as the Path, and the manner is just the same as with a motion event. For instance, "The ball rolled into the cave" designates an event of motion, and a manner, namely *rolling*, by which this event takes place. The resultative "The pond froze solid" likewise designates a motion, but this time a metaphorical one, of the pond *going* from one state to another. The result in not a physical place, therefore, but rather a state: *solid*. Transitive resultatives are extensions of Caused Motion event (e.g. "He rolled the car down the hill."), but the same principle applies.

This relation between motion events and the resultative is particularly clear in the case of Latin PP resultatives, such as "liquitur in lacrimas" (38a). Here, "lacrimas" is in the accusative. In Latin this is the case taken with "in" when the preposition conveys motion (as opposed to the ablative, which is used for static position).

If resultatives are just satellite-framed motion events, it would seem to follow that only languages that allow satellite framing are able to have them. This turns out largely to be the case[10].

[10]Largely, because counterexamples in various Romance languages are often proposed, as in ((Napoli 1992)).

Latin, inasmuch as Talmy's dichotomy can be absolutely applied, appears to be satellite-framed, a case argued by Acedo-Matellán and Mateu (2013).

(Acedo-Matellán 2009) also argues for Latin being satellite-framed, but we disagree on a key point, namely the presence of AP resultatives in Latin:

> In spite of the wide availability of complex resultative constructions based on adposition-like elements, as just illustrated, example (9b)[11] is representative of the fact that APs, like "vacuum", do not make appropriate secondary resultative predicates in Latin. (9b) is of course a made-up example, but the fact that Latin disallows AP-based resultative constructions is a solid conclusion, drawn from a corpus research inspired in the one Boas (2003) built for resultative constructions in English.

((Acedo-Matellán 2009)) sets out to explain this perceived absence of AP resultatives, via morphosyntactic arguments. In my view this is unnecessary, since, as we have taken pains to show, Latin in fact *does* display AP resultatives, though they are disguised under the guise of "prolepsis".

4.2 Lexical Subordination

So far we have talked about semantic parameters in our discussion of cross-linguistic properties, rather than constructions.

Parameters often tend to be excessively strong claims; countless papers have been written demonstrating how languages which appear "verb-framed" have "satellite-framed" characteristics, and vice versa.

Rather than conceive of satellite-framing as a parameter, it is therefore helpful to posit it as a construction, in the sense discussed in section 3.1.6. The idea is that a language with the satellite-framing construction has in its arsenal a strategy for encoding motion events whereby the verb expresses the manner and a satellite expresses the path:

[11] "poculum vacuum bibere."

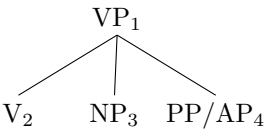


Figure 3: Syntax

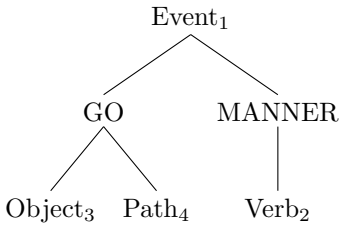


Figure 4: Semantics

Rather than claim that languages that follow this pattern are bound by a strict parameter, we simply claim that they make heavy use of the above construction, to generate sentences such as "The ball floated into the cave", and so on.

This allows for the possibility that other constructions might also be present; a language could also have a verb-framed construction which it used less. In other words, this approach suggests that the distribution of almost entirely satellite-framed lexicalization in certain languages is simply the result of this construction being so readily available and productive over a period of time.

If we treat the property of being satellite-framed as a construction, we might wonder whether we can generalise to a broader construction, reaching beyond Motion Events alone. As it turns out, a generalisation of resultativity expounded by Rappaport Hovav and Levin (1988) applies interestingly to Latin, and provides a new interpretation for internal accusatives, as we shall now discuss.

4.2.1 Lexical Subordination

In section 3.1.6, we noted that the main function of the resultative construction was to show how a simple resultative like "make the pan black" could be bolstered by a different verb conveying

manner, to give a phrase such as "*cook* the pan black". Rappaport Hovav and Levin (1988) term this amalgamation of a manner verb into the place of the main verb "lexical subordination" and note a series of examples where this it is found with verbs other than "make".

(46) The car screeched around the bend.

(47) Cry me a river.

(48) He smiled his thanks.

(49) He burnt a hole in the carpet.

(50) The room sleeps ten people.

In each of these cases, the main verb can be replaced by a *light verb*, as the following paraphrases illustrate:

(51) The car went around the bend, screeching.

(52) Create a river for me, by crying[12].

(53) He expressed his thanks by smiling.

(54) He made a hole in the carpet by burning it.

(55) The room contains ten people, with respect to sleeping.

Thus we arrive at "He smiled his thanks" by putting the manner, "smile", in the place of the main verb, "express", and so on. Resultativity is just lexical subordination where the main verb is "BECOME" in intransitive cases, or "CAUSE: BECOME" in transitive ones. In other words, lexical subordination generalizes the resultative, by extending it to other instances where a *manner* verb takes the place of the main verb.

If lexical subordination is viewd as a construction, we might expect a language which shows one instance of it to show others. The gamut of English possibilities has already been sampled above, and French, which lacks a resultative, also lacks other lexical subordination, as (Rappaport Hovav and Levin 1988) points out.

[12]Note the use of "create" rather than "make", to avoid confusion with the resultative sense of "make".

We have established that Latin, in the poetic register, has resultativity, so it is natural to wonder whether it also has the other forms of lexical subordination. The following examples suggest that it does:

(56) a. "Hoc ut dixit, Amor sinistra ut ante dextra sternuit approbationem." *Catullus 45.9-10*

b. "When he said this, Cupid sneezed his approval on the left, as before on the right."

c. sternuit approbationem
sneezed.3RD.PERF approval.ACC

(57) a. "...eque sacra resonant examina quercu." *Virgil, Eclogues, 7.13*

b. "...and the swarm buzzes out from the sacred oak."

c. e que sacra resonant examina
out.PARTICPLE and.ENCLITIC sacred.ABL buzz.3RD.PRES swarm.NOM
quercu
oak.ABL

(58) a. "'has meus ad metas sudet oportet equus." *Propertius 4.1.70*

b. "It is fitting for your horses to sweat towards these goals."

c. ad metas sudet oportet equus
to posts.ACC sweat.PRES.SUBJ ought.IMPERS horse.NOM

As these examples show, Latin does appear to display many of the same examples of lexical subordination as English. (56) bears comparison to (48), (57) to (46), and (58) to (50). It therefore seems reasonable to propose that either Classical Latin or early Latin had lexical subordination as a construction.

One problem that the construction does raise however, is how to decide on the set of lexical primitives to use as main verbs in our event structure. We have assumed that certain relations such as CAUSE and BECOME are fundamental to many languages, but it is unclear how we should construe the underlying relation of "smile one's thanks" or "the room sleeps ten". This problem is beyond the scope of this thesis.

5 The Remaining Questions

We now return to some of the more difficult questions about resultativity with which we began.

5.1 Does Latin observe the indirect object constraint?

We have already observed that in English, one cannot *"steal from them poor" (as opposed to "rob them poor"). We now consider whether the same holds true for Latin.

The evidence that it does not is twofold. We first have an, albeit limited, set of AP resultatives where the RP seems to be in the dative. We shall examine these case by case to determine whether they are necessarily resultatives.

Secondly, we have reason to suspect that Latin is more tolerant than English of secondary predicates functioning as indirect objects, because it allows depictives to appear in practically any case. Examples include:

Latin allows APs to be depictive even if they modify an object in the dative, as in:

(59) a. "ille vim tulit *invitae...*" *Met. 4.239*

b. "He forced her, though she was unwilling."

c. ille vim tulit invitae
he force.ACC brought.PERF.3RD unwilling.FEM.DAT(implied: her)

(60) a. "...mi *inani* atque *inopi* subblandibitur" *Pl. Bac. 517*

b. "She will flatter me while I am poor and without money. "

c. mi inani atque inopi subblandibitur
me.DAT poor.DAT and resource-less.DAT it-will-be-provided

English, by contrast, has no such provision for indirect depictives. One cannot *"give a gift to someone unwilling" (where "unwilling" is a depictive predicate of "someone").

In is unclear, however, whether the nature of the depictive in Latin has any bearing on that of the resultative. This really depends on a point of much contention, namely whether the depictive

and resultative are syntactically a single phenomenon[13].

We now turn to the apparent examples of RPs in Latin in indirect cases:

(61) a. "...neque ullum tempus *sobrio* relinquebatur..." *Nepos 10.4*

b. "...nor was any time left to him when he was sober..."

c. tempus sobrio relinquebatur
time.NEUT.NOM.SING sober.DAT.SING leave.IMPERF.PASS.3RD

Though (Kühner 1879) designates this as prolepsis, it is far more likely to be an indirect depictive, of just the kind discussed above, than it is to be a resultative.

This leaves us with (20):

(62) a. "...qua centum quisque parabat inicere anguipedum captivo bracchia caelo" *Ovid Met 1.185*

b. "...when each of the snake-footed giants prepared to throw his hundred arms around the sky and imprison it."

c. qua centum quisque parabat inicere anguipedum
when hundred each.NOM prepare.IMP throw.INF snake-footed-ones.PART-GEN
captivo bracchia caelo
captive.DAT.SING arms.ACC sky.DAT

While this is semantically plausible as a resultative, we might wonder whether this is a case of prolepsis where resultativity is *not* the correct interpretation, comparable to "...when Jove will...hang his poison in the sick air." (Timon of Athens, 4.3).

So, while the presence of dative depictive predicates provides a tantalizing suggestion, the scarcity of examples prevents us from establishing whether Latin really does have RPs as indirect objects.

[13]See (Cormack and Smith 1999) as one of many approaches to the debate.

5.2 Are resultatives productive in Latin?

We finally return to one of the key questions of the thesis. As we noted in section 3.1.3, the claim that Latin resultatives are not productive equates to saying that each Latin resultative has its own construction, rather than there being a single construction accounting for all of them.

As discussed in section 3.1.4, it is important to note that we are are discussing *complex* resultatives. For light verbs like "ago", "facio" or "fio", it is clear that resultativity is productive, as Pinkster notes in (Pinkster 1990), 8.3.3.

The question of productivity divides into two cases: AP and preverb resultatives. As we have already noted, Latin has an indigenous preverb resultative, which appears to have some degree of productivity well into Classical Latin, as seen in verbs like "extussere" and others in section 3.2.1. However, in many cases, preverb resultatives have lexicalized into words with no internal structure. A particularly striking example of this can be found in the cases of **??** and (1):

(63) a. "tum *sterilis* exurere Sirius agros..." *Aeneid 3.141*

b. "Then Sirius burnt the barren fields..."

c. tum sterilis exurere Sirius agros
then barren.ACC burn.INF Sirius.NOM fields.ACC

As discussed in section 2.2, "sterilis" appears to be a resultative predicate. Since a resultative construction tends to allow for only a single result (c.f. (Giannakidou and Merchant 1999) for "Tenny's generalization"), we can assume that the "ex" of "exurere" is not functioning as an RP. Similar arguments can be made for (19). Though "ex" is morphological, and "sterilis" syntactic, Tenny's generalization is taken to apply to the semantic structure of the resultative, where this difference of type is not relevant.

Our main interest, however, is in the AP resultative and its proposed productivity. The main reason to suspect that AP resultatives are not productive is the possibility that they are inherited on a case by case basis from Greek. This would mean that each AP resultative we have seen is

a fixed idiom, not an instance of a more general resultative construction[14].

That Greek is the source of AP resultatives is suggested by the fact that almost all AP resultatives in Latin appear in poetry, a medium where both cultural and linguistic borrowing from Greek is very common. Moreover, Greek is known to have resultatives from an early stage (c.f. (Kuhner 1898) and (Gonda 1958)).

A further reason to suspect AP resultatives are not an indigenous construction is their rarity in Latin. As we have seen, Acedo-Matellán (2009) was even led to believe that AP resultatives are absent from the language. He reached this conclusion after searching through the verb/RP combinations listed in (Hans Boas 2003) and finding no matches.

A counterargument to this position is the idea that borrowing from Greek does not entail lack of productivity. Latin could well have adopted the use of AP resultative predicates from Greek, and done so easily because the semantics for resultativity were already present in the language.

If this were the case, Latin might have borrowed the abstract template, i.e. the AP resultative *construction*, but used it to create new particular instances which themselves were not direct translations of Greek. If this were the case, then the resultative *would* have been productive in Classical Latin.

5.2.1 The Significance of Servius' Commentary

Another relevant piece of evidence in in support of this position is Servius' commentary. As we have seen, Servius often provides paraphrases for the AP resultatives.

The fact that Servius comments on resultatives at all is telling. Since his aim is to explain unclear language (among other things) in Virgil's poetry, we can infer that he perceived resultatives as a phenomenon that would not have been instantly recognized in his own Latin.

So why might resultatives not have been productive at the time that Servius wrote? One tan-

[14] An English example is the idiom "hard-boiled", which derives from a resultative (i.e. "to boil hard") which no longer appears in English. Instead, the phrase has lexicalized into an idiom of its own.

talising explanation is found in the fact that the Romance languages are satellite-framed. As Acedo-Matellán and Mateu (2013) discusses, this implies that Latin underwent a change from a satellite-framed to a verb-framed language, a change which Acedo-Matellan claims to have happened around the fourth century AD.

Servius wrote his commentaries in the 4th century AD, so we can potentially understand his need to explain resultatives as evidence that his Latin was verb-framed. This explanation is bolstered by the nature of Servius' paraphrases, such as "premendo reddit placida".

As we can see, this sentence used a verb-framed approach to convey the motion event! The manner of the motion is conveyed by an adverbial phrase (or in Talmy's terms a "satellite"), the ablative gerund "exurendo". This is the exact strategy that verb-framed languages would use for articulating caused motion of this sort.

We now have a reason for which Servius would have felt the need to paraphrase AP resultatives, namely the change of Latin into a verb-framed language, and yet we still have little evidence as to whether they were in fact productive in the first place. It could well be that they were never more than a set of direct translations from Greek, and that *this* is why Servius has to explain them.

A final factor to consider is the presence of lexical subordination outside of the resultative, in the examples discussed in section 4.2. If we consider lexical subordination to be a productive construction of sorts in Classical Latin, then it seems likely that AP resultatives are adopted as a productive phenomenon easily. This is of course very speculative, and merits a more detailed consideration, beyond the scope of this thesis.

6 Conclusion

From prolepsis to resultativity to lexical subordination, we have covered a wide range of material. We began by establishing that AP resultatives are present in Latin, in the guise of prolepsis. Though a number of the examples of prolepsis provided by (Kühner 1879) were found to be

examples of other phenomena, the many valid examples, as well as the commentary of Servius gave conclusive evidence for AP resultatives. This contradicted the claims of (Acedo-Matellán 2009), who set out to explain the absence of AP resultatives in Latin.

We then introduced the framework of Construction Grammar. This approach was suited not only to capturing the resultative, but also to the typological claims we subsequently considered, in the vein of both (Talmy 1987) and (Rappaport Hovav and Levin 1988). An interesting example of a microparametric approach carried out in further detail for resultatives is (Giannakidou and Merchant 1999). Along with Construction Grammar, we briefly discussed event semantics. A useful application of this to Latin was the case of "inmobiles parumper" (29), which bore a similarity to the English case "open the window for half an hour".

We then attempted to answer key questions about AP resultatives in Latin with reference to our data, which was taken not only from Kühner (1879), but also our own searches of Latin, as well as searches of the commentary of Servius, as discussed in section 2.3.6.

This led us to a further theoretical discussion, touching on the Talmian view of resultatives as abstracted motion events. These theoretical excursions linked happily back to Latin, as we saw by the use of the accusative, rather than the ablative case in prepositional RPs, such as "liquitur in lacrimas" (38a). Moreover, our discussion of lexical subordination produced an elegant interpretation of internal accusatives. An interesting extension of this idea would be the consideration of cognate objects in Latin, which are particularly common in early texts such as Plautus. From a theoretical perspective, the approach of lexical subordination raises difficult questions as to how to construe the "light verbs" of a given language; should these be considered part of Universal Grammar, for instance?

We concluded with two of the more difficult questions raised in the thesis, first of whether the Latin AP resultative was productive. Here, we posited that given the presence of preverb resultatives, as well as the satellite-framed paraphrases of Servius, it is. Servius' satellite-framed expressions supported the theory that Latin began its change from a satellite-framed language to verb-framed proto-Romance around the late fourth century AD, in keeping with the findings of Acedo-Matellán and Mateu (2013). We then discussed the possibility of Latin's having RPs in

indirect cases. Despite a paucity of valid examples, the presence of indirect depictive predicates did make this plausible. A more thorough examination of this topic would have to examine the relation of the depictive to the resultative, which is an area of current linguistic research. Pinkster (1990), chapter 8.3.3, p153), in his brief discussion of prolepsis does not differentiate between the two phenomena, and neither does Gonda (1958). It would be tempting to incorporate depictives into the scheme of lexical subordination, though this is not a straightforward task.

References

Acedo-Matellán, Víctor (2009). *"Adjectival resultatives cross-linguistically: a morphophonological account". (Talk given at ConSOLE XVII, University of Nova Gorica).*

Acedo-Matellán, Víctor and Jaume Mateu (2013). "Satellite-framed Latin vs. verb-framed Romance: A syntactic approach". In: *International Journal of Latin and Romance Linguistics* 25.2, pp. 227–265. ISSN: 1613-4079. DOI: 10.1515/probus-2013-0008. URL: http://www.degruyter.com/view/j/prbs.2013.25.issue-2/probus-2013-0008/probus-2013-0008.xml (visited on 05/07/2014).

Cormack, Annabel and Neil Smith (1999). "Why are depictives different from resultatives?" In: *UCLWPL*, pp. 251–284.

Davidson, Donald (2001). *The Logical Form of Action Sentences.*

Giannakidou, Anastasia and Jason Merchant (1999). *Why Giannis can't scrub his plate clean: On the absence of resultative secondary predication in Greek.*

Goldberg, Adele E. (2003). "Constructions: a new theoretical approach to language". In: *Trends in Cognitive Sciences* 7.5, pp. 219–224. ISSN: 1364-6613. DOI: 10.1016/S1364-6613(03)00080-9.

Goldberg, Adele E. and Ray Jackendoff (2004). "The English Resultative as a Family of Constructions". In: *Language* 80, pp. 532–568.

Gonda, J (1958). "'Prolepsis' of the Adjective in Greek and Other Ancient Indo-European Languages". In: *Mnemosyne* 11.1. ISSN: 0026-7074.

Hans Boas (2003). *A Constructional Approach to Resultatives.*

Jackendoff, Ray (2002). *Foundations of language [electronic resource] : brain, meaning, grammar, evolution*. Oxford: Oxford University Press. ISBN: 9780191713255.

— (Nov. 2003). *Foundations of Language: Brain, Meaning, Grammar, Evolution*. English. Oxford; New York: OUP Oxford. ISBN: 9780199264377.

Jaume Mateu Fontanals (2000). "Why Cant We Wipe the Slate Clean? A Lexical-Syntactic Approach to Resultative Constructions". In: *CatWPL 8*.

Kühner, Raphael (1879). *Ausfhrliche Grammatik der lateinischen Sprache: Satzlehre*. German. Hahnsche Buchhandlung. URL: http://archive.org/details/ausfhrlichegram00steggoog (visited on 04/15/2014).

Kuhner, Raphael (1898). *Ausfuhrliche Griechische Grammatik*. German.

Napoli, Donna Jo (1992). "Secondary resultative predicates in Italian". In: *Journal of Linguistics* 28.1. ISSN: 0022-2267. DOI: 10.1017/S0022226700014997.

Nutting, Herbert C. (1926). "Prolepsis". In: *The Classical Journal* 22.1, pp. 51–53. ISSN: 0009-8353.

Pinkster, Harm (1990). *Latin Syntax and Semantics*. en. Routledge. ISBN: 9780415046824.

Rappaport Hovav, Malka and Beth Levin (1988). "Lexical Subordination". In:

Servius. *SERVII GRAMMATICI IN VERGILII AENEIDOS LIBRUM PRIMUM COMMENTARIUS*.

Talmy, Leonard (1987). *Lexicalization Patterns: Semantic Structure in Lexical Forms; and*. Tech. rep. Berkeley, CA, USA: University of California at Berkeley.

Washio, Ryuichi (1997). "Resultatives, Compositionality and Language Variation". In: *Journal of East Asian Linguistics* 6.1, pp. 1–49. DOI: 10.1023/A:1008257704110.

Wechsler, Stephen and Bokyung Noh (2001). *On Resultative Predicates and Clauses: Parallels between Korean and English*.

Zhang Jun (2009). "A Review on the Analyses of Resultative Constructions in English and Chinese". In: *HKBU Papers in Applied Language Studies Vol. 13*.