More than Just Emphatic Reflexives Themselves:
Their Prosody, Semantics and Syntax

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Abstract

Emphatic Reflexives is the term used to describe the use of reflexive pronouns in an emphatic, adjunct-like way, as in "Sayoko drove to LA **herself**." Emphatic Reflexives (ERs) have been investigated by many in the course of generative linguistics (Moravcsik 1972, Edmondson and Plank 1978, Browning 1993, Eckardt 2001, Hole 2002, König and Gast 2002, Bergeton 2004, König and Siemund 2005, and Tavano 2006, to name a few), but past analyses leave some questions inadequately or not at all answered.

I endeavor to explain as many of the phenomena as possible, focusing on three main points. First, there are exactly two readings of ERs – an agentive adverbial and an adnominal intensifier – each with its own felicity conditions, syntactic licensing and semantic properties. Second, ERs are indeed instances of reflexive pronouns that are subject to the Binding Conditions; and though some ERs may appear linearly disjoint from their associate DP, they are always (extremely locally) bound. Thirdly, all ERs are obligatorily contrastively focused under both readings, and they exhibit prosodic properties related to this.

In making these arguments, I also find evidence for hypotheses that may have broader impact, such as the fact that the Voice head must be the licenser of **volitional** agents and that the MAE_ToBI model of English intonational structure needs modification.

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Section 1

Introduction

Emphatic Reflexives may seem like an isolated phenomenon. However, as I will prove, they are in fact a good example of interfacing between syntax, semantics and prosody. In this paper, apart from making clear the phenomena related to ERs, I find that certain ERs interact with verbal structure in such a way as to make predictions about stranding and the positions of traces, the site of verb phrase ellipsis, and the hierarchy of subject theta roles. Furthermore, I find that (a) ERs sometimes exemplify prosodic characteristics that are unpredicted by current models of intonation, as well as (b) their phrasing may be related to parentheticals and their syntax/prosody.

This paper is divided into six sections. The first, the introduction, provides a bird's eye view of ERs, showing that it is not limited to English and that ERs may encompass more than one meaning. In Section 2, by analyzing restrictions on ER usage, I show conclusively that there must be two lexically differentiated readings of ERs, and despite what others may have claimed, one is an agentive adverbial and the other is an adnominal intensifier. In Section 3, I review semantic proposals for both types of ERs in languages (such as German) whose ERs do not use reflexive pronouns, and then extend those analyses so that they can apply to languages (such as English) in which the ERs are represented by reflexive pronouns. Next, in Section 4, I tackle the as-yet under-researched problem of syntactic positions for ERs as well as their binding. I provide an analysis in which the binding is easily achieved due to the syntactic positions that make for very local relationships between ERs and their associate DPs. In Section 5, after the syntax and semantics are understood, I set out to experimentally measure the prosodic properties of ERs – especially those which are predicted to be necessary for felicity. Finally, in the Section 5, the conclusion

section, I summarize the findings of this research and present areas which require further scrutiny.

1.1 The Emphatic Reflexive

To begin, I will introduce what is meant by the term *Emphatic Reflexive*.[1] Emphatic Reflexives (henceforth ERs) are, in languages like English, reflexive pronouns used in such a way as to appear to be modifiers. This is in opposition to the more canonical usage of reflexive pronouns as bound variable arguments in a clause. Examples of the two uses are given below in (1) & (2).

(1) Clasual argument
John helped **himself**.

(2) Emphatic Reflexive
John helped me **himself**.

In both examples, we have a clearly transitive predicate, *help*, which must have exactly one object. In (1), the requirement for an object is satisfied by the bound pronoun *himself*. On the other hand, the status of ER *himself* as initially unclear in (2), as *me* is clearly the object. Given the facts that *himself* (i) lacks a clear thematic-role in (2) and (ii) feels like a modifier as much as anything, ERs like this have been analyzed as adjuncts rather than arguments.

1.2 A Crosslinguistic Phenomenon

English is not alone in its usage of the same word/morpheme for a bound variable arguments of a predicate and for an adjunct modifier. In fact, approximately half of the world's languages do so. (König and Siemund 2005) Below is a small, yet typologically diverse, sample of languages, showing clausal argument usage given in (a) and the ER given in (b).[2]

(3) Mandarin Chinese
a. *Lǎowáng bù xǐhuan* ***zìjǐ***
Laowang not like self
'Laowang does not like himself'
b. *nǐ wèishénme bu* ***zìjǐ*** *xǐ ne?*
you why not self wash PRT
'Why don't you do your washing yourself?'

[1] Emphatic Reflexives are called Intensifiers, Intensifying Reflexives or Intensive Pronouns by some. However, for the purposes of this investigation, these terms may be too broad (Intensifiers may include elements such as "even") or too specific (Intensive Pronouns are often limited to a certain syntagmatic structure such as "I myself").

[2] These foreign language examples are based on data in Gast et al. (2007)

(4) Arabic

a. *baʕti* ***nafs****-i* *furθ*^{ʕ}*a li n-najaaħ*
I.will.give self-1SG.GEN chance for 1PL-succeed
'I will give myself a chance to succeed.'

b. *al-mudīr-u* ***nafs****-u-hu* *sa-ya-staqbilu-nā*
the-director-NOM self-NOM-3SG.GEN will-3SG.M-welcome-us
'The director himself will welcome us.'

(5) Turkish

a. *Paul ve Maria* ***kendi****-ler-i-ne* *hayran*
Paul and Mary self-3PL-GEN-DAT admire
'Paul and Mary admire themselves.'

b. *müdür-ün* ***kendi****-si* *bizim-le konusacak*
Director-GEN self-3SG.GEN us-with will.talk
'The director himself will talk to us.'

(6) Koyrabora Senni (Mali)

a. *a mba šelaŋ ŋga-****boŋ***
he was speak 3SG.M.GEN-head
'He was speaking to himself.'

b. *ni no ma a tee nda-ni-****boŋ***
you FOC IMPF 3SG.OBJ do with-2SG.GEN-head
'You do it yourself.'

1.3 Distributional Data

Before we continue on into an analysis of ERs, it would be beneficial to review some of their distributional facts. It is important to note that these distributional data are ***only distributional***. That is to say, the facts and distinctions provided below may be useful, but do not necessarily correlate to specific formal semantic or syntactic properties.

1.3.1 Sentential Position

ERs can be found in many positions in a sentence with the same interpretation. In (7), I demonstrate a subset of the possible positions in which an ER can appear.

(7) Sentential Position

a. John **himself** was typing the paper last night.
b. John was typing the paper **himself** last night.
c. John was typing the paper last night **himself**.
d. John was **himself** typing the paper last night.

I will call the ER in (7a) – in which the ER is adjacent to its antecedent – an **Adjacent**

Emphatic (AE). Conversely, I will call the ER in (7b) – in which the ER is found immediately after the verb and its complement – a **Post-VP Emphatic** (PVE).[3] As for (7c) and (7d), seem to be more marked ER usages whose string position may be the result of other syntactic mechanisms.[4]

1.3.2 Verb Type and Position Availability

PVEs seem to be sensitive to the syntax in a way that other ERs are not. Specifically, PVEs seem to be ungrammatical when following an argument promoting verb, such as an unaccusative, inchoative or passive.[5] Below are some examples which demonstrate that, when PVEs appear with an argument promoting verb, the sentence is ungrammatical.[6]

(8) Transitive
a. ✓The doctor **himself** made the discovery.
b. ✓The doctor made the discovery **himself**.

(9) Underspecified for Object
a. ✓She **herself** was drinking.
b. ✓She was drinking **herself**.

(10) Inchoative
a. ✓The radio **itself** broke.
b. *The radio broke **itself**.

(11) Passive
a. ✓The beef **itself** was burned.
b. *The beef was burned **itself**.

(12) Unaccusative
a. ✓John **himself** arrived.
b. *John arrived **himself**.

1.3.3 Interpretations

The literature on ERs is inconsistent with regard to how many interpretations are available to ERs. Many have employed an additive versus exclusive distinction, yielding a classification as below.

[3]This name should not be interpreted as a commitment to a syntactic story where the ER's position is necessarily related to the VP. It should only mean "to right of the verb's complement(s)."

[4]It seems clear to me that (7c) and (7d) are a little more stilted than others. However, instances similar to them are still well attested both in spoken discourse and in writing.

[5]The term "argument promoting verb" refers to a class of verbs in which what seems to be an underlying object is "promoted" to the subject position.

[6]These examples can be rescued from their apparent ungrammaticality under certain conditions, as we will see later in Section 5.2.3.

(13) a. Exclusive:
The president held the New Years speech himself.
b. Additive:
Aphrodite herself isnt more beautiful than Maria.

Others have gone further in their dissections of what ERs can mean; Eckardt (2001) reviews five possible interpretations, summarized below.

(14) Archie ate a hoagie **himself**.
a. Archie did it without anyone's help *(Assistive-Exclusive)*
b. Archie didn't delegate it to someone else. *(Delegative-Exclusive)*
c. It is only logical that eating hoagies is done by oneself. *(Logically-Exclusive)*
d. It wasn't Archie's father who ate a hoagie. *(Corrective-Exclusive)*
e. In addition to all his friends eating hoagies, Archie ate one too. *(Additive)*

Though I will not pursue an analysis dependent on these (exact) distinctions, they are useful as descriptors and are relevant for understanding the evolution of the theory on ERs.

Section 2

Two Readings

2.1 Improbable Lexical Distinctions

Both of analyses presented in (13) and (14) are unsuccessful in locating the number of ER interpretations in the lexicon. First of all, the distinctions employed in (14) are so specific they can only be pragmatic in nature. That is to say, it seems rather unlikely that something defined in the semantics or syntax which would necessarily invoke a *corrective* or *delegative-exclusive* interpretation.

Secondly, even the broader distinction between *additive* and *exclusive* readings seems to be pragmatic in nature. That is, small changes to test sentences or background contexts can change whether a given sentence is additive or exclusive.

(15) a. The president held the New Years speech himself.
Exclusive: The president gives the only (relevant) New Year's speech.
b. The president held a New Year's speech himself.
Additive: The president gives one of many New Year's speeches.

(16) a. (Maria is so pretty,) Aphrodite herself isnt more beautiful than Maria.
Additive: Even the goddess of love isn't more beautiful than Maria.
b. (Maria is so ugly,) Ugly Betty herself isn't more beautiful than Maria.
Exclusive: Only one of the ugliest girls is not more beautiful than Maria.

It would be difficult to say that the ER is sensitive to the definiteness of an unrelated DP (15), or to the manipulation of contextual variables (16).

2.2 What Are the Two Readings?

As I will show, the data makes it clear that there are two important readings. The first is an adnominal[1] one that I term ^{dp}ERs. ^{dp}ERs seem to emphasize the identity of the associate DP, contrasting it with other entities. The second reading is an adverbial reading, which I term ^{vp}ERs. The ^{vp}ER reading is closely related to the *assistive-exclusive* reading in (14). It means something along the lines of "the agent of this clause is really the agent."

In fact, other independent research also points to the ^{vp}ER reading as being necessarily distinct from all others (cf. (14)). Many people have pointed this out; either by directly saying so, or indirectly by analyzing only the properties assistive-exclusive reading (Moravcsik 1972, Browning 1993, Eckardt 2001, Hole 2002, Bergeton 2004, Tavano 2006).

The two readings can be distinguished with differnt paraphrases. ^{dp}ERs can be paraphrased as "**X** (not Y)" and ^{vp}ERs can loosely be paraphrased as "without any help" as (17) shows. Similarly, in denying a statement with an ER, the form of the refutal differs with respect to whether the ER is a ^{dp}ER or a ^{vp}ER (18).

(17) a. John himself did it.
≈ **John** (not his mother) did it.
b. John did it himself.
≈ John did it without any help.[2]

(18) a. Denying a ^{dp}ER reading
A: John himself fixed the car.
B: No, **John's mother** did.
b. Denying a ^{vp}ER reading
A: John fixed the car himself.
B: No, John did it **with Mary**.

Finally, a note of caution. ERs seem to be quite similar to "*by Xself*", but it is important to note that "*by Xself*" has distinct properties, which have been reported by Levin and Rappaport Hovav (1995). First of all, "by Xself" can mean "alone" or "without outside help."

(19) a. John went to the movies by himself (=alone).
b. John made dinner by himself (=without outside help)

[1]The term adnominal suggests surface 'adjacency' between the ER and its associate DP, and, though this is sometimes true, all that is required is adjacency *at some derivational level*.

[2]This paraphrase turns out to be a little too restrictive, as there are certain contexts where it is possible that the agent did get help. However, for the large majority of cases, the strong implication of an ^{vp}ER is that the agent was the sole agent.

Secondly, while it seems that (19) has equivalents that use ERs, the "by Xself" construction has a wider syntactic distribution.

(20) a. John is by himself (=alone).
b. *John is ^{vp}himself.

(21) a. The book fell down by itself (=without outside help).
b. *The book fell down ^{vp}itself.

It seems that "by Xself" means something like "there was no external causer", which is not the analysis I pursue for ^{vp}ERs, which instead has to do with agentivity. That said, assessing the differences between ERs and "by Xself" are outside of the scope of this paper;[3] instead it is only important that "by Xself" is not the same as an ER.

2.2.1 Evidence for Two readings

Furthermore, there is cross-linguistic evidence that there are two crucial readings in the variation of words/morphemes used to express ERs. That is to say, if there were five distinct readings of ERs, we might expect some language to have five (or at least more than two) different words, each expressing a different ER. In fact, the variation we find is rather restricted. The table below, summarizing ER/reflexive patterns in 72 languages, comes from Gast and Siemund (2006).

(22)

	^{dp}ER	^{vp}ER	REFL	n in sample	example
I	A	A	A	30	English
II	A	A	B	25	German
III	A	B	B	10	Japanese
IV	A	B	C	4	Koyra Chiini
V	A	B	A	3	Amharic

This table shows a few things. First, the connection between ERs and reflexive pronouns is strong – about 60% of the languages surveyed use a reflexive pronoun for at least one ER. Second, over 75% of the languages surveyed use the same word for both ERs. Third, of the langauges where the ^{dp}ER form is distinct from the ^{vp}ER form, there was still a maximum of two forms.[4] Furthermore, if there is a morphological distinction between ERs, it is always between a ^{dp}ER reading and a ^{vp}ER reading. A Japanese example of a ^{dp}ER having a form distinct from a ^{vp}ER is given below. Note that the case marking occurs outside of the [DP ^{dp}ER] constituent.

[3]Those interested are referred to Levin and Rappaport Hovav (1995).

[4]Some languages have more than one word for a given reading depending on lexical factors (most commonly animacy). However, it is my understanding that these other words are more or less synonyms and are semantically no different.

(23) [*Robotto jishin*] *-ga* *jibun-de* *jibun-o* *tsukuri-naoshi-ta.*
Robot ^{dp}ER NOM ^{vp}ER-INSTR REFL-ACC built-re-PAST
'The robot itself rebuilt itself (by) itself.'

2.3 Sortal Restrictions

The felicity of ERs is constrained in a number of ways, and these constraints will inform our theory on their formal semantics. Furthermore, the constraints only apply to either ^{dp}ER or ^{vp}ER, but not both – thereby providing strong evidence that there are exactly two distinct kinds of ERs.[5]

2.3.1 Position of ^{vp}ER

^{vp}ERs are greatly limited in their sentential position, in a way that ^{dp}ERs are not. ^{dp}ERs may appear adnominally to their associate DP (24a), after or between auxiliaries (24b-c), or after the clausal object(s) (24d). However, ^{vp}ERs may only appear after the clausal object(s).

(24) a. Spike ^{dp}himself could have smoked the whole pack.
b. Spike could ^{dp}himself have smoked the whole pack.
c. Spike could have ^{dp}himself smoked the whole pack.
d. Spike could have smoked the whole pack ^{dp}himself.

(25) a. #Spike ^{vp}himself could have smoked the whole pack.
b. #Spike could ^{vp}himself have smoked the whole pack.
c. #Spike could have ^{vp}himself smoked the whole pack.
d. Spike could have smoked the whole pack ^{vp}himself.

Thus, if an ER is not in a PVE position, it is certainly a ^{dp}ER. However, if an ER is in PVE position, it may either be ^{dp}ER or ^{vp}ER. Thus, (24d) should mean something different form (25d).

(26) a. Spike could have smoked the whole pack ^{dp}himself.
≈ His dad could have, his mom could have, and ***Spike*** could have.
b. Spike could have smoked the whole pack ^{vp}himself.
≈ Spike wouldn't have needed anyone's help – he could have on his own.

As we will see in Section 4, this constraint on the position of ^{vp}ER will be borne out from its syntactic licensing being entirely distinct from that of ^{dp}ERs.

[5]These sortal restrictions are not limited to English – in fact some of the original intuitions come from languages like German, Danish, etc.

2.3.2 Semantic Restrictions on DP Type for ^{dp}ERs

2.3.2.1 Shared World Knowledge

As I mentioned above ^{dp}ERs contrast the associate DP with other entities. In order to generate a possible contrast for an entity X, one must have some world-knowledge about X. For this reason, ^{dp}ERs are only well-formed when there is enough information shared by interlocutors, and as such are generally infelicitous in "out-of-the-blue" contexts.

(27) A: What did you do yesterday?
B: I (#myself) spoke with Bobby (#himself) about Star Wars (#itself).

Such usage of an ER is improved when there are easily generated contrastive alternates to the ER's associate DP.

(28) A: What did you do yesterday?
B: I spoke with George Lucas himself about Star Wars.

In this context, given that you know who George Lucas is and that there are many other more likely alternatives with whom one would speak about Star Wars, the usage of a ^{dp}ER is both licit and appropriate.

A distinction of the type comparing (27) and (28) has long been recognized, and has been attributed to a restriction on surprisal by some (e.g. Edmondson and Plank 1978). However, Eckardt (2001) correctly points out that it is easy to find ^{dp}ERs when there is no surprise necessary.

(29) A: What happened at Paula's party?
B: Her brother sang a song, and Paula herself got a present.

Even if the party were for Paula's birthday and her receiving a present were expected, (29) is well-formed thanks to easily an accessible contrast in her brother. Bergeton (2004) explicitly defines a constraint that explains data pattern – his Contrastiveness Condition, given in (30). The fact that 'surprise' facilitates interpretation for (28) is explicable in that it is easy to create a contrastive alternate to an entity when that entity is surprising; explicitly, the more expected entity/entities should be easily accessible as contrasts.

(30) Contrastiveness Condition
A nominal expression DP [is only compatible with a ^{dp}ER] if it can be contrasted with other expressions in the context in which it is found.

Despite the restriction on ^{dp}ER's well-formedness in contexts without good contrasting entities,

there is no such restriction on ^{vp}ERs. Even Edmondson and Plank (1978), the strongest proponent of a 'surprise' restriction, do not impose this restriction on ^{vp}ERs.

(31) A: What happened at Paula's party?
B: Paula (#^{dp}herself) got a present (#^{dp}herself).

Without the accessible contrast of her brother, which was available in (29), the response is not well-formed, no matter the sentential position of the ^{dp}ER.[6] This should be taken as evidence that ^{dp}ERs pattern together with regard to Contrastiveness regardless of their sentential position. On the other hand, (32) requires no knowledge of possible contrasting alternates to Paula.

(32) A: What happened at Paula's party?
B: Paula ate the entire cake ^{vp}herself.

Moreover, no knowledge of the plausibility of Paula eating the entire cake is required either – Paula may eat entire cakes often or she may hardly eat cake; both situations are compatible with the usage of the ^{vp}ER.[7] This demonstrates that ^{vp}ERs are not sensitive to context in the way that ^{dp}ERs are.

2.3.2.2 Referential Properties of the Associate DP

The second type of sortal restriction I discuss is also limited to ^{dp}ERs. A DP must be specific to be compatible with ^{dp}ER usage. The data below show cases of ^{dp}ERs failing to be felicitous.

(33) ^{dp}ERs and Non-specific DPs
a. #Which boy himself solved the problem?
b. #Someone himself/themselves solved the problem.
c. #A boy himself solved the problem.

To show that it is non-specificity that is the crucial feature, compare the non-specific DP data to the data below. We can see well-formed examples with a [+specific, +definite] DP (34a) and a [+specific, -definite] DP (34b). There is also a malformed example with a [-specific, +definite] DP given in (34c).[8]

[6] Only the ^{dp}ER interpretation would be available in this sentence, for reasons that will become clear in Section 2.3.3.

[7] To exemplify the scenario where she eats entire cakes often, consider the sentence "Paula ate the entire cake herself... again."

[8] There are many examples of indefinites being infelicitous with ^{dp}ERs, but these tend to be the result of our previous restriction – it is more difficult to generate a plausible contrast for an indefinite. Though not impossible, as (34b) demonstrates.

(34) Specificity, not definiteness

a. ✓ Noam himself solved the problem.

b. ✓ All Cretans lie. A Cretan (himself) told me that. Edmondson&Plank (1978)

c. # We wanted to go to the doctor[9] himself, but we didn't know any. Edmondson&Plank (1978)

Furthermore, ^{dp}ERs are not well-formed unless their associate DP is referential. Non-referential QPs are incompatible with ^{dp}ERs, unlike a referential QP, as in (36).

(35) ^{dp}ERs and non-referential QPs

a. #Many boys themselves solved the problem.

b. #Each boy himself solved the problem.

c. #Some boys themselves solved the problem.

(36) ✓These three boys themselves solved the problem.

These data are consistent with Siemund (2000)'s Unique Identifiability Condition, presented below.

(37) Unique Identifiability Condition

A ^{dp}ER's associate DP "must denote a uniquely identifiable referent where referent can be understood in the broadest sense of of the word."

I take "uniquely identifiable" as excluding non-specific and non-referential DPs. The only modification necessary for this constraint is that it must also apply to ^{dp}ERs that are not in adnominal positions. Furthermore, this constraint does not make any reference to ^{vp}ERs. Thus we predict that, in a clause with a non-specific/non-referential subject, a PVE[10] will be uninterpretable with a ^{dp}ER reading but possibly compatible with a ^{vp}ER interpretation, as we see in (38) and (39). This should be taken as evidence that ^{dp}ER interpretations pattern together in terms of Unique Identifiability, no matter their sentential position.

(38) a. #Some boys solved the problem ^{dp}themselves.
≈ It wasn't some girls who solved the problem, it was some boys.

b. Some boys solved the problem ^{vp}themselves.
≈ Without help from the teacher, some boys solved the problem.

(39) a. Which boy solved the problem himself?

b. Someone solved the problem themselves.

c. A boy solved the problem himself.

d. Many boys solved the problem themselves.

e. Each boy solved the problem himself.

f. Some boys solved the problem themselves.

[9] Here 'the doctor' is not considered specific. Consider "I went to the doctor" – this sentence can be uttered even if there is no doctor in the common ground, unlike "The doctor arrived."

[10] See Section 1.3.1 on page 3.

2.3.3 Semantic Restrictions on Verb Type for ^{vp}ERs

Unlike ^{dp}ERs, ^{vp}ERs cannot be felicitously produced with certain classes of verbs. This data supports the theory that ^{vp}ERs in fact modify the verbal structure rather than having an underlying direct semantic relationship with a DP. To begin the discussion on verb types, stative verbs are the first type of verb that I will discuss as being incompatible with ^{vp}ERs.

(40) a. This time, Grandpa heard it ^{dp}himself.
≈ I heard it last time, and this time, Grandpa heard it.
b. #This time, Grandpa heard it ^{vp}himself.
≈ This time, Grandpa was able to hear it without his hearing aid's help.

A ^{dp}ER interpretation is compatible with a stative verb (40a), whereas a ^{vp}ER interpretation as in (40b) is out.

2.3.3.1 Agentive Subject

Hole (2002) and Tavano (2006) have noticed this pattern, and have offered different solutions. Hole argues that ^{vp}ERs require a dynamic/agentive verb, while Tavano argues they require a durative verb. The relevant data is replicated below.

(41) a. Activity: John (always) buys cars himself.
b. Accomplishment: John built the house himself.
c. State: # John lives himself.
d. Achievement: # John won the race himself. Tavano (2006)

(42) a. Dynamic: The people divide the country into two parts themselves.
b. Stative: # The mountains divide the country into two parts themselves.
Hole (2002)

Though I do not believe Hole has captured the entire story, I favor his analysis. Indeed, Hole argues that the felicity of an ^{vp}ER is tied to the agent licenser (e.g. *Voice* in Kratzer (1996)'s terms), the presence of which should also change a stative verb (42b) into a dynamic one (42a).

A direct contradiction to Tavano's durative restriction can be found with any number of achievement verbs that license agentive subjects.

(43) Achievement: Phill broke the door himself.

Furthermore, verbs of a durative nature that are not agentive are not compatible with ^{vp}ERs. The data below are in the present progressive to indicate their durative property.

(44) a. Experiencer: # Ronan is living the dream ^{vp}himself.
b. Unaccusative: # Amalia is growing up ^{vp}herself.

The kind of data found in (43) and (44) support an analysis based on agentivity. Thus I propose the Agentivity Condition.[11]

(45) Agentivity Condition
The subject of a clause with a ^{vp}ER must be an Agent.

2.3.3.2 Volitional Subject

As we will see explicitly in Section 3.1.2, Hole links ^{vp}ER to the external argument licenser. While I do not dispute this outright, it fails to capture the distinction between verbs with non-volitional external arguments (causers) and verbs with volitional agentive subjects. In that vein, I argue that the verb in question must license not only an agentive subject but a volitional agentive subject.[12]

In fact, even a sentence like (43) can be put into a context in which 'Phill' is not volitional and the ^{vp}ER is marginalized.

(46) #?(After tripping and falling into the door,) Phill broke the door himself.

Furthermore, when it is impossible for the subject to be volitional, the use of a ^{vp}ER is more clearly infelicitous.[13]

(47) a. Non-volitional causative
#Guess which medicine cured me itself.
b. Volitional agent
Guess which nurse cured me herself.

(48) Volitionality Condition
The subject of a clause with a ^{vp}ER must be volitional.

Moreover, even assuming ^{vp}ERs are restricted in the thematic role of the subject, we may expect ^{dp}ERs to be compatible with a DP of any thematic role – even in a clause where no agent is licensed.

(49) a. Agent: I myself roasted the peppers.
b. Instrument: Uli saw the meteor with the telescope itself.[14]
c. Theme: The computer itself fell onto the floor.
d. Benefactor: There was a round of applause for the director herself.

[11] I am unsure of whether 'John' is not an agent in (41d). That said, why exactly (41d) is bad may be unclear, but the fact that (43) is good seems to disprove Tavano's argument.

[12] It has been argued that volitional agents are only licensed by predicates whose verbal structure is inherently larger than that of a predicate with a non-volitional subject. ***I need references for this. Hilda?***

[13] Indefinite subjects are used to avoid the possibility of a ^{dp}ER reading.

[14] The context for this example may be a little more difficult to come up with on one's own. Consider that a scenario where Uli could have seen the meteor by looking through the actual telescope eyepiece or by looking at the image on a computer screen that was coming from the telescope.

From these data, we can conclude that ^{vp}ERs (unlike ^{dp}ERs) are restricted to clauses in which the verb licenses a volitional agent. Importantly, though the restrictions on verb type manifest in the thematic role of the subject, the restrictions themselves are actually on the verb.[15] In this way ^{dp}ERs a restricted in properties of their associate DP, and ^{vp}ERs are restricted in the properties of their associate clause.

[15]The technical implementation showing this will be given in Section 4.3.

Section 3

Semantic Identity of the ER

3.1 Analyses of Non-Reflexive Intensifiers

In the literature related to ERs, semantic analyses have largely been focused on constructions in German, as well as in languages such as Danish, Dutch, and Finnish. Unlike the data in Section 1.2, these languages do not use a reflexive element for the function of an ER.[1] Instead, they use a different functional element.[2] This non-reflexive emphatic has traditionally been called an intensifier; however, for consistency with the rest of this paper, I will call them non-reflexive ERs.

(50) Reflexive pronouns

a. Danish
Max vasker sig(selv)
Max washes self

b. Dutch
Max wast zich(zelf)
Max washes self

c. Finnish
Max pesee itse-nsä
Max washes self-3SG.POSS

d. German
Max wäscht sich
Max washes self

(51) Non-reflexive ERs

a. Danish
Max vasker bil-en selv
Max washes car-the itself/himself

b. Dutch
Max wast de auto zelf
Max washes the car itself/himself

c. Finnish
Max pesee auto itse
Max washes car itself/himself

d. German
Max wäscht das Auto selbst
Max washes the car itself/himself

[1] See Gast and Siemund (2006) for a detailed pattern analysis of the languages' words for the ^{dp}ER, ^{vp}ER and reflexive pronoun. As we saw in Section 2.2.1, about 40% of the languages in their sample are like German and do not use a reflexive pronoun for either ER, and the class of languages that behaves this way are typologically very diverse.

[2] This functional element (e.g. *selv/zelf/itse/selbst*) can also act as a scalar focus particle for DPs (at least in these four languages) but exhibits vastly different properties from the ER usage – notably, the focus particle usage is left-adjoined to the DP (e.g. Dutch '*selv bilen*'), whereas the ER usage is right-adjoined (e.g. Dutch '*bilen selv*'). For a detailed discussion, see Bergeton (2004).

While the non-reflexive ERs in these languages exhibit many of the same properties as ERs of the English type,[3] they will differ in certain respects. Notably, they are not pronouns marked for number or gender. Among other effects, this allows for ambiguities in ways that are not always seen in languages like English. That is, in (51), the Non-reflexive ER can have a ^{dp}ER interpretation (itself) or a ^{vp}ER interpretation (himself). Moreover, it seems the semantic type of the non-reflexive ER word differs from the reflexive ER word. These differences (especially the latter) will play a role in determining the logical form of ERs.

Setting aside these differences for now, analyses for both non-reflexive ^{dp}ERs and non-reflexive ^{vp}ERs, an identity function, ID, is employed. ID is defined as a one-place predicate whose output is identical to its argument, as (52).

(52) $\text{ID}(x) = x$

How such a vaccuous function yields the properties of non-reflexive ERs is explained below.

3.1.1 Non-reflexive ^{dp}ERs and the id Function

In Eckardt (2001)'s analysis, the non-reflexive ^{dp}ER is the phonological form of ID that takes a DP argument of type $\langle \mathbf{e} \rangle$. Take, for example, the German phrase "*das Auto selbst.*" In it, *selbst* denotes ID, its argument is *das Auto*, and its output is *das Auto*. A positive result of this analysis is that the use of a ^{dp}ER does not impact the truth conditions of the sentence. However, if a non-reflexive ER is simply an identity function, it might seem difficult to explain why we find sortal restrictions like those in Section 2.3.2. Counterintuitively, this analysis explains just that.

Eckardt notes that *selbst* seems to necessarily receive sentence-level stress. She takes this stress to be indicative of contrastive focus marking, meaning a set of focus alternatives is evoked, as proposed in Rooth (1996). These focus alternatives to $\text{ID}(x)$ will also be of the form $f(x)$ where f is a function.[4] Going back to our example, *das Auto selbst*, we derive the meaning as follows.

(53) a. $[\![\text{das Auto}]\!] = \textbf{the car}$
b. $[\![^{dp}\text{selbst}]\!] = \lambda \text{x}_e.\ \text{ID}(\text{x})$
c. $[\![^{dp}\text{selbst}_{foc}]\!] = \lambda \text{x}_e.\ \text{ID}(\text{x})$ & focus alternatives of the form $f(\text{x})$

[3] Indeed, much of the research I have cited has been on non-reflexive intensifiers, and the findings of that research has been applicable to languages that use ERs and those that do not.

[4] There is no theoretical limit on what kind of function f can be, though it seems focus alternatives find a way of restricting themselves. Take for example, "The book is RED." Any property should be a good focus alternative to *red*, but in reality, the number of optimal focus alternatives is quite limited – in this case, likely to colors.

d. $[\![\text{das Auto } {}^{dp}\text{selbst}]\!] = \textsc{id}([\![\text{das Auto}]\!]) = \textsc{id}(\textbf{the car}) = \textbf{the car}$
e. $[\![\text{das Auto } {}^{dp}\text{selbst}_{foc}]\!] = \textbf{the car}$ & focus alternatives of the form $f(\textbf{the car})$

That is to say, focus alternatives to $\textsc{id}(\textbf{the car})$ may be $\textsc{windshield-of}(\textbf{the car})$ or $\textsc{engine-of}(\textbf{the car})$. This explains the fact that "I washed the car itself" may mean something like "I washed **the car**, not just its windshield."

This predicts that ERs must always be marked with contrastive focus, otherwise no meaning will be contributed; this turns out to be true (at least for English), as I find in Section 5. Furthermore, the fact that ERs must be contrastively focused should derive the two contraints of Section 2.3.2, repeated below as (54) and (55).

(54) Contrastiveness Condition
A nominal expression DP [is only compatible with a ^{dp}ER] if it can be contrasted with other expressions in the context in which it is found.

(55) Unique Identifiability Condition
A ^{dp}ER's associate DP "must denote a uniquely identifiable referent where referent can be understood in the broadest sense of of the word."

The Contrastiveness Condition can be reanalyzed as result of the need for a focus alternative set. If there is no (non-empty) focus alternative set, it would be meaningless to focus ID. Therefore, it must not be difficult to populate the focus alternative set; in other words, whatever restricts focus alternative sets in the first place (as mentioned in footnote 4) must not restrict the set to being empty. The Unique Identifiability Condition can also be reanalyzed in our new theory. It is a direct result of ID's type restrictions: the ^{dp}ER's associate DP must be of type $\langle \mathbf{e} \rangle$. I formalize these reanalyses of our restrictions in (56) and (57).

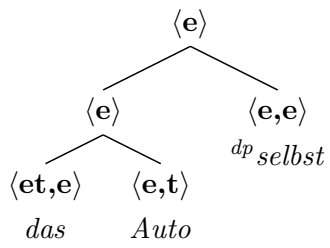
(56) Contrastiveness Condition (Revised)
A DP is only compatible with a ^{dp}ER if its focus alternative set is non-empty.

(57) Unique Identifiability Condition (Revised)
A DP must be of type $\langle \mathbf{e} \rangle$ to be a valid argument of the identity function denoted by ^{dp}ER.

In terms of the compositional semantics of ID, Eckardt supposes that there are four logical forms, depending on sentential position. This seems a bit theoretically heavy, especially given the fact that ^{dp}ERs pattern together with regard to sortal restrictions, no matter where they appear sententially, as we saw in (31) and (38). Thus I argue, as Bergeton (2004) does, that ^{dp}ERs are base-generated adnominally, forming a constituent with the associate DP. Other sentential positions

are derived by a form of stranding in the sense of Sportiche (1988).[5] In this way, *das Auto selbst* is generated is in (58).

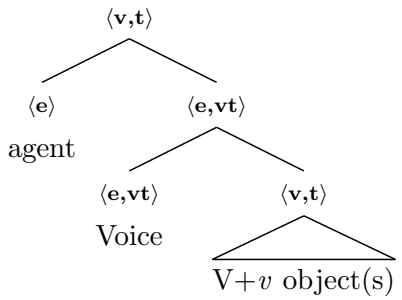
(58)



3.1.2 Non-reflexive ^{vp}ERs and the id Function

Before we go into the analysis of ^{vp}ERs, we need some background information on Kratzer (1996)'s Voice function. This function is semantically independent of the verb and, among other things, provides an Agent for the event.[6] The Voice head itself is of type ⟨**e,vt**⟩, combines with the predicate (type ⟨**v,t**⟩) by Event Identification, and forms a constituent of type ⟨**e, vt**⟩. The implementation of Voice is modeled below.

(59)



As for Hole (2002)'s analysis of the non-reflexive ^{vp}ER, he states that the ^{vp}ER – like Eckardt's ^{dp}ER – denotes an identity function. Unlike Eckardt's ID for ^{dp}ERs, which takes a DP argument of type ⟨**e**⟩, his identity function takes Kratzer's Voice head as its argument. As with the identity function for ^{dp}ERs, this identity function over Voice heads is necessarily focused[7] and elicits focus alternatives. Below, (60) gives a non-formal example of what is meant.

(60) Max washes the car ^{vp}himself.
  a. Assertion: Max holds the Agent relation w.r.t. the-washing-of-the-car.
  b. Alternatives: Max holds a non-Agent relation w.r.t. the-washing-of-the-car.

The vagueness of holding a relation with regard to a predicate is useful, as it allows for an

[5] More on this in Section 4.2.

[6] This Voice head has been claimed to license the thematic role of Agent, license accusative case and be the locus of morphology related to active/passive voice.

[7] Otherwise, no meaning would be contributed.

alternative such as "Max gets his car washed at the garage." If we had a stricter definition of the alternatives such that Max had to be assisted (as in Eckardt 2001), getting his car washed at the garage might not be possible focus alternative. (61) gives a formal derivation for the use of a ^{vp}ER.[8]

(61) a. $[\![\text{Voice}]\!] = \lambda x_e.\lambda e_v.\ \text{Agent}(x)(e)$
b. $[\![^{vp}\textit{selbst}]\!] = \lambda r_{\langle e,vt\rangle}.\ \text{ID}(r)$
c. $[\![^{vp}\textit{selbst}_{foc}]\!] = \lambda r_{\langle e,vt\rangle}.\ \text{ID}(r)$ & focus alternatives of the form $f(x)(e)$
d. $[\![\text{Voice } ^{vp}\textit{selbst}_{foc}]\!] = [\text{ID}([\![\text{Voice}]\!])]_{foc} = [\text{ID}(\lambda x_e.\lambda e_v.\ \text{Agent}(x)(e))]_{foc}$
$= \lambda x_e.\lambda e_v.\ \text{Agent}(x)(e)$ & focus alternatives of the form $f(x)(e)$

Thus the focus alternatives elicited by ID(AGENT(x)) may include JOINED-AGENT(x)[9], BENEFACTIVE(x), etc. However, it is not evident how this formal definition of ^{vp}ERs yields the typical intuition that ^{vp}ERs mean "without help." Hole states that this is a positive result as we can find examples like the following.

(62) Teddy built this house himself.

In (62), the ^{vp}ER still allows for other people to be involved in the an Agent-licensing Voice, we do not expect to find instances of ^{vp}ER with non-agentive verbs.[10] This rules out sentences like those in (44), repeated below as (63).

(63) a. Experiencer: # Ronan is living the dream ^{vp}himself.
b. Unaccusative: # Amalia is growing up ^{vp}herself.

This data was previously captured by the the sortal restriction we noted on agentivity that we posited in Section 2.3.3. However, now, we can rewrite the Agentivity Condition in more formal terms, as (65).

(64) Agentivity Condition
The subject of a clause with a ^{vp}ER must be an Agent.

(65) Agentivity Condition (Revised)
A predicate modified by an ^{vp}ER must include an Agent-assigning Voice head of type $\langle$**e,vt**$\rangle$.

Despite largely succeeding, Hole's analysis has three major syntactic issues: it involves X′ adjunction, it fails to capture facts with verb phrase ellipsis, and it cannot explain the Volitionality

[8] Hole uses the variable r to range over Voice heads. This seems stipulative, and I revise the definition of ^{vp}ER without such a variable in Section 4.3.1.

[9] See Tavano (2006).

[10] Non-agentive verbs arguably may still have a Voice head as part of their structure; just one that doesn't assign an Agent theta role.

Condition. However, for the purposes of the semantic theory, Hole's analysis suffices. We will return to the syntactic issues in Section 4.3.

3.2 Extending the Analyses to Reflexive ERs

The analyses presented by Eckardt and Hole seem to be rather cohesive. However, there are two problems with extending their analyses crosslinguistically. First, in languages such as English, Japanese, Chinese, Arabic and many others, the/an ER is represented by a reflexive pronoun. Reflecting on this fact, it is strange to think that a pronoun would denote a function – and this is exactly what an analysis like those above would argue for. They do so in spite of the fact that, in non-ER usages, these act as arguments – not functions.

Second, in these languages, the reflexive pronoun in question is subject to Binding Conditions, again unlike a non-reflexive ER. It would seem reckless to argue that, in just the ER usage, Binding Conditions do not apply. These two problems lead me to argue that there must be a separate analysis for languages of this type.[11]

As such, I argue for a new description of the internal structure of ERs.[12] Specifically, I argue that reflexive ER languages use an ID function different from the the one found in non-reflexive ER languages: one that is syntactically inherently reflexive and may be phonologically null.

First, just as we find variation across languages as to which syntactic heads are overtly expressed and which are not, I argue that in a language like English, the ID is silent. That is to say, I argue for the structure of "the car itself" to be of the following form.

(66) $[_{\text{DP}}\ [_{\text{DP}}\ \text{the car}]\ [_{\text{ER}}\ [_{\text{ID}}\ \emptyset]\ \text{itself}]]$

Next, and more radically, as I argue the reflexive pronouns to be arguments in ER structures, what is the function that takes it as an argument? As we have argued extensively, ERs themselves contain a function, and the exact form of that function has been almost entirely stipulated in the first place. Thus, I modify the ID function to be a two-place predicate, in only a syntactic sense.

[11] Recall that languages which have at least one ER that uses the same morpheme(s) as the reflexive pronoun account for about 60% of the languages surveyed by Gast and Siemund (2006).

[12] Tavano (2006) has noted the problem of ERs being reflexive pronouns, as well. However, her analysis seems to fail to capture the patterns of ER (in)felicity, and it relies on a Reinhart and Reuland (1996)-like focus logophor analysis of ERs, despite the lack of a possible pronominal alternate for the reflexive word (generally a hallmark of Reinhart and Reuland's logophors). Thus I will not pursue an analysis like hers.

What does it mean to be two-place in the syntax and one-place in the semantics? It is not easy to say, though there is a crosslinguistically well-attested class that fits just that description: inherent reflexives.

Inherent reflexive verbs are those which necessarily take a reflexive argument and said argument cannot be any other kind of DP. Arguably, the reflexive argument contributes no reflexive meaning; in fact, Büring (2005) calls these 'semantically intransitive.' Examples are given below.

(67) a. English
behave oneself; better oneself; busy oneself; collect oneself; compose oneself; conduct oneself; enjoy oneself; exert oneself; fancy oneself; perjure oneself; pride oneself; resign oneself; sun oneself Levin (1993)

b. French
se souvenir (remember); *se repentir* (repent); *se demander* (wonder)

c. German
sich verlieben (fall in love); *sich schließen* (close)

d. Dutch
zich gedragen (behave oneself); *zich bevinden* (be located)

e. Croatian
žaliti se (complain); *smijati se* (laugh)

In the same way, I argue that the ID function takes a semantically null reflexive argument. Thus ID's two syntactic arguments are (i) a reflexive pronoun and (ii) a DP or Voice argument for ^{dp}ERs and ^{vp}ERs, respectively.[13] However, the number and type of **semantic** arguments need not change.

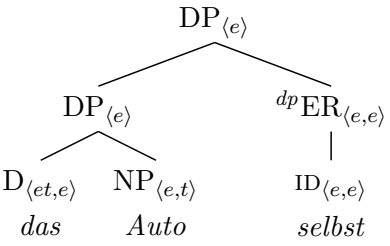
Thus, the benefit of my "inherently reflexive ID" analysis is that it allows for the same semantic denotation of ID in all languages, and posits that the variation is only syntactic. Restricting the cross-linguistic variation to the syntax makes a strong position that all of the sortal restrictions, which are semantic in nature, should remain constant across languages.[14]

Given our new theory on ERs and the ID function, I give a structure for the non-reflexive ^{dp}ER (68), using German, and a structure for the reflexive ^{dp}ER (69), using English.

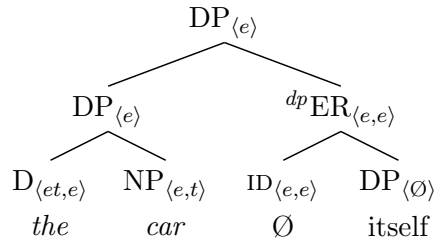
[13] I'm not opposed to a theory along the lines of Browning (1993)'s, in which the ID is the *-self* of *himself* (or some other morphological piece in the languages where the reflexive pronoun is morphologically complex). However, such an analysis requires a real semantic difference between the denotation of ID in reflexive ER languages and that of non-reflexive ER languages.

[14] Caution should be taken, however, in reviewing the properties of a given language's ERs. For example, language X's ^{vp}ER may be ambiguous between the way we define ^{vp}ERs (Agent-restricted) and a "by Xself" construction (which has no such Agentivity restriction, see Section 2.2).

(68)



(69)



In (69), I label the reflexive DP *itself* as being of type ⟨Ø⟩. What I mean by this is that, like an expletive, this DP has no semantic type as it does not participate in the semantics – or if it does, it does so totally vacuously. In fact, inherently reflexive arguments clearly match two of the three diagnostics for expletives[15] put forth in Postal and Pullum (1988), replicated below.

(70) Diagnostics for Expletives
- (i) Morphologically identical to pro-forms,
- (ii) Non-referential, and
- (iii) Devoid of any but a vacuous semantic role

In this way, as I said, the denotations of ID functions in (68) and (69) are identical, and therefore the denotations of the ERs, reflexive argument or no, are identical.

Thus far, I have extended the semantic analysis of the ER and its ID functions, but I have not been entirely specific about the implementation of these new definitions with regard to the ^{vp}ER. Before attempting that, we must first understand the syntactic properties of ERs. Afterwards, I will return to the semantics of ^{vp}ERs in Section 4.3.1.

[15] Whether or not condition (ii) is met is debatable, since anaphors are non-referring expressions (as they are bound), though they are referential in the sense that they have a referential value.

Section 4

Syntactic Licensing

4.1 Two Mechanisms

Given the wealth of data supporting the fact that their are two different readings, each with its own lexical entry, it should not be surprising that there are two different syntactic mechanisms that license ERs. Therefore, we should expect it to be possible that a single clause can contain two ERs – one of each type. This turns out to be the case, as demonstrated below.[1]

(71) *Ray's brother has cleaned the apartment himself twice, Ray's roommate has cleaned the apartment himself once, and...*

a. Ray ^{dp}himself has cleaned the apartment ^{vp}himself.
b. Ray has ^{dp}himself cleaned the apartment ^{vp}himself.
c. ?✓Ray has cleaned the apartment ^{vp}himself, ^{dp}himself.
d. *Ray ^{dp}himself has ^{dp}himself cleaned the apartment.
e. *Ray ^{dp}himself has ^{dp}himself cleaned the apartment ^{vp}himself.
f. *Ray ^{dp}himself has cleaned the apartment ^{vp}himself, ^{dp}himself.

In this way, despite the variety of positions in which ERs can be found, there are only two independent licensers. This predicts that, instead of there being a restriction on the number of ERs per clause, the maximum number of ERs in a clause is limited only by the number of possible syntactic licensers. In this way, there is no reason for there to be a numerical limit ruling out examples with three ERs, as (71e-f) might suggest;[2] in fact, data such as (72) deny this outright.

[1] (71c) is slightly degraded for some speakers, perhaps because of the repetition of the same word twice in a row.

[2] Baker (1995) argues that it is impossible to have two ^{dp}ERs in a clause, providing (i) as evidence. However, I dispute this with data like (ii). The crucial difference is the amount of context provided.

(i) ??Fred ^{dp}himself is not usually as alert as Karen ^{dp}herself. (Baker 1995:(46))

(72) Ray himself has cleaned the windows themselves with ammonia itself.

Examples with more ERs may be grammatically possible, but difficult to create because of the increasing amount of necessary context.

4.2 ^{dp}ER Stranding

The data in (71d–f) suggest that ^{dp}ERs in different locations are in complementary distribution with one another. That is, a certain syntactic element (^{dp}ER) may appear in multiple positions, but not in more than one of those positions at a time. The most reasonable way to explain this is a movement analysis, and cannot be explained by an analysis in which ^{dp}ERs may be base-generated in "adverbial" positions (as in Eckardt 2001). The case of ERs is a little more complex than simple movement, as the ER forms a constituent with its associate DP. In this way, ERs share much in common with Quantifier Float, as exemplified in (73)/(74).

(73) a. [You both] will [~~you both~~] have [~~you both~~] done it.
b. [You] will [~~you~~ both] have [~~you both~~] done it.
c. [You] will [~~you~~] have [~~you~~ both] done it.

(74) a. [You yourselves] will [~~you yourselves~~] have [~~you yourselves~~] done it.
b. [You] will [~~you~~ yourselves] have [~~you yourselves~~] done it.
c. [You] will [~~you~~] have [~~you~~ yourselves] done it.

Thus I assume the derivational link between different positions can be explained with a Sportiche (1988) style of Quantifier Float. Such a theory states that a DP can strand a portion of itself in an A-trace position because of the DP's constituent structure. Specifically, as demonstrated in (75), the fact that there is a DP within a DP which share the same formal properties with each other allows either the larger or smaller DP can be a target for movement. When the smaller DP is moved, the larger DP shell with the quantifier are stranded behind. The structure argued for by Sportiche is strikingly similar to the structure argued for for ERs in this paper. This parallelism has also been noticed by Bergeton (2004), citing data like (71d) as motivation.

(75) a. $[_{\text{DP}}\ [_{\text{DP}}$ you$]\ [_{\text{QP}}$ both$]]$
b. $[_{\text{DP}}\ [_{\text{DP}}$ you$]\ [_{\text{ER}}$ yourselves$]]$

(ii) (*No one in John's family likes the hamburger meat - not John's mother, not his brother, not his cousin. However, everyone does like the bun and fixings. John feels differently.*)
✓John ^{dp}himself likes the meat ^{dp}itself just fine.

Though ^{dp}ERs can be stranded, it is clear that ^{vp}ERs are not an instance of such stranding. If this were the case, there would be no reason to expect the contrast between (76a) and (b).

(76) a. Ray ^{dp}himself has cleaned the apartment ^{vp}himself.
b. *Ray ^{dp}himself has ^{dp}himself cleaned the apartment.

Lending further support to a stranding analysis is that the sortal restrictions of section 2.3.2 apply to all positions of ^{dp}ER. It is thus the case that all ^{dp}ERs, no matter their surface position, act as though they are the same kind of element.

(77) Some girls (*themselves) have (*themselves) seen Waldo (*themselves).

For this reason, a stranding analysis is the most straightforward in terms of being able to capture the fact that the same element (that is a subportion of a DP) may appear in multiple positions.

Last of all, there seems to be a distinction between A and A′ movement when it comes to stranding. Below are several data points showing that A′ movement seems to not allow for ER-stranding – even when the relevant trace is in an A position.[3]

(78) Subject Topic
a. The boys all/themselves like beans.
b. ?The boys$_i$, t_i all/themselves like beans.[4]

(79) Object Topic
a. Courtney likes all the boys/the boys themselves.
b. *The boys$_i$, Courtney likes t_i all/themselves.

(80) Subject Relative
a. I think the boys all/themselves cooked the beans.
b. *It was the boys$_i$ that I think t_i all/themselves cooked the beans.

(81) Object Relative
a. I think that Courtney ate all the beans/the beans themselves.
b. *It was the beans$_i$ that I think Courtney ate t_i all/themselves.

It seems to me that an A′ trace is simply incompatible with a quantifier or ^{dp}ER. However this is derived,[5] ^{vp}ERs are completely licit in situations where the subject has A′-moved.

(82) a. The boys$_i$, t_i cooked the beans ^{vp}themselves.
b. It was the boys$_i$ that I think cooked the beans themselves.

[3]I do not include examples of wh-movement, as ^{dp}ERs are incompatible with non-specific DPs.

[4]I represent a topic's necessary rising L-H% contour and prosodic break at its right edge with a comma.

[5]The data involving stranding in an object position might be ruled out apart from A′ movement, as the object position has long been recognized as incompatible with FQs. (Bošković 2004)

4.2.1 The Relationship Between Q-Float and ERs

It is not my assertion that Sportiche (1988) is correct for the distribution of floated quantifiers, but rather that the mechanism used in Sportiche (1988) to explain the distribution of FQs applies to ^{dp}ERs. In fact, many have pointed out, the FQ analysis in Sportiche (1988) makes predictions that are not borne out. Namely, it would incorrectly predict (83) to be good.

(83) a. *The students had arrived [all ~~the students~~].
b. *Les etudiants sont arrivés [tous ~~les etudiants~~].

More recent FQ analyses dispute the validity of the claims in Sportiche (1988). For example, Fitzpatrick (2006) argues that the distributional facts for Q-float are derived by adverbial adjunction with a silent null pronoun, *pro*, as below.

(84) $[_{\text{DP}}$ The students$]_1$ will have $[_{\text{VP}}$ [all *pro=them*] $[_{\text{VP}}$ t_1 had lunch]]

Though, under this analysis Q-float is not an instance of stranding[6], his analysis is not (easily) extendable to other adnominal elements outside of quantifiers. Importantly, his data seems to rely on possible semantic differentiation between Q-float positions and adnominal positions. In fact, his analysis allows for multiple instances of quantifiers, as in (85a). If ER-float were similarly analyzed, one would expect (85b) to be licit, though we have previously in (71) seen this not to be the case.

(85) a. ✓All the students have all arrived. (Fitzpatrick 2006:46)
b.*#The students themselves have themselves arrived.

Moreover, Fitzpatrick intentionally blocks Q-float at the right edge of the sentence (for verbs of all types), as in (86a). If we adopted an adverbial analysis for ER-float, we would be unable to explain the difference between (86a) and (86b).[7]

(86) a. *The finalists have danced all. (Fitzpatrick 2006:39)
b. ✓The finalists have danced themselves.

As we can see, more modern theories on Q-float diverge from the stranding analysis of Sportiche (1988). However, we have also seen that ERs and FQs differ in exactly the ways that have motivated modern research away from a stranding approach. For this reason, I will continue to use a stranding

[6] At least in the case of A-movement. See Fitzpatrick (2006) for a discussion of Q-float as an instance of stranding in the case of A'-movement.

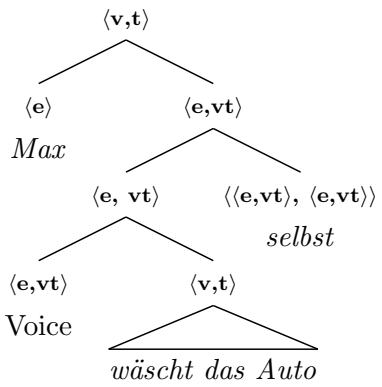
[7] Though Sportiche (1988) doesn't explicitly support the grammaticality of (86b), the analysis allows for it to be grammatical (assuming the DP moves through a right-adjoined position at some point in the derivation). I do not have a clear idea as to why ^{dp}ERs appear at the right edge, but this is even true in languages other languages which do not allow for Q-float to the right edge, like English does not. See Section 6.2.3 for an open-ended discussion.

to the distribution of ^{dp}ERs.

4.3 Adverbial Attachment of ^{vp}ERs

^{vp}ER are adjuncts that make specific reference to verbal properties, and are crucially linked to the volitional agent licensing morpheme. Hole's analysis offers an argument structure that more or less corresponds to the following syntactic tree.[8]

(87)



However, as mentioned in Section 3.1.2, there are three problems with this analysis. First, the adjunction site of the non-reflexive ER to an X′ level is non-standard at best. Since Barriers (1986a), Chomsky has argued that bar-levels are not levels of structure that can be referenced by the syntax – the only "real" syntactic units are minimal (X^0) and maximal projections (XP). Furthermore, in an approach following Kayne (1994) or Cinque (1999), the relationship between a head and its argument is extremely local, and attacking this locality by suspending argument-satisfaction of a head is all but explicitly ruled out.

Second, the disappearance of ERs in instances of verb phrase ellipsis (VPE) also presents an issue for the analysis in (87). Taking the issue of voice-mismatch in cases of VPE to be syntactic in nature, Merchant (2007:15) must be correct in asserting that VPE is ellipsis of all material sister to the Voice head.

(88) This problem was to have been looked into $Voice_{passive}$ [~~look into this problem~~], but obviously nobody did $Voice_{active}$ [~~look into this problem~~].

The Voice head must be outside the ellipsis in order for the elided material to be identical in (88).

[8] Hole never gives an explicit syntactic analysis, but I have induced the structure in (87) as being the structure necessary to be compatible with his assertions.

(89) a. ?*Mary didn't bake a cake, but Lily did [~~bake a cake~~] herself.[9]
b. Mary didn't bake a cake herself, but Lily did [~~bake a cake herself~~]

Since it seems infelicitous to have the ^{vp}ER as pronounced with VPE (89a), and since VPE seems to yield the interpretation where the ^{vp}ER is in the elided verb phrase (89b), it seems that ^{vp}ERs must also be contained in the sister of Voice.

Third and finally, there is nothing in Hole's analysis restricting ^{vp}ERs to verbs with **volitional** agentive subjects. As mentioned in Section 2.3.3, volitional agents are licensed by a portion of the verbal morphology that is higher than the non-volitional agent licenser. The data provided in Koopman (2008)'s analysis of Samoan ergatives reveals that volitional agents co-occur with extra verbal morphology ('*faʔa*') in a way that non-volitional causers never do.

(90) a. *na faʔa-mama: e Ioane le ʔieʔafu*
PAST CAUSATIVE-clean ERG John the sheet$_{abs}$
'John cleaned the sheet.'
b. *na (*faʔa-)mama: le ʔieʔafu i le timu*
PAST (CAUSATIVE-)clean the sheet$_{abs}$ OBL the rain
'The rain cleaned the sheet.'

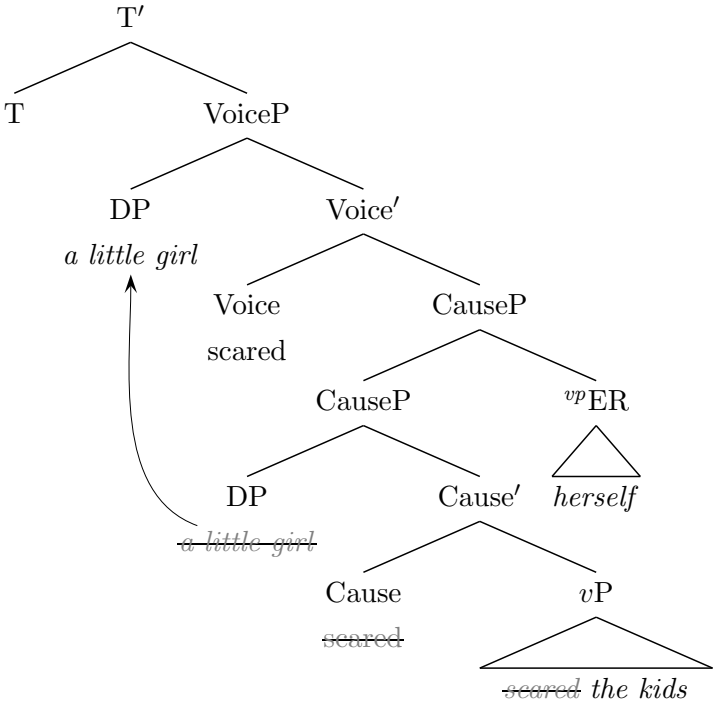
Thus, I argue that the Voice head licenses volitional agents like the one in (90a) whereas another, lower head, Cause, licenses a non-volitional causer as in (90b). With this and the VPE data in mind, I argue that CauseP, sister of the Voice head, is the ellipsis site which contains the ^{vp}ER. Furthermore, as adjuncts cannot attach at the X′ level, ^{vp}ER is adjoined to the maximal projection of Cause. In an analysis such as this one that I propose, it simply becomes mechanical to capture the volitional/nonvolitional distinction of the sentences in (91a) and (b).[10]

[9] This is as (un)acceptable as cases that appear to be pseudogapping a manner adjunct, as below in (i). Though it may be somewhat acceptable, the badness must be explained somehow.
(i) ??Mary didn't run, but Lily did (run) quickly.

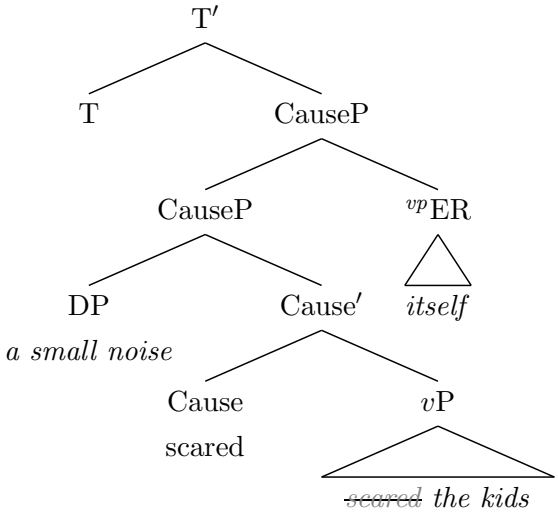
[10] Assume the list of verbal shells have the following hierarchy $VoiceP > CauseP > ... > vP > VP$. In my analysis, if $VoiceP$ is in the derivation then every shell from VP to $VoiceP$ must be in the derivation. Conversely, if vP is in the derivation, it does not necessarily follow that $CauseP$ or $VoiceP$ must be as well. In this way, predicates with volitional agents have exactly one more verbal shell than those with only causers.
It is worth questioning what a CauseP shell does if it does not introduce a DP causer. In my analysis, I would actually argue that CauseP, when present, always introduces a causer. This is to allow for a compositional analysis of subject theta roles such that agents are in fact causers that are volitional as well (or, to extend the analysis, agents are initiators that are causers that are volitional, if an InitP is proposed). This is not far-fetched considering (a) the fact that volitional agents are a notional subset of causers (which are a subset of initiators), and (b) data like that found in ***who should I cite?*** which shows these theta roles to be additive.
Also relevant to the data at hand, in an analysis like this one, the label of the VPE site depends on the number of shells in the verbal structure. I argue that the ellipsis site must be the sister of the highest verbal projection's head. Thus, in a structure in which CauseP is the highest verbal shell, the target of VPE is sister of Cause; and as predicted by Merchant (2007), when it is VoiceP, the target of ellipsis is the sister of Voice.

(91) a. A little girl scared the kids herself.
b. ?*A small noise scared the kids itself

(92) a. A little girl scared the kids herself.



b. ?*A small noise scared the kids itself.



In these derivations, the non-volitional causer (*a small noise*) in (92b) is licensed by Cause and the volitional agent (*a little girl*) in (92a) is licensed by Voice. The sentence represented by (92b) is ungrammatical with the ^{vp}ER, for two potential reasons. First, there may be an issue with binding. But second and more importantly, there is no Voice head to be the argument of the ^{vp}ER, as is extensively motivated in Hole (2002). Thus, the difference in grammaticality between a volitional

structure like (91a) and a plain causative structure like (91b) is captured under this theory.[11]

Moreover, ^{vp}ERs are much further degraded when there isn't even enough structure to adjoin in the first place (i.e. when there is no CauseP), as in (93).

(93) a. ?*The wind froze Lake Haruna ^{vp}itself.
b. **Lake Haruna froze ^{vp}itself.

This is like being unable to attach any other adverb when there is not enough structure. Take for example the adverb *definitely* (which should attach in the modal region) and a small clause structure.

(94) a. ✓I consider Matt to definitely be a genius.
b. *I consider Matt definitely a genius.
c. *I consider definitely Matt a genius.

4.3.1 Semantic Update

After reviewing the motivations for our new syntactic analysis, we must update our semantic theory, notably with regard to the argument structure and the type denoted by the ID function. Before we do that, let us review Hole's analysis. His used a definition of ^{vp}ER as given below, but this definition forced the ^{vp}ER to adjoin in a place that (a) was not a good syntactic site of adjunction, (b) did not predict VPE data, and (c) did not prediction the Volitionality Condition. This definition is repeated below.

(95) $[\![^{vp}selbst]\!] = \lambda r_{\langle e,vt\rangle}.\ \textsc{id}(r)$[12]

Thus, to integrate the semantics with the syntactic theory just presented, I have type-lifted the ID. This new type-lifted ^{vp}ER is defined below.

(96) $[\![^{vp}\text{ER}]\!] = \lambda E_{\langle v,t\rangle}.\lambda\Psi_{\langle e,vt\rangle}.\lambda x_e.\lambda e_v.\ \textsc{id}(\Psi(x,e))\ \&\ E(e)$

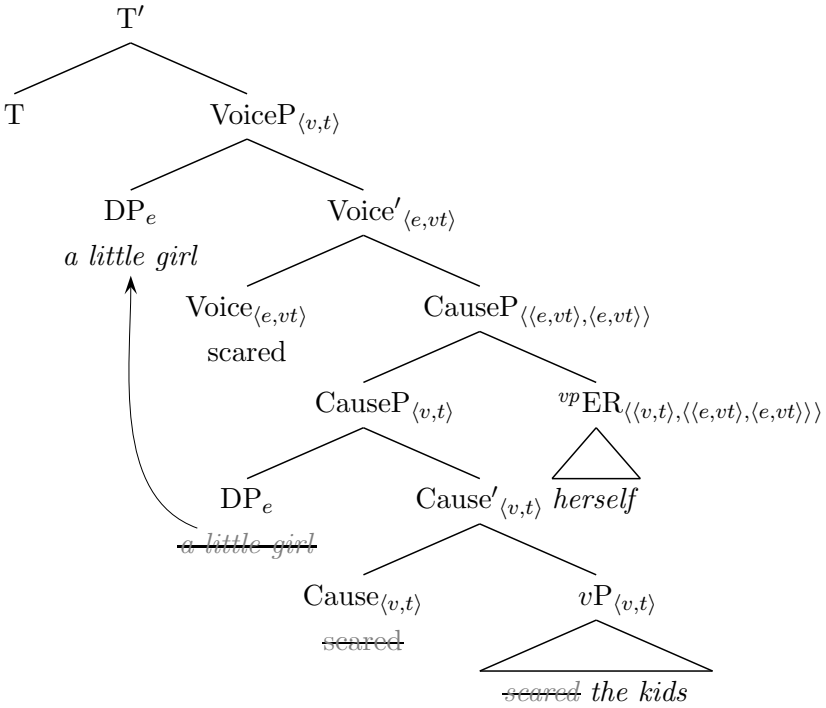
Importantly, this will still require the verbal structure to have the volitional agent licensing Voice head. In my definition, Voice is the variable Ψ. Actually, along with the requirement that ^{vp}ER adjoin to CauseP, this definition allows us to not have to specify that Ψ is a variable for Voice heads only, unlike Hole had to with his variable r. This is because the only head of type $\langle$**e,vt**$\rangle$ that could be sister of CauseP is Voice. In fact, if there is no VoiceP present in the structure, the ^{vp}ER

[11] If the implementation of verbal projections/compositionality of theta roles seems unnecessary, the same work can be done in a more minimalist framework (see Appendix B), assuming a story for where VPE occurs in verbal projections of different sizes, and, more importantly, a mechanism to distinguish volitional agents from causers.

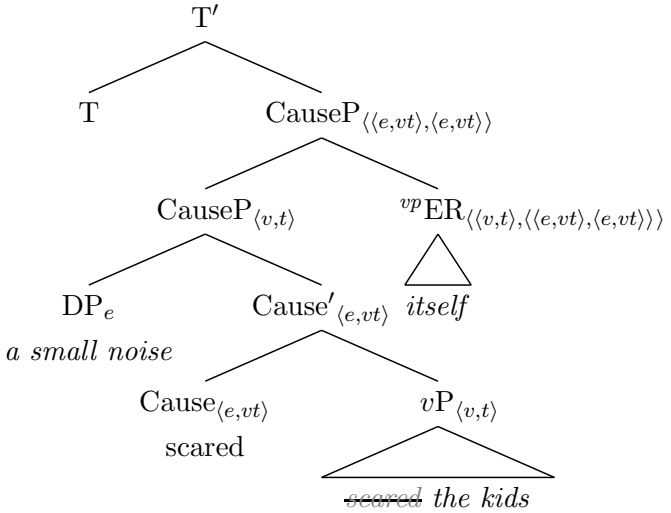
[12] Recall that r is a variable ranging over Voice heads, stipulated by Hole.

will fail to have its Ψ lambda satisfied, crashing the interpretation. To make clear this analysis, I have added semantic types to the trees presented in (92a).

(97) a. A little girl scared the kids herself.



b. ?*A small noise scared the kids itself.



Furthermore, now we have the tools to revise the Volitionality Condition in formal terms. Rather, what I do is merge the Agentivity and Volitionality Conditions (both repeated below), since I argue that Voice is the licenser of volitional agents.

(98) Agentivity Condition (Revised)
A predicate modified by an ^{vp}ER must include an Agent-assigning Voice head of type ⟨**e,vt**⟩.

(99) Volitionality Condition
The subject of a clause with a ^{vp}ER must be volitional.

(100) Volitional Agentivity Condition
A predicate modified by an ^{vp}ER must include a Voice head of type $\langle \mathbf{e,vt} \rangle$.[13]

Thus I have recaptured the last of the sortal restrictions with a defintion referring to the formal properties of ERs.

4.4 Binding

Assuming that ERs involve a bound reflexive pronoun, it must be the case that binding principles apply. If this is the case, we may expect that there are locality constraints on the positions in which ERs can occur, as we see with 'normal' reflexives. Examples of constraints on DPs intervening between an anaphor and its antecedent are given below.[14]

(101) Eric showed Denkins himself.
a. ?*Eric said, "Denkins, look at me."
b. ✓Eric said, "Denkins, look at yourself."

(102) Eric made Denkins watch himself.
a. ?*Eric said, "Denkins, watch me."
b. ✓Eric said, "Denkins, watch yourself."

However, such constraints are not found with ERs.

(103) A: Did Eric$_i$ and his$_i$ wife make Denkins$_j$ watch for trespassers togethim?
B: No, Eric$_i$ made Denkins$_j$ watch ^{vp}himself$_i$.

(104) A: Did Eric$_i$ make Denkins$_j$ and his$_j$ sister watch for trespassers togethim?
B: No, Eric$_i$ made Denkins$_j$ watch ^{vp}himself$_j$.

(105) A: Did Eric$_i$s wife make Denkins$_j$ watch for trespassers?
B: No, Eric$_i$ made Denkins$_j$ watch ^{dp}himself$_i$.

(106) A: Did Eric$_i$ make Denkins$_j$s sister watch for trespassers?
B: No, Eric$_i$ made Denkins$_j$ watch ^{dp}himself$_j$.

To deal with this data, we can pose two hypotheses. First, ERs dont follow binding conditions, unlike all other reflexives. Second, ERs are bound locally according to binding conditions but the structure is such that there is no real intervening DP in cases like (103–106). Thanks to the

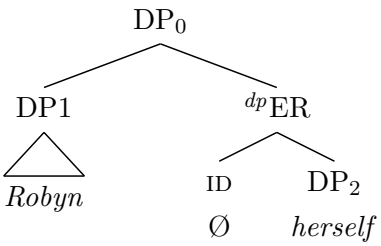
[13] This presupposes a theory of volitional agent licensing like the one I use. However, it is easily modified for a different theory of agent licensers by changing "a Voice head" to "a volitional agent licensing head."

[14] It should be mentioned that judgments on examples like (101-102) may be subject to dialectal differences; furthermore, if at all acceptable, they may be sensitive to linguistic factors such as de se versus de re. (Ahn, Orfitelli, and Sportiche, *in preparation*)

syntactic structures we have developed here, hypothesis two will be assumed.

As we saw in Section 4.2, ^{dp}ERs form a very small syntactic constituent with their associate DP. Furthermore, the logical form also suggests that the reflexive and the associate DP are coarguments of the ID function. The syntactic tree for a ^{dp}ER from (69) is repeated below with DP indecies.

(107)

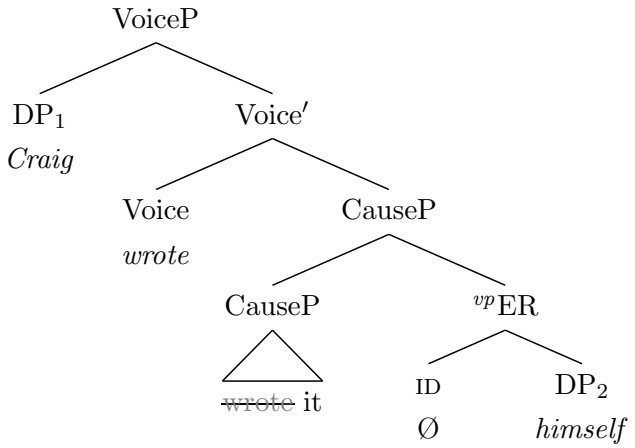


This being the case, binding is trivial under a Chomsky (1981, 1986b) syntactic locality plus c-command approach to Binding – DP_1 immediately c-commands DP_1.[15] Of course, this very local binding relationship is also in place even when stranding has taken place, as in (108).

(108) Robyn$_i$ must t_i have [t_i herself] been falling down laughing.

Furthermore, ^{vp}ERs too are always trivially bindable, as in the next example.

(109)



The DP_1 Specifier of VoiceP c-commands the reflexive DP_2 within the same binding domain, and the two share a closer relationship than the agent DP would have with any object DP, preventing any kinds of object interveners.[16]

ER binding, therefore, could never had interveners blocking binding as the syntactic relationship between ER and associate DP is too local to allow room for any interveners.

[15] In Reinhart and Reuland (1993)'s semantic coargument analysis, ID is a (inherently) reflexive marked predicate and DP_1 and DP_2 are coarguments of the ID predicate. I believe a Pollard and Sag (1992)'s lexical structure approach would deal with this well, but I'm not sure as the obliqueness ordering of ID's arguments is not clear.

[16] It is not clear to me how easily Reinhart and Reuland could explain this binding as it does not seem that the reflexive is not straightforwardly a co-argument with its antecedent. Pollard and Sag might also have problems since there do not seem to be any DP co-arguments that could o-command the reflexive.

Section 5

Prosodic Properties

As we saw in (1) and (2), ERs in English are segmentally and (apparently) morphologically identical to clausal reflexive arguments. However, given the intuitions of Eckardt (2001) and Hole (2002) and the focus-related requirements of our semantic theory, I set out to test if and how they differ prosodically. Specifically, I expect (a) that ERs must always be prominent, and (b) that there will be iP breaks surrounding the ER (sometimes optionally).

Furthermore, given the contrastive focusing nature of the ER as we discussed in Section 3 and a framework on intonation-meaning mapping such as Pierrehumbert and Hirschberg (1990), I expect and find ERs to consistently be associated with a L+H* accent. I also find that, though there are several ways to divide up ERs (syntagmatically and semantically), ERs are act as a homogeneous class with respect to prosody. This is taken as evidence in favor of our analysis, whereby ^{dp}ERs and ^{vp}ERs both share the property of needing to elicit focus alternatives.

In pursuing the prosodic qualities of ERs, I assume the framework of MAE_ToBI (as most recently formalized in (Beckman et al. 2005)), though exact conventions may not be followed if it seems appropriate. For example, I use the mismatch label '1m' label to mean 'word-level break, with a intermediate phrase (iP) tone', as has been discussed in a recent ToBI workshop.[1]

[1]I interpret the '1m' to mean that an iP level break is not fully realized when it is otherwise expected to be.

5.1 Methods

5.1.1 Recording

To test the hypothesis on the pitch accent of the English ER, I have run a production experiment. There were three participants – BW, CC and KV. They are all female native speakers of English. BW and CC are from the Los Angeles area, and KV is originally from Dallas, Texas.

Each recording session was conducted in the UCLA Phonetics Lab sound booth. Data was recorded digitally through head-mounted microphones to a computer and saved in WAV format. In each session, the participant read lines that were part of 48 short scripts that were approximately three or four lines a piece. Participants were asked to read the entire script first, as to fully understand the context, and then read the script twice, as naturally as possible. Participants were offered a short break halfway through the experiment, which lasted about fourty-five minutes.

The 48 scripts were composed of 24 fillers and 24 test conditions. The test conditions are summarized in Table 5.1. This set of conditions will force subjects to produce sentences which are predicted to be ungrammatical – namely the PVEs with an object promoting verb, as in (10–12) of Section 1.3.2, repeated below as (110–112).

(110) *The radio broke itself.

(111) *The beef was burned itself.

(112) *John arrived himself.

That participants are asked to produced ungrammatical sentences should not be a problem – in fact, what participants did in these cases turns out to be informative.

	Adjacent (AE)	Post-VP (PVE)	Sentence Final
Transitive	x4	x4	x4
Object Promoting	x4	x4	x4

Table 5.1: Test Conditions

That said, I will focus primarily on data regarding AEs and PVEs, as they are the most natural.

The fillers and the test sentences were pseudo-randomized such that the first and last two scripts were fillers. A sample script is given below in (113). For a complete list of scripts, please see the Appendix. Since each script required two speakers, I filled the role of the second speaker.

(113) A: Did you hear about Perry?
B: Yeah – about his bike, right?
A: Well not only did his bike get hit by a car last week...
B: Oh no, what happened now?
A: He himself was hit just last night.
B: Is he okay?
A: Yeah, the car wasn't going very fast.

5.1.2 ToBI Transcription

The sentences containing the ER in each of the scripts were segmented and labelled in Praat. Labeling was done independently by two labelers who are native speakers of English, and who are familiar with MAE_ToBI.

5.1.3 Excluded Data

Fifteen cases (or about 11%) of the 137 recorded test sentences were discared, where it was determined by both labelers that the produced sentence was ungrammatical with an ER interpretation. These errors occurred when the speaker either (a) seemed to interpret the verb as a transitive taking the reflexive word as an argument, or (b) made performance errors such as misreading the script in such a way as to affect the status of the ER. An example of each of these kinds of mistakes are given below.

(114) a. Then he collapsed himself.
b. Then he collapsed on himself.

The type of error in (114a) is due to the fact that "collapse" is ambiguous between causative and unaccusative, and "himself" is ambiguous between an ER and an argument. The type of error in (114b) allows for a grammatical (albeit different) interpretation.

5.2 Results

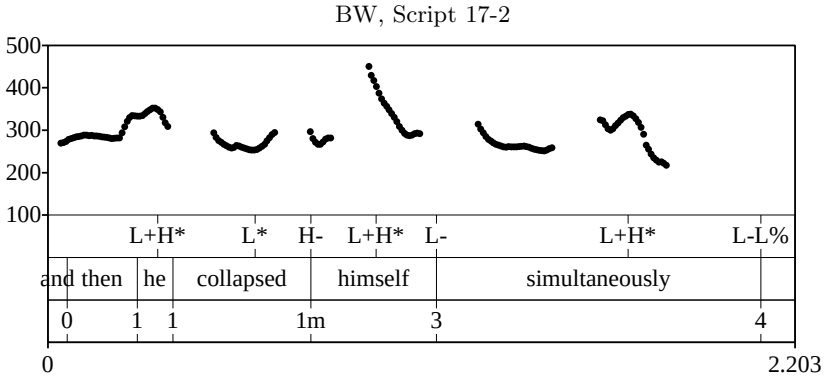
5.2.1 Generalizations

Most instances of ERs (103/122, or 84.4%) surfaced with a L+H* pitch accent.[2] The remaining 15.6% of ERs, which were not marked with L+H*, will be discussed later on.

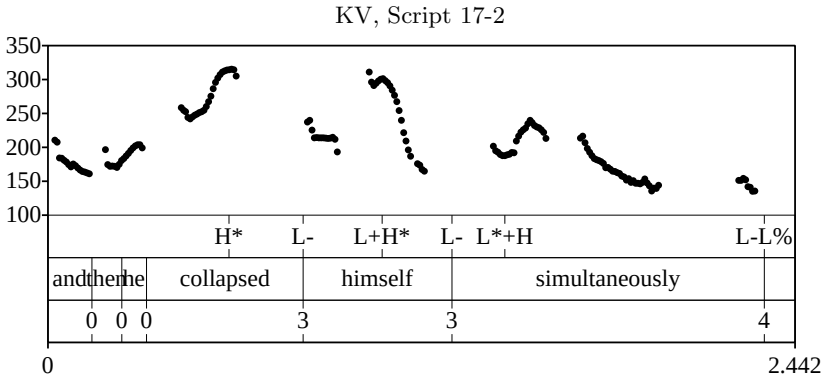
[2]When I refer to ERs having a L+H* pitch accent, I mean to say L+H* as well as L+$^{!}$H*. I assume that, underlyingly, the two are the same pitch accent.

The accent on the associate DP varied much more – the most common being H* (37.7%), no pitch accent (25.4%), and L+H* (18.0%). This suggests that there is no pitch accent requirement regarding the associate DP, and having one is more or less optional. Our semantic analyses of ERs whereby only the identity functions, not their arguments, are focused predict this lack of a consistent pattern.[3] Examples of this optionality are given below.

(115)



(116)

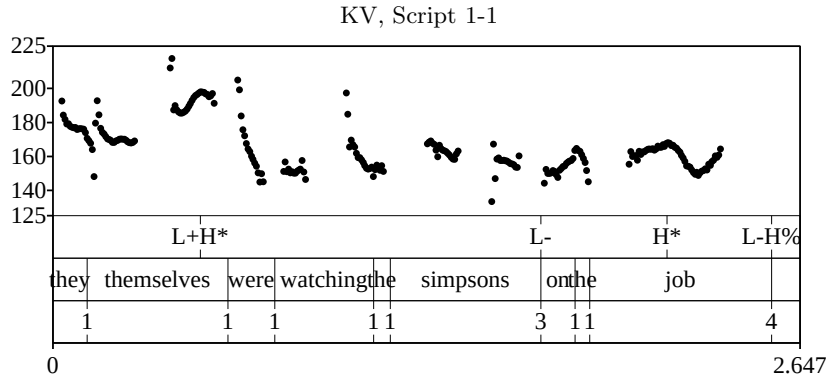


All of the L+H* marked ERs were also nuclear pitch accents (NPA) – the most prominent pitch accent in its intermediate phrase (which, in English, is always the right-most accent in its iP). As a result, post-ER material in the same iP was deaccented, as we can see in (117).[4]

[3]Recall, that the reflexive word in English does not represent the ID function, but is rather a syntactic argument. That said, as the ID function is silent, the reflexive word is somehow made to bear the focus intonation – perhaps similar to syntactic elements in T bearing the focus of silent positive polarity operators.

[4]It might be that this is not deaccenting, but some other kind of pitch range reduction, as it seems there may be certain cases of very weakly realized accent in the post-ER domain.

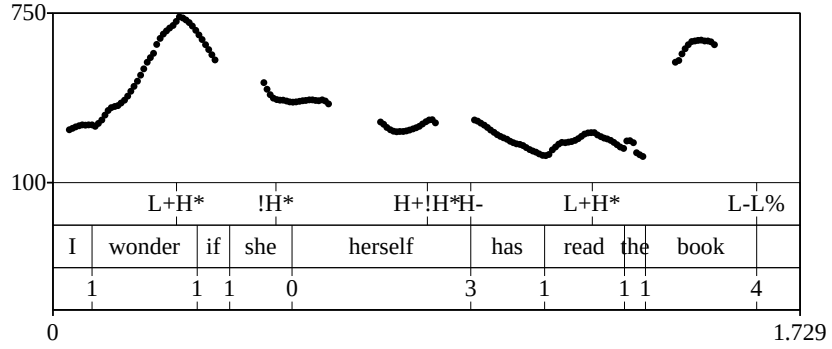
(117)



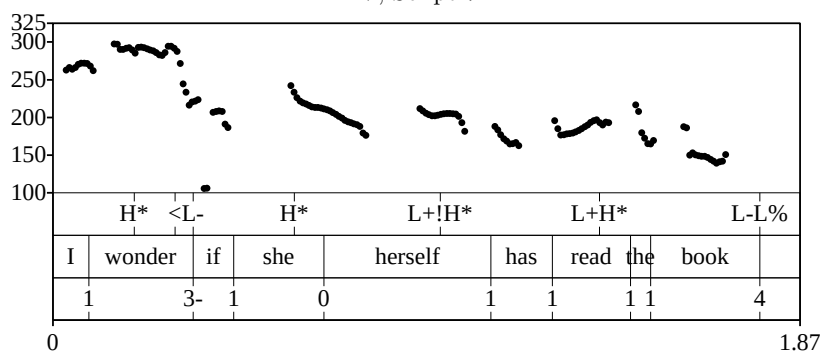
5.2.2 AEs

ERs in the AE position can be marked L+H*, just as the rest of the ERs; but unlike other ERs, there were also cases of AEs being marked with !H* or H+!H*. Data of each of type can be seen in (118–120), which are all from the same script.[5]

(118)

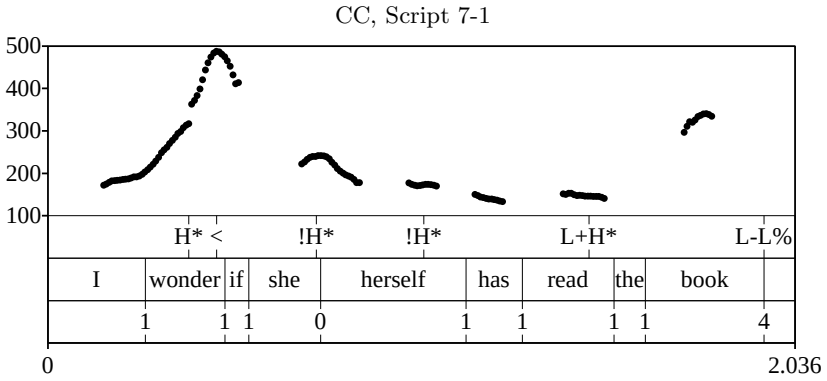


(119)



[5]In (118) and (120), there is pitch-doubling on "book" – the actual pitch is much lower than the computer-generated pitch tracks represent.

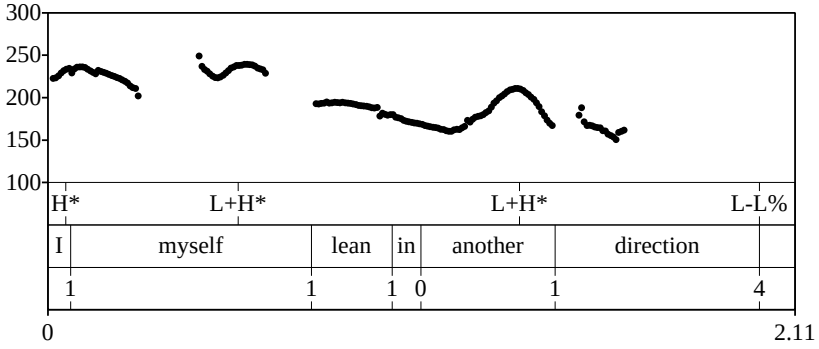
(120)



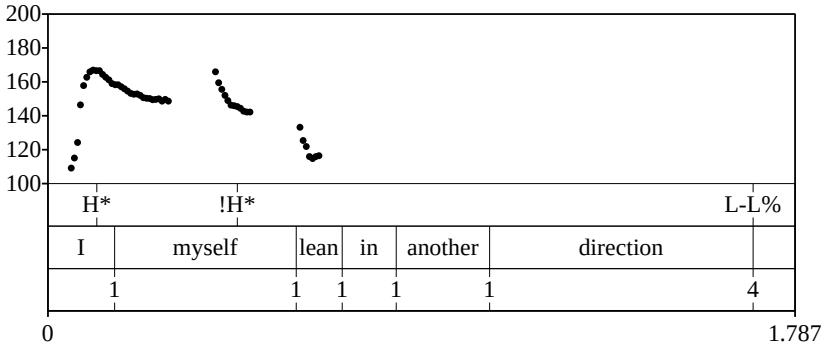
In fact, every ER that was not marked L+H* was an AE that was marked (H+)$^{!}$H*. The fact that the examples in (118–120) are all from the same script – while also varying with regard to L+H* or (H+)$^{!}$H* – suggests that AEs are not inherently different from other ERs, but exhibit multiple surface variants for a common underlying form.

Moreover, there does not seem to be any requirement that AEs be the NPA (unlike the L+H* ERs). This becomes clear when comparing (121) and (122).

(121)

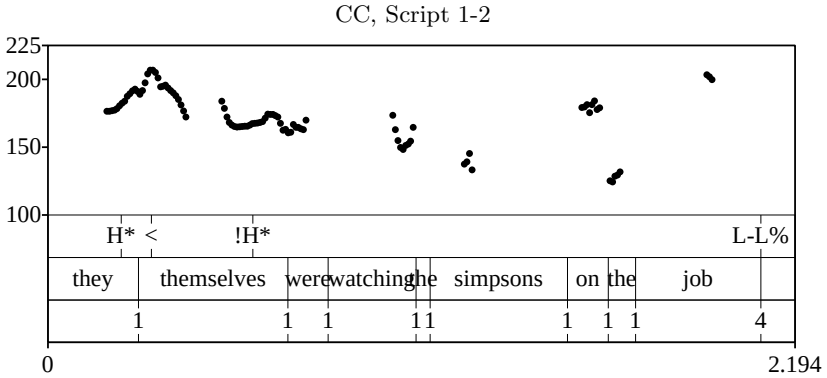


(122)

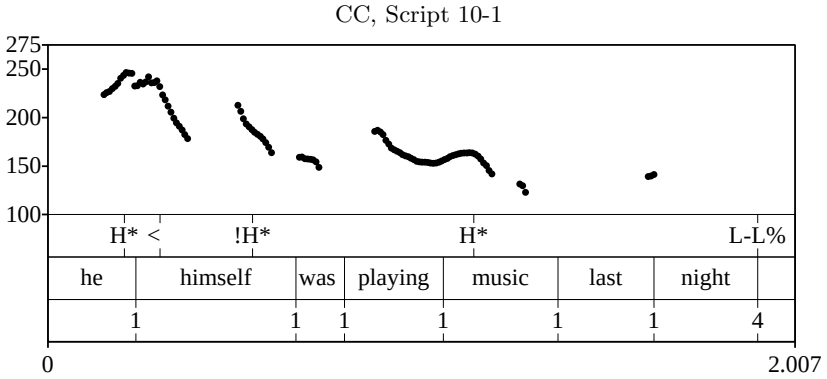


As for the AE's associate DP, the tone (if there is one) is sometimes delayed into the ER, as in (123) and (124). This pattern seems to show up most often when the associate is a shorter word such as a pronoun or one-syllable name.

(123)

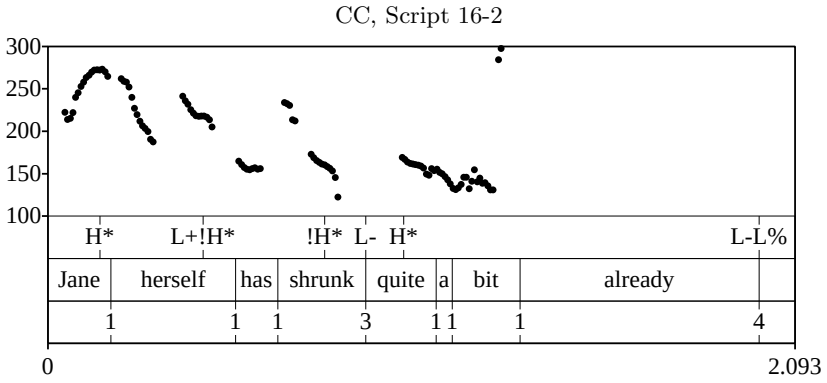


(124)



Finally, as in (119), (121) and (125), the L dip on the ER can be often rather shallow (if not nonexistent).

(125)



5.2.3 Necessary iP Breaks

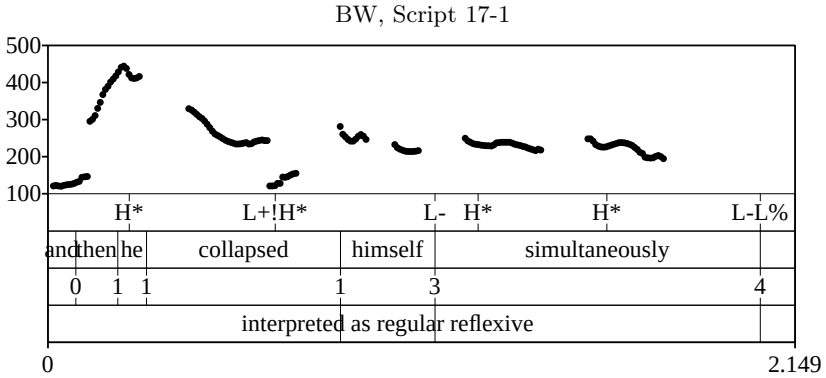
Thus far, nothing has been said about prosodic requirement on the kind of prosodic breaks that surround the ER. As mentioned earlier in Section 5.1.1, subjects were asked to produce what were expected to be ungrammatical sentences in some of the scripts; namely those where there is a PVE with an object promoting verb. Often times, when given one of these sentences, the participant had difficulty pronouncing the sentence fluently, reading the script as it was written or interpreting

the sentence correctly.[6] Take, for example, the relevant section of script 17, below.

A: Well, I pushed over my voodoo doll of John...
B: Uh huh...
A: And then he collapsed himself simultaneously.

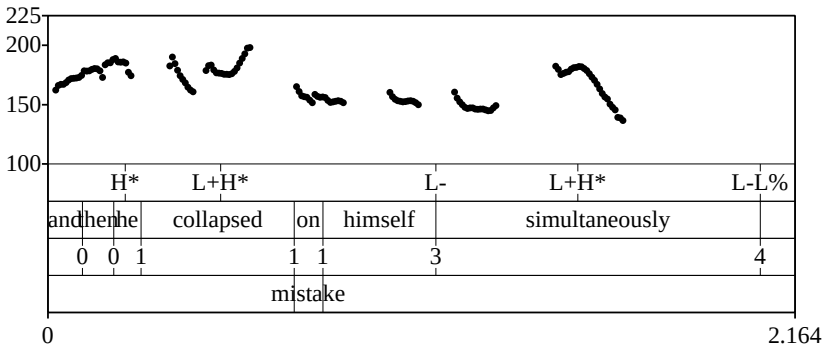
When it comes to reading the test sentence, "And then he collapsed himself simultaneously", BW seemed to interpret the verb as a causative, as in "He collapsed the folding chairs.'

(126)



In this way, BW used "himself" non-emphatically, which is why there is no pitch accent on it. CC, on the other hand, inserted a preposition to make the sentence more straightforwardly grammatical.

(127)



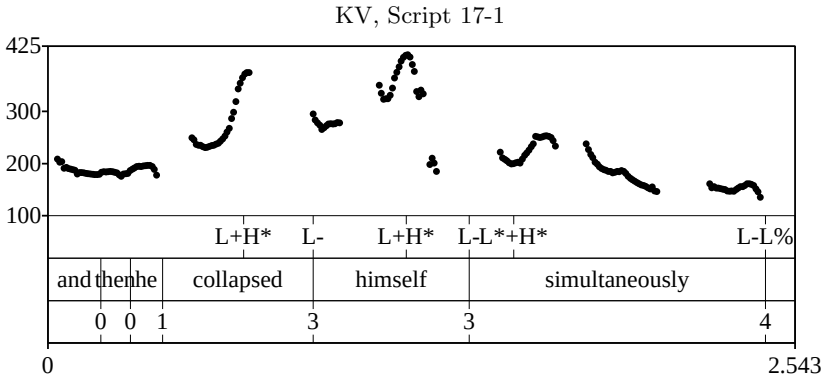
In both examples above, the speaker is trying to interpret "himself" non-emphatically, and therefore there is no accent on it.[7] However, some productions of this same sentence were made in such a way that it sounded grammatical.[8]

[6]This is despite the fact that the participants had already read the passage to themselves and read the passage out loud twice.

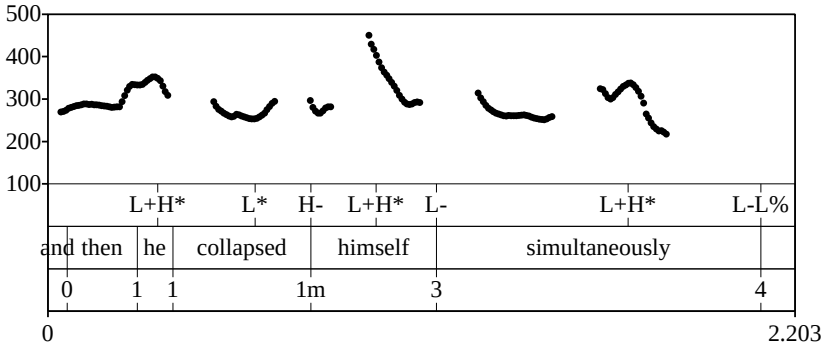
[7]It may seem circular, but the reason that these are interpreted as non-emphatic is that they have no accent; and they have no accent, because they are non-emphatic uses of the reflexive that are not focused in any way. Though there is no escaping this circularity, I feel strongly that the intuitions are correct.

[8](128) sounds somewhat more natural than (129). Perhaps this is because the iP break target before the ER in (129) is not fully realized, which degrades the naturalness.

(128)



(129)



By inserting intermediate phrase breaks, the sentence sounds grammatical, and the ER is easily interpretable as emphatic.

5.3 Discussion

5.3.1 Pitch Accent

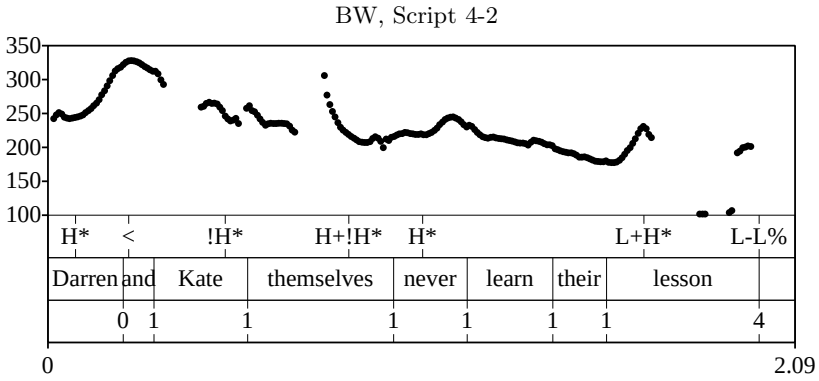
When it comes to the variations on the ER's accent – namely in the AEs, where we find a surprising amount of variation (see section 5.2.2) – perhaps we can say this is because an AE cannot be interpreted any other way (e.g. not as a plain reflexive).

More strongly, I believe there is a phonological story behind these variations. AEs are used with monosyllabic words, such as pronouns, very often. We could imagine that if the monosyllabic word were marked with some kind of high tone – antecedents in this study were found to be so ∼60% of the time – and the ER is L+H* marked, there may not be enough time to fully realize both of these targets. Since the L of the L+H* is not attached to a stressed syllable, it seems that this might be the first to be weakened – as we saw in the undershot Ls of (119) and (121).

From this weakened L, it is not hard to imagine that instead of being realized on its own, the L down-steps the following H* – as is common in African tone languages for non-fully-realized Ls

adjacent to Hs. This now yields a [H !H*] sequence, with the H on the pronoun, as in (120) and (122). Since pronouns are often prosodically weak words, it might make sense that instead of a tone target on the pronoun, this sequence became one tone marking the ER, H+!H*. I believe that this process has since become grammaticized such that you find H+!H* with a prosodically stronger antecedent – for example (130).

(130)



Under this analysis, all of the tone targets we found on ERs were L+H* or a surface variant. Furthermore, this explains why AEs act as a natural class to the exclusion of other ^{dp}ERs for prosody when they do not in the syntax or semantics. Importantly, this variation in pitch accent does not exist in all ^{dp}ERs or any ^{vp}ERs, which should further indicate this property is more or less a surface accident than representative of the underlying form.

Overall, the results confirm the hypothesis that ERs should always be accompanied by a L+H* pitch accent. Functionally, this distinguishes ERs from 'normal' reflexive pronouns. Furthermore, it seems that the underlying pitch accent is entirely consistent as L+H*, across semantic and syntactic classifications. This consistency is due to the ER's requirement of eliciting focus alternatives, as discussed in Section 3.

5.3.2 Phrasing

Besides the results we have found with regard to pitch accent, there have also been some positive results on the ER and phrasing. First, non-AE ERs must be the nuclear pitch accent of the phrase.[9] Second, and more interestingly, if the ER is in a non-grammatically licensed location in the sentence,[10] such as the PVE position with an object promoting verb, one must insert iP

[9]Why are AEs exempt from this generalization? Is it perhaps again due to their unambiguous status as ERs?

[10]This phrasing is purposefully vague – what is a grammatically licensed location? I expect that only positions which the associate DP has A-moved through will qualify. (Though the sentence's right edge seems to be available

boundaries on either side of the the ER in order to rescue the grammaticality.[11]

(131) a. *He collapsed himSELF/himself simultaneously.
b. He collapsed – himSELF/*himself – simultaneously.

How exactly this repairs the ungrammaticality is unclear to me, though I suspect these re-grammatical ERs are "misplaced" units that syntactically interact differently with the surrounding structure[12] – especially considering the way in which ERs are licensed and bound. Such a theory whereby structures appear out of place but still in the syntactic derivation is argued for for parentheticals, which are exemplified below in (132). (McCawley 1982, Potts 2002, and others)

(132) a. Frank has – I think – already received his money.
b. Sally – according to Alex – is a little eccentric.
c. Terry is – as the jury found – guilty.
d. Martha has – of course – let us down.

At its weakest, this re-grammaticalization data makes a prediction – wherever you use an iP boundary in producing an ER, that ER has a different status in the syntactic derivation than an ER without iP boundaries on either side. If this were not the case, PVEs after an object-promoting verb would *always* be ungrammatical, counter to fact. Furthermore, logically, you should be able to insert an ER with iP boundaries in any location.[13]

5.3.3 Correlate - QUID

Occasionally in the data, there are examples of unexpected low targets surfacing right after a L+H*, as in (133)-(137). This drop in pitch cannot be predicted in MAE_ToBI without the use of a boundary tone; however, there was no obviously perceptible phrase break. For that reason, I use a 1m boundry. I refer to this phenomenon as a QUID (Quick Unexpected Intonational Drop).

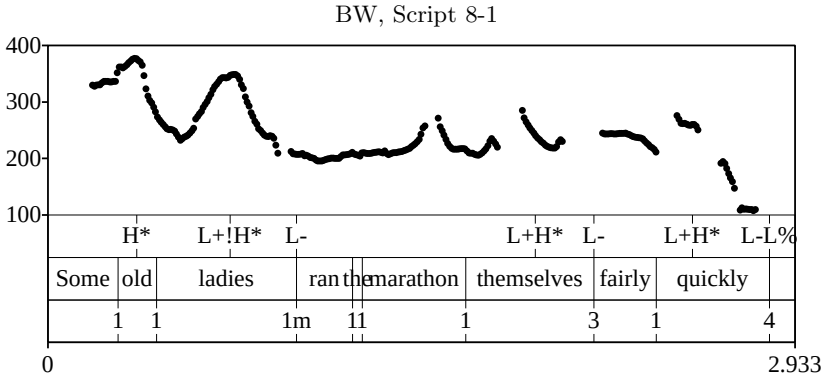
to ^{dp}ERs associated with subjects.) That is to say, non-grammatically licensed locations include PVEs after an object-promoting verb, and other more "freely" placed ERs.

[11] I am using the dash to orthographically represent an iP break.

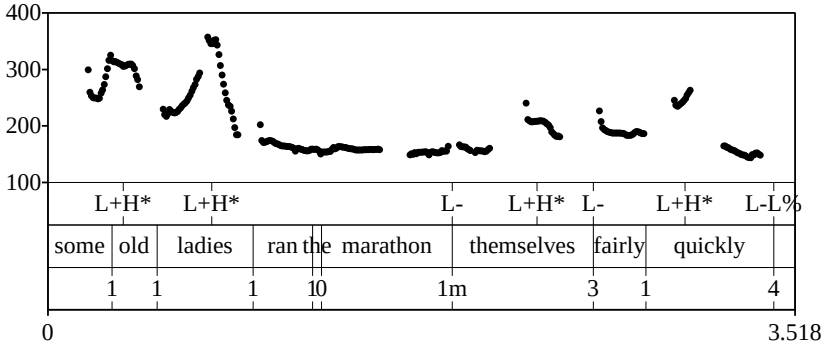
[12] Or with elided material, as the case may be.

[13] Perhaps as long as a phonological break is licit at that location in the first place. This should be tested and compared to other things that look like they have been inserted (e.g., "I think" and "you know").

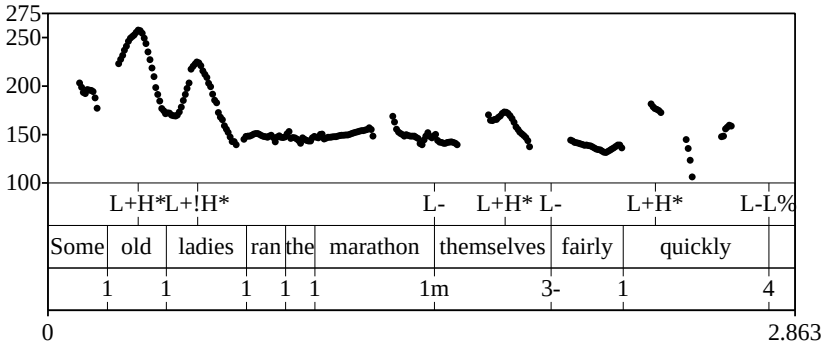
(133)



(134)

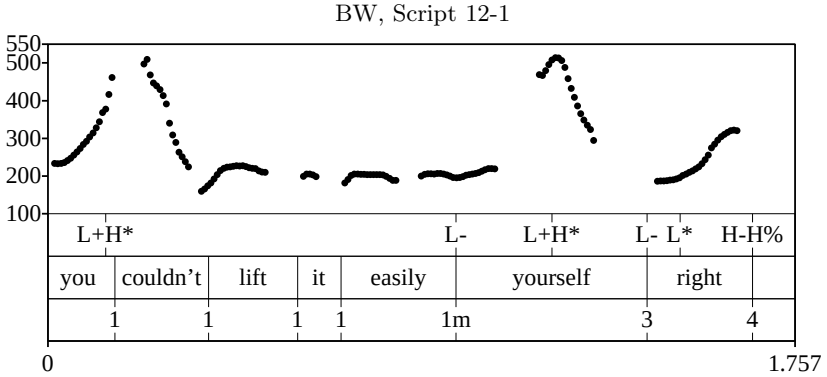


(135)

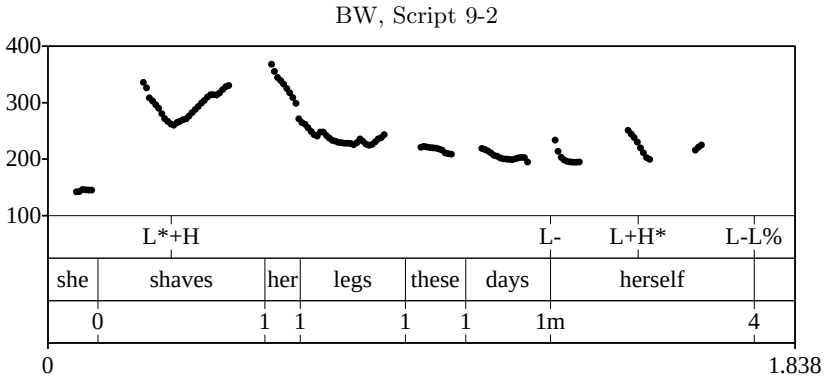


However, it is not just that script 8 leads to a QUID. For example, (136) and (137) are also good exemplars of QUIDs following a L+H* target.

(136)



(137)



I have brute-forced these QUID examples into my ToBI transcription by way of using a mismatch boundary (1m) bearing a L- tone. However, I don't necessarily believe there was ever any iP break intended, given consistency across speakers within a script, as in (133)-(135).[14] In fact, for all recordings of "Some old ladies ran the marathon themselves fairly quickly", every single speaker places a QUID on/after "ladies" – do we really want to say that everyone is just making mistakes? Thus, I propose a new notation: superscript L on the tone that falls immediately after its realization, as in L+H*^{L}.[15] The distribution of QUIDs is not limited to ERs, which seems to indicate that they are part of a wider set of phenomena and require explanation in the intonational theory.

[14] I mean this 1m to not be an underlying iP break, as opposed to (129).

[15] I do not propose adding X*+L, as we find QUIDs after L+H*, meaning we would have to posit L+H*+L – a tritone, which does not seem to have any cross-linguistic support. (Jun, P.C.)

Section 6

Conclusion

6.1 Summary of the Findings

In investigating ERs, we have found that there are exactly two readings of ERs – the ^{dp}ER reading and the ^{vp}ER reading. Each one obeys its own felicity conditions, like the Unique Identifiability Condition and the Contrastiveness Condition for ^{dp}ERs and the Volitional Agent Condition for ^{vp}ERs. Each one has a different semantic denotation, (basically) varying in the semantic type of the argument for the ID function. And, each one has its own syntactic licensing mechanism – stranding for ^{dp}ERs and fixed adverbial attachment for ^{vp}ERs.

Moreover, we found that some languages use real reflexive pronouns in ER constructions, and these reflexive pronouns (at least in English) follow the Binding Conditions. Binding Condition A is always met locally, since the configurations for ERs are always rather small, even if the ERs appear to be very distant in the linearized string.

Finally we found that ERs are necessarily marked with contrastive focus intonation, supporting our semantic theory that ERs must always be in focus. Even though we did find some cases (only about 15%) where the pitch accent on the ER was not L+H*, we concluded that the different cases were surface variants of L+H*.

6.2 Further Research

The semantic form and pragmatic constraints of ERs have long been studied, though their exact prosodic and syntactic nature have not fully been studied – least of all crosslingusitically. As such, there is much research yet to be done in these areas.

Furthermore, there were some specific phenomena/problems that I encountered in this paper that beg for more research. I have given some of these and pose the related questions that need answering in the sections below.

6.2.1 QUID

Further investigation of the Quick Unexpected Intonational Drops (QUIDs) such as those found in the course of this study may reveal more about the semantics/prosody interface. As mentioned in Section 5.3.3, the distribution of QUIDs is broader than just the examples in this paper. For more examples, let us briefly look at aspects of Jun 2001, (Ladd 1996:96) and Shilman 2006. Jun's work explores examples similar to (138).

(138) a. *John didn't hit Mary because she was yelling.*
L+H*^{L} L+H* L-H%
⇒'John hit Mary, but not because she was yelling.'

b. *John didn't hit Mary because she was yelling.*
H* !H* !H* (L-) H* !H* L-L%
⇒'John didn't hit Mary and that is because she was yelling.'

She shows that if there is a QUID on/after "John" and there is no iP boundary, the natural interpretation is that of (138a). However, without a QUID and with an iP boundary, the interpretation is that of (138b). Note that the readings are necessarily tied to their respective prosodies.

Ladd briefly discusses the problem with "1m", and cites the following example.

(139) *Edinburgh is the capitol of Scotland.*
H*^{L} (L+)H* L-L%

In (139), it is clear that there are no iP boundaries anywhere, yet the early drop is very natural (if not compulsory).

Finally, Shilman's work shows that, in Motherese, there is often a quick drop, faster than there should be with interpolation. An example of this is given below.

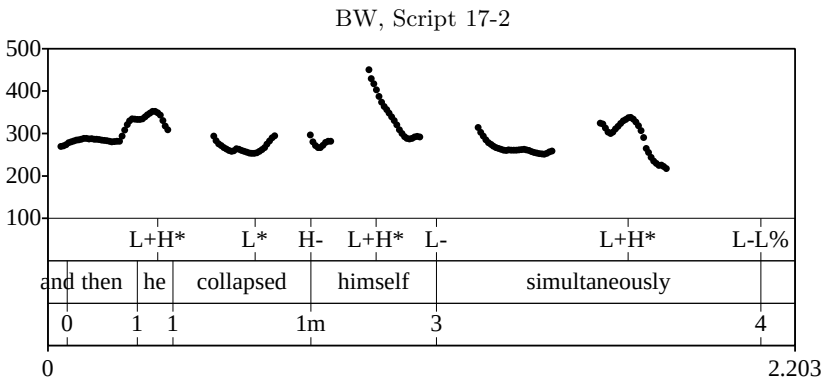
(140) *If you become a tree, said the bunny...*
L+H*^{L} L+H* (L-) ?* L-

It seems to me that the unification between all of these is a pitch accent later on in the same iP, when there "shouldnt be one." By that I mean, in the region where there should be deaccenting due to presence of focus, there is something else that should be prominent. That said, it is not clear exactly what the licensing conditions for a QUID are.[1] Further research into their shared formal linguistic properties is required. Moreover, the MAE_ToBI framework may need updating to be able to predict the melody type found in QUIDs.

6.2.2 Parenthetical Prosody

Also in pursuing the prosodic nature of ERs, I found that certain ERs which I predicted to be ungrammatical were re-grammaticalized when surrounded by intonation-Phrase breaks. Not only were they surrounded by iP breaks, the pitch range during the production of the ERs was expanded or contracted, and then returned to normal when resuming the main sentence.

(141)



This yields a few questions. First, my intuition is that these feel like parentheticals, as I mention in Section 5.2.1. Before pursuing a syntactic/semantic analysis of ERs as being occasionally parenthetical, it would be fitting to first ascertain what the prosodic nature of parentheticals is. Furthermore, if a parenthetical does indeed employ a different pitch range inside its iP breaks, where does the pitch range "return" to? Specifically, does it maintain a maximum pitch ceiling in down-stepped high-tone contexts? Finally, if ERs are indeed sometimes acting as parentheticals do prosodically, what can we infer about the structure of ERs? In investigating these questions, the syntax-semantics-prosody interface will become better understood.

[1]Perhaps this might be a phonological effect on phonetic realization of the sort proposed in Ahn 2008, whereby syllables adjacent to the focus-tone bearing syllable (which would normally not carry **any** tone target) bear a tone target distinct from the focus-tone bearing syllable.

6.2.3 The Right Edge availability

It seems that the right edge of a sentence/clause is available to ERs, even though it's not entirely clear that the associate DP ever passed through a right-adjoined position.[2]

(142) Sous-chefs always cook squid, but tonight the chef (himself) cooked some (himself).

(143) Everyone else drove to school, but she (herself) walked to school (herself).

(144) The designer likes the one on the right, but Sue-Ellen (herself) likes the one on the left (herself).

(145) They ridiculed others for not living in the reality, but they (themselves) were dreaming (themselves).

(146) While Kuri's dog was given meat, she (herself) was given tofu (herself).

Some have suggested that the VP-internal subject position is actually right adjoining. (Kitagawa 1986) However, the right edge isn't always available.

(147) a. The beef dumplings were cooked fine, but the beef (itself) was burned (??itself).
b. The computer's screen doesn't bother Steve, but the compter (itself) bothers him (??itself).

Additionally, it seems that the right edge is even available for (certain) particle verb and resultative constructions.

(148) I didnt just pick up its sleeve; I picked the LP up itself.

(149) I had to hack the tree's branches into pieces before hacking the tree into pieces itself.

I take this to mean that the right edge of a small clause is also available, so whatever mechanism/position allows for right edge ERs must be rather low in the structure.

If it is true that ERs are stranded in the sense of Sportiche (1988), then these available positions for ERs should say something about the internal structure of these clauses and what is right-branching (or what ends up being linearized at the right edge, for an anti-symmetric approach).

6.2.4 Case and Stranding

It seems that there may be some correlation between phrasal/high case marking and inability to strand ^{dp}ERs. Japanese and Korean data support this idea.

[2]or position linearized to be at the right edge.

(150) Japanese: ✓FNQ, *ER-float/stranding

a. *(futa-ri) dojjibooru ga (futa-ri) seito o (futa-ri) kizutsuke-ta*
(2-CL) dodgeball NOM (2-CL) student ACC (2-CL) hurt-past
the dodgeball hurt 2 students

b. *(*jishin) dojjibooru ga kouchou (jishin) o (*jishin) kizutsuke-ta*
(^{dp}ER) dodgeball NOM principal (^{dp}ER) ACC (^{dp}ER) hurt-past
the dodgeball hurt the principal himself.

(151) Korean: Restricted FNQ, *ER-float/stranding

a. *(*du-bun) pigu ka hagseng (du-bun) eul (du-bun) ttaelyeo-ss-da*
(two-CL) student nom book (two-CL) acc (two-CL) hit-past-DECL
'The student bought 2 books'

b. *(*casin) pigu ka gyojang (casin) eul ttaelyeo-ss-da*
(^{dp}ER) dodgeball nom principal (^{dp}ER) acc hit-past-DECL
'The dodgeball hit the principal'

This may be explained by saying phrasal case marking freezes a DP and disallows stranding. However, Hindi, which uses phrasal case marking, allows ER stranding, challenging the idea that phrasal case marking blocks stranding.

(152) Hindi: ✓FNQ, ✓ER-float/stranding

a. ***Anoop will supply the necessary data***

b. ***Anoop will supply the necessary data***

Further research regarding how specific case-assigning mechanisms block or allow ER-stranding may elucidate micro-syntactic differences between case systems.

6.2.5 Passives

It seems to be the case that the passive and the ^{vp}ER are in complementary distribution.

(153) The dish was cooked by the Iron Chef herself.

a. ⇒Her sous-chef didn't cook the dish, ***the Iron Chef*** did it.

b. ⇏The Iron Chef did it without help.

(154) *The cake was baked herself by the Iron Chef.

Notably, if the Passive is derived in the way of Collins (2005), the behavior is unpredicted since the Voice head is still present and licensing an agent, thus satisfying the requirements of a ^{vp}ER. That is, unless the ungrammaticality isn't coming from such a crash, but some other conflict.

Maybe the issue with passives is with the by-phrase (pronounced or not). Maybe there is competition between ^{vp}ERs and by-phrases for the same syntactic position.[3] In fact, both ^{vp}ERs

[3]Or maybe there is even just unacceptable overlap in the by-phrase and ^{vp}ER structures.

and by-phrases are about external arguments, and by-phrases – just like "by Xself" – can be related to either an agent or a causer.

It seems the 'competition for the same spot' theory hits a wall in Finnish, because there are no by-phrases in the language, but the ^{vp}ERs (which still occur in the PVE position (155a)) are not possible in passives (155c).[4]

(155) a. *Joku jo-i shamppanja-n (ihan) itse*
Someone drink-3PL champagne-ACC (DEG) self
'Someone drank the champagne (all by) themselves.'

b. *Shamppanja juo-tiin*
Champagne drink-PASSIVE.PAST
'The champagne was drunk all by themselves.' / 'Someone drank the champagne.'

c. ??*Shamppanja juo-tiin ihan itse*
Champagne drink-PASSIVE.PAST DEGREE self
'The champagne was drunk all by themselves.' / 'Someone drank the champagne all by themselves.'

If it is not about structural overlap between ^{vp}ERs and the by-phrase, perhaps the issue is binding from passive subjects being marginalized.

(156) a.?✓A bonus was given by John to himself.
b. *?A bonus was given to himself by John.

If the reflexive pronoun in not bind-able in (156a), it might explain why the ^{vp}ER interpretation is unavailable in (153). And if the reflexive pronoun is not bind-able in (156b), it seems to follow that (154) would also force a Condition A violation.

The passive seems to share a relationship with ^{vp}ERs (notably with regard to the distribution of by-phrases and by-^{vp}ERs). Perhaps the two phenomena can work to help solve one another's problems.

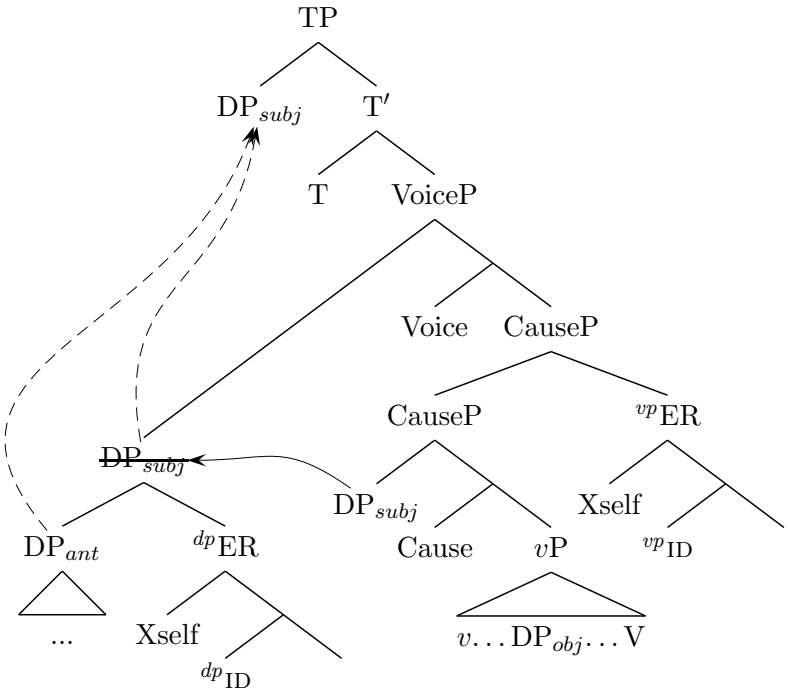
[4]The word *ihan* is a degree modifier and means something like 'entirely' or 'quite.' When used with *itse*, it forces the ^{vp}ER interpretation.

Appendix A

Syntactic Derivations

The formalisms presented in this paper are not a technical exercise in bearing out facts in a single syntactic framework. Rather, the general theory should be extendable to other generative syntactic frameworks. I demonstrate this with derivations in three different frameworks; the differences between each are quite minimal.[1]

(1) **My analysis**

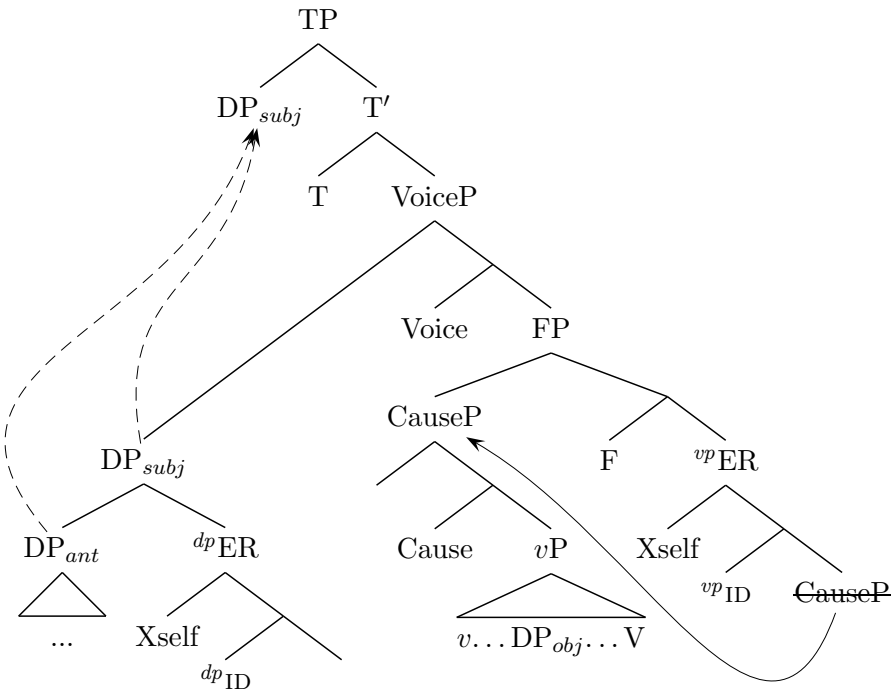


[1]In all three tree, dotted lines indicate the possibility of stranding a ^{dp}ER lower down.

Antisymmetric Analysis

In the Antisymmetric analysis below, I argue that there must be some FP such that (a) the ^{vp}ER can be on the spine between CauseP and VoiceP (for semantic reasons and to match the VPE data), and (b) the CauseP has a place to "roll-up" to, yielding correct word order with regard to the ^{vp}ER being post-verbal. Perhaps this FP is the instrumental case marking element, as ^{vp}ER often appear in instrumental case (e.g., Japanese, Arabic, etc)

(2) **Standard Antisymmetric analysis**

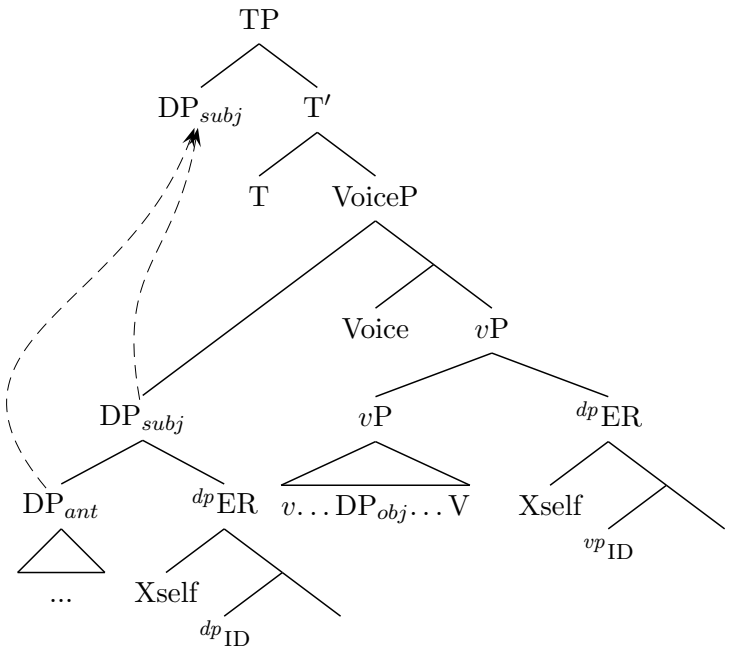


Minimalist Analysis

In the Minimalist analysis, I have removed reference to any more than three VP shells. Three VP shells is actually sufficient, provided that the following two assumptions are met. First, there are different kinds of Voice which license different kinds of external arguments (Causer/Agent). Pylkkänen (2002) argues for just this. Secondly, there are always three verbal shells as to guarantee sister of Voice being the target of VPE. Merchant (2007) seems to assume verbal structure like this). However, one potential problem for an analysis like this one is that the semantics of ^{vp}ER's ID must be sensitive to the type of Voice head present in the derivation. How to implement this in the

semantics is not entirely clear to me.

(3) **Standard Minimalist analysis**



Summary

In all of these derivations, what remains constant is what is important for the syntactic theory of ERs. First and foremost, ERs are phrasal projections that contain an ID function and a semantically null reflexive pronoun. Second, ^{dp}ERs form a DP constituent with their associate DP which can be split up by A-movement of the smaller DP. And third, ^{vp}ERs are base-generated in a position such that they can take the Voice head as an argument and such that they are within the VPE site. These facts taken together with the denotation of ERs yield all the properties seen in this paper.

Appendix B

Test Condition Scripts

(1) A: I like watching the Simpsons.
B: Me too. I think it's a funny show.
A: But the babysitters don't like it.
B: Yeah, I know. They told the kids not to watch it.
⟶ A: Yeah, but guess what. They themselves were watching the Simpsons on the job.
B: Really?
A: Yeah, they shouldn't do that...

(2) B: Guess who I saw today?
A: Who?
B: Ryan.
A: Oh yeah? Oh, you know how he runs an anti-steroid coalition?
B: Right.
A: Guess what I just heard.
B: What?
⟶ A: Ryan has used in the past himself.
B: But that just means he's matured and realized his mistakes.
A: That's probably true, I guess I didn't think of it like that.

(3) B: What are you reading?
A: An article about racism in California today.
B: Yeah? What about racism?
A: "Who thinks Californians are racist?"
B: What did they find out?
⟶ A: Californians think so themselves apparently.
B: That's really surprising.
A: I thought so too.

(4) A: Doesn't everyone think that you learn best from your mistakes?
B: Probably. Why do you ask?
⟶ A: Well, Darren and Kate themselves never learn their lesson, even though they always try to tell their kids that.
B: I think it's easy to say you need to learn from your mistakes...
A: ...but it's not easy to do it, huh.
B: Exactly.

(5) A: I have the schedule of birthdays for our club.
B: What's on it, besides just dates?
A: It has who is baking for each event.
B: All of us aren't taking turns, are we?
⟶ A: Yes we are. You will bake one yourself for Amy's birthday.
B: Really? Even I'm baking? But I can't bake very well.
A: I know, but no one else can do it that week...

(6) B: I don't really like our teachers this year.
A: Oh, you know how they always criticize people who drink?
B: Mhm.
A: Well guess what I saw them doing last night.
B: What?
⟶ A: They were drinking at a bar themselves.
B: What hypocrits.
A: I know.

(7) A: That celebrity I don't like wrote a book.
B: Is it selling well?
A: I dunno. I doubt she even read it.
B: What do you mean?
⟶ A: I wonder if she herself has read the book, despite supposedly having written it.
B: Oh, like she had a ghostwriter.
A: Uh huh...

(8) B: I can't imagine running a marathon.
A: What do you mean? Anyone can run a marathon.
B: I don't know about that...
⟶ A: Some old ladies ran the marathon themselves fairly quickly. I read it in the paper.
B: Wow. So even they could do it, huh.
A: Yeah. So you could too, I would think.
B: I guess so.

(9) B: Do all women shave their own legs?
A: No, some go to salons to get them done.
B: Does your wife go to a salon for it?
⟶ A: She shaves her legs these days herself. She won't go to a salon for it any more.
B: Do you know if it's hard to do?
A: No, but you do have to be careful not to cut yourself.

(10) A: So have you met my upstairs neighbor?
B: No, I don't think I've met him – but I have heard him.
A: Oh right, isn't he so noisy?
B: Definitely.
A: Well, I woke up at 2 AM thinking he was playing a CD loudly, as usual...
B: Right...
⟶ A: But it turns out that he himself was playing music last night.
B: At 2 AM?
A: Yes!
B: Well, I hope he was good.
A: Not really...

(11) B: I'd really like it if my mom would do my laundry still.
A: Well, now you're living on your own, and we're adults now.
B: I know.
⟶ A: You have to do that yourself after you leave home. You can't rely on others for these kinds of things any more.
B: But I'm so lazy.
A: I know, I'm so lazy too.

(12) A: Sometimes I think of conundrums that have no answer.
B: Oh yeah? Like what?
A: Like... if you were all powerful, you would be able to create a stone so heavy that no one can lift it right?
B: I guess so.
⟶ A: But then you could make stone so heavy that you couldn't lift it easily yourself. Right?
B: You're weird.
A: Yeah, that's true.

(13) A: Ugh, I hate radios.
B: What happened?
A: Well you know how the antenna has been on the fritz?
B: Uh huh...
⟶ A: Well, the radio broke itself last night, and I don't know what to do now.
B: Are you going to buy a new one?
A: I guess I have to...

(14) A: I hear that Europeans, in general, don't trust their governments very much.
B: Well, they've had lots of deceitful governments in their past.
⟶ A: Right, but, as an American, I myself lean in another direction.
B: In what way?
A: I think that, for the most part, governments exist to help their citizens.
B: Well, you don't want to be too naive.

(15) A: Did you hear that it was 20 degrees last night?
B: That's really cold for L.A.
A: I know.
B: Did the citrus fruit all freeze like it did last year?
⟶ A: The citrus trees froze last night themselves - it wasn't just the fruit.
B: Does that mean they'll have to plant whole new trees?
A: I'm not sure, but I'd think so.
B: That's awful.

(16) A: Have you seen Jane in the past few years?
B: No, why?
A: Well, you know how her mother didn't lose much height in her old age?
B: Mhm.
⟶ A: Jane herself has shrunk quite a bit already.
B: How much shorter has she gotten?
A: A few inches so far.

(17) A: Did you know I do voodoo?
B: Really? Does it actually work?
A: Yeah, it worked just last night.
B: What happened?
A: Well, I pushed over my voodoo doll of John...
B: Uh huh...
⟶ A: And then he collapsed himself simultaneously.
B: Really?
A: Yeah, you can ask John.

(18) A: I feel like I'm losing everything.
B: Literally?
A: Yeah, so, first I lost my bike lock yesterday.
B: Right, I remember.
⟶ A: Now, the lock's keys have disappeared completely themselves.
B: I bet they're both in the same place.
A: If only I knew where that place was.

(19) B: The chancellor never comes to these kinds of events.
A: Right, he usually just sends someone from his office.
B: That's lame.
⟶ A: Oh, but I heard he was seen at the last one himself.
B: I wonder why he went to that one.
A: Ya, I don't know. Maybe someone special was there.
B: Maybe.

(20) B: I hear that our senator's advisors are upset with what he's doing.
A: What's going on now?
B: I dunno, I only read that in a headline; but he should listen to his advisors, right?
⟶ A: Well the senator himself was elected to the senate; his advisors weren't.
B: But it seems silly to have advisors if you don't listen to them.
A: I think everyone needs to think for themselves sometimes.

(21) B: Are you part of the game of Assassins?
A: Yeah, I've gotten 5 people so far.
B: Has anyone shot anyone from John's team yet?
⟶ A: Uh-huh, in fact, John was shot himself recently.
B: Oh, too bad for him.
A: Well, that's how the game goes.

(22) B: Did you hear about the scandal at the business school?
A: Yeah, the president was embezzling.
B: Isn't that pathetic?
⟶ A: Mhm. If you are fined for unethical behavior yourself, I wonder if you can teach ethics.
B: You'd have to if it's your job.
A: Yeah, I guess so.

(23) A: Did you hear about Perry?
B: Yeah – about his bike, right?
A: Well not only did his bike get hit by a car last week...
B: Oh no, what happened now?
⟶ A: He himself was hit just last night.
B: Is he okay?
A: Yeah, the car wasn't going very fast.

(24) A: I feel really bad for Tracy.
B: Why, what happened?
A: You know how her publisher was sued last week?
B: Uh-huh...
⟶ A: Well, she is being sued herself now.
B: Wow, what for?
A: I'm not sure, something about copyright infringement.

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